SUGGESTED ROUTES TO UCF CAMPUS:
From Int'l Airport: 436 to East on Expressway and Eastern Beltway to University Blvd.
From Turnpike (from south): Exit 75 to I-4 to East on Expressway and Eastern Beltway to University Blvd.
From Turnpike (from north): Exit 80 to Rt. 50 to East on Expressway and Eastern Beltway to University Blvd.
From I-4 (from north): Exit 49 to Rt. 434 or Exit 48 to Rt. 436 to University Blvd.
From I-4 (from south): Exit 36 to East on Expressway and Eastern Beltway to University Blvd.
PEGASUS was the winged horse of the muses in Greek Mythology. He carried their hopes, their aspirations, and their poetry into the skies. PEGASUS is as futuristic as tomorrow’s space exploration in our solar system and into the universe beyond. The seal also bridges the gap between the humanities and space technology.

Accent on the Individual
and on Excellence

Volume 23, Number 1
May 1990
Cover Design: Mindy Z. Colton
Cover Photography: Bill Thomson

Additional copies of this catalog may be purchased for $2.00 in the University Bookstore or by mail for $3.50 by writing to: Catalog, UCF Bookstore, Orlando, FL 32816-0444. A current catalog is issued to each student free of charge at registration.
The University of Central Florida, under applicable rules of the Administrative Procedures Act, may change any of the announcements, information, policies, rules, regulations, or procedures set forth in this catalog. The catalog is published once a year and cannot always reflect new and modified regulations. Statements in this catalog may not be regarded in the nature of binding obligations on the institution or the State of Florida. While every effort will be made to accommodate the curricular needs of students, limited resources may prevent the University from offering all required courses in each semester or in day and evening sections.

Students will be held accountable for the requirements, policies, and procedures described in this catalog. Additional information or clarification of any policy or procedure may be obtained from the specified office.

The University of Central Florida values diversity in the campus community. Accordingly, discrimination on the basis of race, sex, national origin, religion, age, handicap, marital status, parental status, or veteran's status is prohibited.

Sexual harassment, a form of sex discrimination, is defined as unwelcome sexual advances, requests for sexual favors, or verbal or physical conduct of a sexual nature when:
1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment;
2) submission to or rejection of such conduct by an individual is used as the basis for employment decisions affecting such individual, or
3) such conduct has the purpose or effect of substantially interfering with an individual's work performance or creating an intimidating, hostile, or offensive working environment.

The language in these guidelines is applied to situations involving student enrollment as well as employment.

Sexual harassment is strictly prohibited and will be dealt with in accordance with University rule.

Employees, students, or applicants for employment or admission may obtain further information on this policy, including grievance procedures, from the Equity Coordinator. The Director of the Office of Equal Opportunity and Affirmative Action Programs is the campus Equity Coordinator responsible for concerns in all areas of discrimination. The office is located on the main campus, in Administration 329, Orlando, Florida 32816-0030. The phone number is (407) 275-2348.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATE OF FLORIDA BOARD OF EDUCATION</td>
<td>6</td>
</tr>
<tr>
<td>STATE OF FLORIDA BOARD OF REGENTS</td>
<td>6</td>
</tr>
<tr>
<td>PRINCIPAL OFFICERS OF ADMINISTRATION</td>
<td>6</td>
</tr>
<tr>
<td>ADMINISTRATION</td>
<td>6</td>
</tr>
<tr>
<td>COLLEGES, DEPARTMENTS, AND PROGRAMS</td>
<td>8</td>
</tr>
<tr>
<td>ACADEMIC CALENDAR</td>
<td>10</td>
</tr>
<tr>
<td>CAMPUS DIRECTORY</td>
<td>15</td>
</tr>
<tr>
<td>UNIVERSITY OF CENTRAL FLORIDA</td>
<td>17</td>
</tr>
<tr>
<td>STATEMENT OF PURPOSE</td>
<td>17</td>
</tr>
<tr>
<td>INSTITUTIONAL PHILOSOPHY</td>
<td>17</td>
</tr>
<tr>
<td>ACCREDITATION</td>
<td>17</td>
</tr>
<tr>
<td>EAST CENTRAL FLORIDA</td>
<td>18</td>
</tr>
<tr>
<td>THE ORLANDO CAMPUS</td>
<td>18</td>
</tr>
<tr>
<td>AREA CAMPUSES</td>
<td>19</td>
</tr>
<tr>
<td>ENDOWED CHAIRS</td>
<td>22</td>
</tr>
<tr>
<td>INTERNATIONAL STUDIES AND PROGRAMS</td>
<td>22</td>
</tr>
<tr>
<td>UNIVERSITY LIBRARIES</td>
<td>25</td>
</tr>
<tr>
<td>UNIVERSITY OF CENTRAL FLORIDA PRESS</td>
<td>25</td>
</tr>
<tr>
<td>UNIVERSITY OF CENTRAL FLORIDA FOUNDATION, INC</td>
<td>26</td>
</tr>
<tr>
<td>INSTRUCTIONAL RESOURCES</td>
<td>26</td>
</tr>
<tr>
<td>UNIVERSITY BOOKSTORE</td>
<td>26</td>
</tr>
<tr>
<td>INTERCOLLEGIATE ATHLETICS</td>
<td>26</td>
</tr>
<tr>
<td>CENTRAL FLORIDA RESEARCH PARK</td>
<td>26</td>
</tr>
<tr>
<td>STUDENT AFFAIRS</td>
<td>28</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>28</td>
</tr>
<tr>
<td>OFFICE OF DEAN OF STUDENTS</td>
<td>28</td>
</tr>
<tr>
<td>STUDENT PRIVILEGES</td>
<td>28</td>
</tr>
<tr>
<td>STUDENT RESPONSIBILITIES</td>
<td>29</td>
</tr>
<tr>
<td>SERVICES</td>
<td>30</td>
</tr>
<tr>
<td>ADMISSION</td>
<td>35</td>
</tr>
<tr>
<td>APPLICATION FOR ADMISSION</td>
<td>35</td>
</tr>
<tr>
<td>ADMISSIONS AND STANDARDS COMMITTEE</td>
<td>35</td>
</tr>
<tr>
<td>REACTIVATION</td>
<td>35</td>
</tr>
<tr>
<td>READMISSION</td>
<td>35</td>
</tr>
<tr>
<td>LIMITED ACCESS PROGRAMS</td>
<td>36</td>
</tr>
<tr>
<td>RECORDS</td>
<td>36</td>
</tr>
<tr>
<td>FRESHMAN APPLICANTS</td>
<td>37</td>
</tr>
<tr>
<td>TRANSFER APPLICANTS</td>
<td>38</td>
</tr>
<tr>
<td>TRANSFER CREDIT</td>
<td>40</td>
</tr>
<tr>
<td>ACCREDITED INSTITUTIONS</td>
<td>40</td>
</tr>
<tr>
<td>COLLEGE PREPARATORY INSTRUCTION</td>
<td>41</td>
</tr>
<tr>
<td>INTERNATIONAL STUDENTS/INSURANCE REQUIREMENTS</td>
<td>41</td>
</tr>
<tr>
<td>TEMPORARY STUDENTS</td>
<td>42</td>
</tr>
<tr>
<td>TRANSIENT STUDENTS</td>
<td>42</td>
</tr>
<tr>
<td>AUDIT STUDENTS</td>
<td>42</td>
</tr>
<tr>
<td>NON DEGREE-SEEKING STUDENTS</td>
<td>42</td>
</tr>
<tr>
<td>SENIOR CITIZENS</td>
<td>42</td>
</tr>
<tr>
<td>TUITION AND FEES</td>
<td>43</td>
</tr>
<tr>
<td>SCHEDULE OF FEES</td>
<td>43</td>
</tr>
<tr>
<td>FLORIDA RESIDENCY FOR TUITION PURPOSES</td>
<td>44</td>
</tr>
<tr>
<td>APPEALS</td>
<td>45</td>
</tr>
<tr>
<td>CHECK CASHING</td>
<td>45</td>
</tr>
<tr>
<td>PAST-DUE ACCOUNTS</td>
<td>45</td>
</tr>
<tr>
<td>REFUND OF FEES</td>
<td>45</td>
</tr>
<tr>
<td>PAYMENT ON ACCOUNT</td>
<td>45</td>
</tr>
</tbody>
</table>
## FINANCIAL AID AND SCHOLARSHIPS

- Tuition Fee Waivers for State of Florida Employees
- Tuition Fee Waivers for Senior Citizens
- Determining Eligibility
- UCF Application Deadlines
- Application Procedures
- Verification
- Transfer Students
- Independent Student Status
- Programs Available at UCF
  - Grants
  - Employment
  - Loans
  - Loans and Employment Not Based on Need
- Other Services
- Scholarships
- Award Packages
- Automatic Defemernt
- Disbursements
- Refunds and Repayment
- Requirements to Receive Aid
- Satisfactory Academic Progress
- Undergraduate Standards
- Financial Aid for Graduate Students
- Student Rights and Responsibilities

## ACADEMIC POLICIES AND PROCEDURES

- Academic Ethics
- Student Classifications
- Semester Hours Explained
- Grading System
- Academic Standing
- Earning Credit While Disqualified or Excluded
- Incomplete Grade
- Schedule Changes—Add/Drop Policy
- Withdrawal Policy
- Transient Enrollment at Other Institutions
- Grade Forgiveness
- Academic Honors
- Time-Shortened Degree Opportunities
- Transcript Requests

## UNDERGRADUATE DEGREE REQUIREMENTS

- Requirements for Graduation
- Choice of Catalog
- General Education Program
- Foreign Language Proficiency Requirement
- The Gordon Rule
- College Level Academic Skills Test
- Correspondence Courses
- Summer Attendance Requirement
- Admission to the Upper Division
- Steps in the Graduation Process
- Teacher Certification Requirements

## OFFICE OF UNDERGRADUATE STUDIES

- Aerospace Studies
- Army ROTC-Military Science
- Community College Regulations
- Cooperative Education
- Gerontology Certification Program
This publication was produced at an annual cost of $55,978.00 or $1.40 per copy to inform prospective students of the educational opportunities available at the University of Central Florida and to inform enrolled students of undergraduate academic degree program requirements.
STATE OF FLORIDA BOARD OF EDUCATION

Robert Martinez ......................................................... Governor
Betty Castor .......................................................... Commissioner of Education
Robert Butterworth ...................................................... Attorney General
Tom Gallagher .......................................................... State Treasurer
Jim Smith ........................................................................ Secretary of State
Gerald Lewis .................................................................... Comptroller
Doyle Conner .................................................................... Commissioner of Agriculture

STATE OF FLORIDA BOARD OF REGENTS

Charles B. Edwards, Sr. Chairman ........................................ Fort Myers
J. Clint Brown, Vice Chairman ........................................... Tampa
DuBose Ausley ................................................................. Tallahassee
J. Hyatt Brown ............................................................... Daytona Beach
Cecilia Bryant ..................................................................... Jacksonville
Betty Castor, Commissioner of Education ............................. Tallahassee
Alec P. Courtelis .............................................................. Miami
Robert A. Dressler ............................................................ Fort Lauderdale
Pat N. Groner ................................................................. Pensacola
Perla Hantman ................................................................. Miami Lakes
Cecil B. Keene .................................................................. St. Petersburg
Thomas F. Petway III ......................................................... Jacksonville
Carolyn King Roberts ........................................................ Ocala
Joan Dial Ruffier .............................................................. Orlando
Jeffrey B. Smerage, Student Regent ...................................... Tallahassee

Charles B. Reed, Chancellor .............................................. Tallahassee

PRINCIPAL OFFICERS OF ADMINISTRATION

President ............................................................................ Steven Altman
Provost and Vice President for Academic Affairs .................. Richard Astro
Vice President for Administration and Finance ..................... John R. Bolte
Vice President for Student Affairs ...................................... LeVester Tubbs
Vice President for University Relations ................................. D. Robert McGinnis
Vice President for Research ................................................ Michael Bass

ADMINISTRATION

Office of the President

President of the University .................................................. Steven Altman
Executive Assistant to the President ................................. Vicky Brown
Senior Counsel to the President and Director of Governmental Relations ........................................ Daniel C. Holsenbeck
Director, Athletics ................................................................. Gene McDowell
Director, EEO/AA Programs ................................................ Janet Balanoff
Director, Internal Auditing .................................................... Barbara Ratti
University Attorney ............................................................. Ashmun Brown

Office of the Provost and Vice President for Academic Affairs

Provost and Vice President for Academic Affairs .................. Richard Astro
Associate Vice President for Academic Affairs .................... Frank E. Juge
Associate Vice President ..................................................... J. Edward Neighbor
Director, Brevard Campus ........................................... Robert W. Westrick
Director, Daytona Beach Campus .................................... Sarah Pappas
Director, Orlando Area Programs ................................... Thomas A. Shostak
Director, Instructional Resources ................................... Robert L. Arnold
Coordinator for Special Projects .................................... Gwen Haile
Director, International Studies and Programs ....................... Anthony V. Cervone
Director, Project for Humanities ..................................... Stuart Omans

Associate Vice President for Academic Affairs and
Dean of Undergraduate Studies ........................................ Charles N. Micarelli
Associate Dean, Undergraduate Studies ............................... Paul R. McQuilkin
Assistant Dean, Undergraduate Studies ............................... David R. Dees
Assistant Dean, Undergraduate Studies and Director,
Minority Student Services .............................................. Robert L. Belle, Jr.
Assistant to the Dean, Undergraduate Studies ......................... C. Barth Erngert
Chair, Aerospace Studies (AFROTC) ................................. Col. Robt. E. Ceruti
Chair, Army ROTC ..................................................... LTC. Daniel J. Conn
Director, Athletic Advising ............................................. Sandra B. Reeves
Director, Community College Relations .............................. Ralph C. Boston
Director, Cooperative Education ..................................... Sheri E. Dressler
Director, Honors Program .............................................. Mark Stern
Director, Liberal Studies Program .................................. Dennis R. Kamrad
Director, McKnight Center ............................................. Cecelia H. Rivers
Director, Special Programs .............................................. Cecelia H. Rivers
Director, Student Academic Resource Center ......................... Mary Helen Callarman
Director, Student Academic Support Systems ......................... Russell Tiberii
University Registrar .................................................... John F. Bush
Director of Admissions .................................................. Rob Sheinkopf
Associate Director, Admissions ......................................... TBA
Director of Financial Aid ............................................... Mary H. McKinney
Director of Records and Registration ............................... Renee K. Simpson

Dean, Extended Studies .................................................. John B. O'Hara
Director of Libraries .................................................... Anne Marie Allison

Associate Vice President for Academic Affairs and
Dean of Graduate Studies .............................................. Louis M. Trefonas
Associate Dean of Graduate Studies ................................ Roger B. Handberg

Office of the Vice President for Research

Vice President for Research ............................................. Michael Bass
Assistant Vice President and Director for Research ......................... Joan R. Burr
Associate Director ...................................................... Rusty Okoniewski
Grant Development Coordinator ...................................... Bruce M. Furino
Assistant in Grant Coordination ...................................... James E. Robertson
Assistant in Grant Development ....................................... JoAnn Smith
Associate in Contract Development .................................. Betsy L. Gray
Assistant in Contract Management .................................... Irene P. Marton
Assistant in Contract Management .................................... Douglas Backman
Special Projects Coordinator ......................................... Denise Charleston
Associate in Fiscal Management ...................................... William L. Roach

Office of the Vice President for Administration and Finance

Vice President for Administration and Finance ......................... John R. Bolte
Associate Vice President .............................................. Joyce A. Cl amplitt
Director, Budget Office .................................................. James G. Smith, Jr.
Interim Director, Business Services .................................. Timothy W. Carroll
Director, Computer Services .......................................... William H. Branch
Director, Environmental Health and Safety ......................... Hubert G. Ivie
Director, Facilities and Safety ....................................... Anthony W. Blass
Director, Facilities Planning ......................................... Jerry C. Osterhaus
Director, Institutional Research and Planning ......................... Daniel R. Coleman
Director, Payroll Services ......................................................... Mary C. Alford
Director, Personnel Services ..................................................... Mark A. Roberts
Director, Physical Plant .......................................................... Richard Paradise
Director, Purchasing .............................................................. Walter G. Winstead
Director, University Police ...................................................... Richard P. Turkiewicz
Interim University Controller ..................................................... Linda B. Bonta

Office of the Vice President for Student Affairs

Vice President for Student Affairs ........................................... LeVester Tubbs
Associate Vice President & Dean of Students ............................. Carol P. Wilson
Associate Vice President for Administration and Research ............. Kenneth Lawson
Assistant Vice President and Director, Student Information & Evening/Weekend Student Services ........................................... Jimmy Watson
Associate Dean of Students ..................................................... Pamela S. Mounce
Director, Creative School for Children ....................................... Dolores Burghard
Director, Counseling and Testing Center ..................................... Robert Harman
Director, Housing and Residence Life ....................................... Christopher McCray
Director, International Student Services .................................... Douglas M. Mowry
Director, Recreational Services ............................................... Loren Knutson
Director, Student Center/Student Organizations .......................... Jimmie Ferrell
Director, Student Health Services ............................................. John G. Langdon
Director, Career Resource Center ............................................. James W. Gracey
Director, Counseling Coordinator, Veterans' Affairs ....................... Ronald H. Atwell
Director, Handicapped Student Services .................................... Louise A. Friderici

Office of University Relations

Vice President for University Relations and Executive Director, UCF Foundation, Inc. ..................................................... D. Robert McGinnis
Assistant Vice President for University Relations and Director, Public Affairs ................................................................. Dean McFall
Controller, UCF Foundation, Inc. ................................................ Ray D. McFall
Director, Annual Fund ............................................................. TBA
Director, University Development ............................................. Emma Lee Twitchell
Interim Director, University Development ..................................... TBA
Interim Director, Alumni Relations ............................................ Thomas Messina
Director, Community Relations .................................................. Candice J. Crawford

COLLEGES, DEPARTMENTS, AND PROGRAMS

College of Arts and Sciences

Dean .......................................................................................... Edward P. Sheridan
Associate Dean ........................................................................ Lee A. Armstrong
Assistant Dean .......................................................................... Kathryn L. Seidel
Acting Assistant Dean ............................................................. Bruce A. Whisler
Director, OASIS ........................................................................ Judith Boyte
Director, School of Communication .......................................... James W. Welke
Coordinator, Preprofessional Programs ...................................... Orville Berringer
Chair, Art .................................................................................. TBA
Chair, Biological Sciences ....................................................... Robert Gennaro
Chair, Chemistry ....................................................................... D. Howard Miles
Acting Chair, Computer Science ................................................... Terry J. Frederick
Chair, English .......................................................................... John F. Schell
Chair, Foreign Languages ......................................................... TBA
Chair, History ........................................................................... Jerrell H. Shofner
Chair, Mathematics .................................................................... Lokenath Debnath
Chair, Music ............................................................................. Edward R. Holaling, Jr.
Chair, Philosophy and Humanities ........................................ TBA
Chair, Physics ................................................................. Subir K. Bose
Chair, Political Science .................................................. TBA
Chair, Psychology .......................................................... Richard D. Tucker
Chair, Sociology and Anthropology .................................... David A. Fabianic
Chair, Statistics ............................................................. TBA
Chair, Theatre ....................................................................... Harry W. Smith, Jr.

College of Business Administration

Dean .................................................................................. Richard C. Huseman
Associate Dean .................................................................. Harvey S. Lewis
Associate Dean for Administration ...................................... Wallace W. Reiff
Assistant Dean ..................................................................... TBA
Director, School of Accounting .......................................... Henry R. Anderson
Chair, Economics ............................................................... W. Warren McHone
Chair, Finance ...................................................................... Ronnie J. Clayton
Chair, Management ........................................................... Halsey R. Jones
Acting Chair, Marketing ...................................................... Duane L. Davis
Coordinator, Undergraduate Programs ................................. Helen Y. Hill

College of Education

Dean .................................................................................. William H. Johnson
Associate Dean ................................................................... Mary Ann Lynn
Assistant Dean ..................................................................... John H. Armstrong
Chair, Educational Foundations .......................................... Alexander T. Wood
Chair, Educational Services ............................................... David J. Mealor
Chair, Exceptional and Physical Education ........................... Michael W. Churton
Chair, Instructional Programs ............................................... Robert D. Martin
Director, Extended Studies and Teacher Education Center .... Margaret Miller

College of Engineering

Dean .................................................................................. Gary E. Whitehouse
Associate Dean .................................................................. Stephen L. Rice
Assistant Dean ..................................................................... Bruce E. Mathews
Assistant Dean ..................................................................... Richard N. Miller
Chair, Civil Engineering and Environmental Sciences ......... David R. Jenkins
Chair, Computer Engineering ............................................... Christian S. Bauer
Chair, Electrical Engineering and Communication Sciences Nicolaos S. Tzannes
Chair, Industrial Engineering and Management Systems .... William W. Swart
Acting Chair, Mechanical Engineering and Aerospace Sciences James K. Beck
Acting Chair, Engineering Technology .................................... Clarence M. Head

College of Health and Professional Studies

Dean .................................................................................. Belinda R. McCarthy
Interim Associate Dean ..................................................... Thomas S. Mendenhall
Chair, Communicative Disorders ........................................... David L. Ratusnik
Chair, Criminal Justice/Legal Studies .................................. N. Gary Holten
Chair, Health Sciences ........................................................ M. Jo Edwards
Chair, Hospitality Management ............................................ Abraham Pizam
Chair, Nursing ..................................................................... Jean C. Kijek
Chair, Public Administration ................................................ Raymond A. Shapek
Chair, Social Work ............................................................ Kenneth J. Kazmerski
Director, Dick Pope Institute ................................................ Abraham Pizam

College of Education
UNIVERSITY CALENDAR

FALL SEMESTER 1990

*March 15  Priority application deadline
August 3  Readmission application deadline
August 13 (1 p.m.)  Residence Halls open for Fall Semester
August 14-16  Orientation and advisement
August 14-17  Registration by appointment
August 20  Classes begin
August 22-24  Add/Drop
August 24  Last day to submit Grade Forgiveness Request
August 24  Last day to adjust class schedule
August 24  Last day of late registration—$25 late fee
August 24  Last day for refund/fees due
August 24  Graduation application deadline
August 27  Audit registration
September 3  Labor Day Holiday (University-wide)
September 7  Registration deadline for October 6 CLAST
September 15  MCAT
September 17  Last day for removing temporary student status
**September 20-21  Rosh Hashana (Sept. 19 sunset through the 21st)
**September 29  Yom Kippur (Sept. 28 sunset through the 29th)
**October 3-5  Sukkot (Oct. 2 sunset through the 5th)
October 6  LSAT
October 6  CLAST
October 12  Withdrawal deadline
October 13  GRE
October 20  GMAT
October 27  FTCE
November 10  Homecoming
November 12  Veterans' Day Holiday (University-wide)
November 16  Last day to remove an "I" earned last semester
November 22-23  Thanksgiving Holidays (University-wide)
December 2  LSAT
December 5  Classes end for Fall Semester
December 6  Prep day for final exams
December 8  GRE
December 7-13  Final Examination period
December 13 (4 p.m.)  Residence Halls close
December 14  Commencement
December 18 (12 noon)  Grades due in Registrar's Office

*The University of Central Florida reserves the right to modify this deadline subject to funding and the number of applicants.

**If possible, examinations should not be scheduled on days or during the times indicated. Students are expected to notify their instructor in advance if they intend to observe a holy day of their religious faith during the time period stated.

<table>
<thead>
<tr>
<th>AUGUST</th>
<th>SEPTEMBER</th>
<th>OCTOBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>S M T W T F S</td>
<td>S M T W T F S</td>
<td>S M T W T F S</td>
</tr>
<tr>
<td>1 2 3 4 5 6 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31</td>
<td>1 2 3 4 5 6 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NOVEMBER</th>
<th>DECEMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>S M T W T F S</td>
<td>S M T W T F S</td>
</tr>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31</td>
</tr>
</tbody>
</table>
UNIVERSITY CALENDAR

SPRING SEMESTER 1991

*October 15  Priority application deadline
December 3  Readmission application deadline
January 1 (1 p.m.)  Residence Halls open
January 2  Orientation and advisement
January 2-4  Registration by appointment
January 7  Classes begin
January 9-11  Add/Drop
January 11  Last day to adjust class schedule
January 11  Last day to submit Grade Forgiveness Request
January 11  Last day of late registration—$25 late fee
January 11  Last day for refund/fees due
January 11  Graduation application deadline
January 14  Martin Luther King Day. University Holiday
January 15  Audit registration
January 25  Registration deadline for February 23 CLAST
January 26  GMAT
February 2  GRE
February 4  Last day for removing temporary student status
February 9  LSAT
February 23  CLAST
March 1  Withdrawal deadline
March 11-16  Spring Holidays
March 16  GMAT
**March 29  Good Friday (noon-3 p.m.)
**March 30-April 1  Passover (March 29, 4 p.m. to April 1, 7 p.m.)
April 5  Last day to remove an "I" earned last semester
April 13  GRE
April 20  FTCE
April 26  Classes end for Spring Semester
April 27  MCAT
April 29  Prep day for final exams
April 30-May 6  Final examination period
May 6 (4 p.m.)  Residence Halls close
May 7  Commencement
May 9 (12 noon)  Grades due in Registrar's Office

*The University of Central Florida reserves the right to modify this deadline subject to funding and the number of applicants.

**If possible, examinations should not be scheduled on days or during the times indicated. Students are expected to notify their instructor in advance if they intend to observe a holy day of their religious faith during the time period stated.

JANUARY

<table>
<thead>
<tr>
<th>S</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>T</th>
<th>F</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>29</td>
<td>30</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FEBRUARY

<table>
<thead>
<tr>
<th>S</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>T</th>
<th>F</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
</tr>
</tbody>
</table>

MARCH

<table>
<thead>
<tr>
<th>S</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>T</th>
<th>F</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
</tr>
<tr>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

APRIL

<table>
<thead>
<tr>
<th>S</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>T</th>
<th>F</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>29</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MAY

<table>
<thead>
<tr>
<th>S</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>T</th>
<th>F</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>29</td>
<td>30</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
UNIVERSITY CALENDAR

SUMMER "C" SEMESTER 1991
(See also Summer "A" and "B")

*February 15
April 15  
Priority application deadline
April 15  
Readmission application deadline
May 3  
Registration deadline for June 1 CLAST
May 8 (1 p.m.)  
Residence Halls open for Summer Semester
May 9  
Orientation and advisement
May 9-10  
*Registration by appointment
May 13  
Classes begin
May 14-15  
Add/Drop
May 15  
Last day to adjust class schedule
May 15  
Last day to submit Grade Forgiveness Request
May 15  
Last day of late registration—$25 late fee
May 15  
Last day for refund/fees due
May 16  
Audit registration
May 17  
Graduation application deadline
May 27  
Memorial Day Holiday (University-wide)
June 1  
CLAST
June 1  
GRE
June 10  
Last day for removing temporary student status
June 15  
GMAT
June 21  
Withdrawal deadline
July 4  
Independence Day Holiday (University-wide)
July 12  
Last day to remove an "I" earned last semester
August 3  
FTCE
August 7  
Classes end
August 7 (4 p.m.)  
Residence halls close
August 8  
Commencement
August 12 (12 noon)  
Grades due in Registrar's Office

*The University of Central Florida reserves the right to modify this deadline subject to funding and the number of applicants.
UNIVERSITY CALENDAR

SUMMER "A" TERM 1991

*February 15
April 15
May 3
May 8 (1 p.m.)
May 9
May 9-10
May 13
May 14-15
May 15
May 15
May 15
May 15
May 16
May 17
May 27
May 31
June 1
June 10
June 24
June 24 (4 p.m.)
June 27 (12 noon)
August 8

Priority application deadline
Readmission application deadline
Registration deadline for June 1 CLAST
Residence Halls open for Summer "A" term
Orientation and advisement
Registration by appointment
Classes begin for Summer "A" Term
Add/Drop
Last day to adjust class schedule
Last day to submit Grade Forgiveness Request
Last day for refund
Last day for late registration—$25 late fee
Audit registration
Graduation application deadline
Memorial Day Holiday (University-wide)
Withdrawal deadline
CLAST
Last day for removing temporary student status
Classes end
Residence Halls close
Grades due in Registrar's Office
Commencement

*The University of Central Florida reserves the right to modify this deadline subject to funding and the number of applicants.
**UNIVERSITY CALENDAR**

**SUMMER "B" TERM 1991**

| *February 15 | Priority application deadline |
| May 9-10     | Registration (see also June 25) |
| May 14-15    | Add/Drop (see also June 28) |
| June 7       | Readmission application deadline |
| June 24 (1 p.m.) | Residence Halls open |
| June 25      | Orientation and advisement |
| June 25      | Registration by appointment |
| June 26      | Classes begin |
| June 28      | Graduation application deadline |
| June 28      | Add/Drop |
| June 28      | Last day to adjust class schedule |
| June 28      | Fees Due |
| June 28      | Last day of late registration — $25 late fee |
| June 28      | Last day for refund/fees due |
| June 28      | Last day to submit Grade Forgiveness Request |
| July 1       | Audit Registration |
| July 4       | Independence Day Holiday (University-wide) |
| July 12      | Withdrawal deadline |
| July 19      | Last day to remove an "I" earned last semester |
| July 24      | Last day for removing temporary student status |
| August 7     | Classes end |
| August 7 (4 p.m.) | Residence Halls close |
| August 8     | Commencement |
| August 12 (12 noon) | Grades due in Registrar’s Office |

*The University of Central Florida reserves the right to modify this deadline subject to funding and the number of applicants.*

<table>
<thead>
<tr>
<th>MAY</th>
<th>JUNE</th>
<th>JULY</th>
<th>AUGUST</th>
</tr>
</thead>
<tbody>
<tr>
<td>S M T W T F S</td>
<td>S M T W T F S</td>
<td>S M T W T F S</td>
<td>S M T W T F S</td>
</tr>
<tr>
<td>1 2 3 4 5</td>
<td>6 7 8 9 10 11</td>
<td>12 13 14 15 16 17 18</td>
<td>19 20 21 22 23 24 25</td>
</tr>
<tr>
<td>26 27 28 29 30 31</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12 13</td>
<td>14 15 16 17 18 19 20 21 22 23 24 25 26 27</td>
<td>28 29 30 31</td>
</tr>
<tr>
<td>30</td>
<td>1 2 3 4 5 6</td>
<td>7 8 9 10 11 12 13</td>
<td>14 15 16 17 18 19 20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14
CAMPUS DIRECTORY

A.A. DEGREE APPLICATION
ACADEMIC CLASSIFICATION
ACADEMIC MATTERS/COUNSELING
ACADEMIC RESOURCE CENTER
ACADEMIC STATUS
ADD/DROP
ADDRESS CHANGE
ADMISSIONS/STANDARDS COMMITTEE
AUDIT A CLASS
BOARD ROOM (President's)
BOOKS, SUPPLIES, & SUNDRY ITEMS
CAMPUS TOURS (By Appointment)
CAREER RESOURCE CENTER
CATALOGS
CERTIFICATION OF ENROLLMENT:
  INTERNATIONAL STUDENTS
  GOOD STUDENT DISCOUNT
  FINANCIAL AID & LOANS
CHANGE OF MAJOR
CHECK CASHING
CHECKING ACCOUNT
CLAST
COLLEGE LEVEL EXAMINATION
  PROGRAM (CLEP)
COOPERATIVE EDUCATION
COUNSELING:
  ADMISSIONS
  CAREER

PERSONAL

RELIGIOUS
CREDIT BY EXAMINATION
DECALS (PARKING)
EMERGENCY
EXTENDED STUDIES, COLLEGE OF

FINANCIAL AID
FLORIDA RESIDENT AFFIDAVIT
FRATERNITIES
GORDON RULE
GRADE FORGIVENESS
GRADUATE ADMISSIONS-LIAISONS
GRADUATION
HANDICAPPED STUDENTS

HEALTH INSURANCE
HELP WITH READING, SPEECH, OR HEARING
"HOLD" CLEARANCES
HOUSING (Campus/Off-Campus)
"I.D. CARD INFORMATION"
INTENT TO GRADUATE FORMS

Registrar/Records AD 1st Floor x2531
Registrar AD 1st Floor x2531
Academic Advisor (Degree Program Advisor) PC-1 102 x5130
Registrar AD 1st Floor x2531
(or Academic Advisor in College)
Registrar/Records (Class Schedule lists dates for current term) AD 3rd Floor
Registrar/Records AD 1st Floor x2531
Admissions AD 1st Floor x2511
Registrar/Records AD 1st Floor x2531
(Details in UCF Catalog & Class Schedule)
AD 3rd Floor
Bookstore, Student Services x2355
Student Center 198 x5105
AD 124 x2361
Bookstore, Student Services x2355
Registrar/Records AD 1st Floor x2531
Registrar/Records AD 1st Floor x2531
Registrar/Records AD 1st Floor x2531
Present Department
Bookstore, Student Services x2355
Credit Union, Student Services x2855
Student Academic Resource Center, PCI-102 x5130
Counseling & Testing Center x2811
RS 203
PH 210 x2314

Admissions AD 1st Floor x2511
Counseling & Testing Center x2811
RS 203
Career Resources Center AD 124 x2361
Counseling & Testing Center x2811
RS 203

Campus Ministry SC 208 x2468
Dept. Chair within appropriate College Police Department x5812
Police Department x2421
Research Pavilion/ Research Park 249-6100
AD 120 x2827
Admissions AD 1st Floor x2511
Student Affairs AD 282 x2177
Undergraduate Studies AD 210 x2691
Registrar/Records AD 1st Floor x2531
AD 146 x2766
Dept. Chair/Advisor/Registrar/Records Handicapped Student Coordinator AD 282 x2371
Wellness Center x5841

Instructional Resources LIB 107 x5489
Registrar/Records AD 1st Floor x2531
Housing Office SC 137 x2171
Business Services AD 362 x2624
Registrar/Records AD 1st Floor x2842
INTERNATIONAL STUDENTS

INTERNATIONAL STUDENT SERVICES
AD 225 x2337
Recreational Services RS 101 x2408
Student Center x2117
AD 384 x2351
KIOSK x2060
Undergraduate Studies AD 210 x2691
AD 225 x2716
Registrar/Records AD 1st Floor x2531
Student Center x2117
Police Department x5812
Cashier's Office AD 110 x2881
Student Accounts AD 110 x2881
Admissions AD 1st Floor x2511
Financial Aid AD 120 x2827
Undergraduate Studies x2691
or College of major
Registrar/Records AD 1st Floor x2531
Student Affairs AD 282 x2177

INTRAMURALS
Recreational Services RS 101 x2408
Student Center x2117

LEISURE PROGRAMS
AD 384 x2351
KIOSK x2060

LIBERAL STUDIES PROGRAM
Undergraduate Studies AD 210 x2691

LOST AND FOUND
AD 225 x2716
Registrar/Records AD 1st Floor x2531

MEDICAL WITHDRAWAL
Student Center x2117

MINORITY STUDENT SERVICES
Police Department x5812
Cashier's Office AD 110 x2881
Student Accounts AD 110 x2881
Admissions AD 1st Floor x2511
Financial Aid AD 120 x2827
Undergraduate Studies x2691
or College of major
Registrar/Records AD 1st Floor x2531
Student Affairs AD 282 x2177

NAME CHANGE
Registrar / Records AD 1st Floor x2531

ORIENTATION
Student Center x2117

PAY UNIVERSITY BILL
Cashier's Office AD 110 x2881

PROBLEMS REGARDING PAYMENT
Student Accounts AD 110 x2881
Admissions AD 1st Floor x2511
Financial Aid AD 120 x2827
Undergraduate Studies x2691
or College of major
Registrar/Records AD 1st Floor x2531
Student Affairs AD 282 x2177

READMISSION APPLICATION
Registrar / Records AD 1st Floor x2531

SCHOLARSHIPS
Student Center x2117

SENIOR CITIZEN FEE WAIVER
Registrar / Records AD 1st Floor x2531

SORORITIES
Registrar / Records AD 1st Floor x2531

STUDENT CENTER ROOM
Registrar / Records AD 1st Floor x2531

RESERVATIONS
Registrar / Records AD 1st Floor x2531

STUDENT EMPLOYMENT
Registrar / Records AD 1st Floor x2531

SUMMER CREDIT WAIVER
Registrar / Records AD 1st Floor x2531

TESTING: SAT, ACT, MCAT, GRE, GMAT
Financial Aid AD 120 x2827
Undergraduate Studies AD 210 x2691
Counseling & Testing RS 203 x2811
Athletic Ticket Office x2663
KIOSK x2060
University Police PD x2422
Registrar/Records AD 1st Floor x2531
Financial Aid AD 120 x2827
Admissions AD 1st Floor x2511
Registrar/Records AD 1st Floor x2531

TRANSIENT STUDENT
Registrar/Records AD 1st Floor x2531
Admissions AD 1st Floor x2511
University Police PD x2424
Veterans' Affairs SC 132 x2707
Registrar/Records AD 1st Floor x2531
Dean of Students AD 282 x2851

REQUESTS SENT FROM UCF
Registrar / Records AD 1st Floor x2531

ACADEMIC (official & unofficial)
Registrar / Records AD 1st Floor x2531

FINANCIAL AID
Registrar / Records AD 1st Floor x2531

TRANSFER HOURS SENT TO UCF
Registrar / Records AD 1st Floor x2531

REQUESTS SENT FROM UCF
Registrar / Records AD 1st Floor x2531

TRANSIENT STUDENT
Registrar / Records AD 1st Floor x2531

FORMS/APPLICATIONS:
Registrar / Records AD 1st Floor x2531

OUTGOING
Registrar / Records AD 1st Floor x2531

INCOMING
Registrar / Records AD 1st Floor x2531

VEHICLE REGISTRATION
Registrar / Records AD 1st Floor x2531

VETERANS' BENEFITS
Registrar / Records AD 1st Floor x2531

WITHDRAWAL FROM COURSES OR
Registrar / Records AD 1st Floor x2531

UNIVERSITY
Registrar / Records AD 1st Floor x2531

CAN'T FIND AN ANSWER?
Registrar / Records AD 1st Floor x2531

Dean of Students AD 282 x2851
The University of Central Florida, a member institution of the State University System, was formerly Florida Technological University. The name was changed by action of the Florida Legislature on December 6, 1978.

STATEMENT OF PURPOSE

The University of Central Florida is a general-purpose state university which serves the needs of the immediate community and the larger region in which it is located. UCF serves its national and international constituents through its quest for new knowledge, the enrichment of the imagination, and the preservation of the knowledge and learning gleaned from previous generations and civilizations.

The University offers educational and research programs in such diverse fields as aerospace, banking, electronics, health, and tourism. UCF's programs in communication and the fine arts help to meet the cultural and entertainment needs of a growing metropolitan area.

UCF's general education program produces well-rounded men and women with a balance of communicative and mathematical skills; historical, social, and scientific knowledge; and ethical, aesthetic, and artistic sensitivity.

In brief, the University's purpose is to provide its students with an enhanced opportunity to lead productive and meaningful lives.

INSTITUTIONAL PHILOSOPHY

The University of Central Florida philosophy is based upon two tenets: Accent on the Individual and Accent on Excellence. The University believes in the individual worth of each person and especially encourages the responsible individual who strives for excellence in every activity.

Research is considered an important part of advanced study, and UCF provides students with opportunities for research projects and independent study. Many projects involve community service and opportunities for students to experience real situations while receiving individual guidance from faculty.

UCF adheres to the principle that the University is primarily a community of national and international scholars, in pursuit of knowledge and active in teaching, learning, and doing research. The presence of international students on the campus contributes substantially to the quality of the educational experience for everyone. International students bring to the classroom unique viewpoints and perceptions which would otherwise be lost to the U.S. students. Effective personal contact across cultures can reduce errors in understanding another's problems and can foster a climate of international peace and cooperation among people of the world today.

In order to serve the community better, the University of Central Florida makes higher education easily available to the citizens of East Central Florida by operating off-campus centers and offering off-campus credit courses to citizens of the area.

ACCREDITATION

The University of Central Florida is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools as a Level IV, general post-secondary institution. The following scientific, professional, and academic bodies also confer accreditation in the listed disciplines and groups of disciplines.

<table>
<thead>
<tr>
<th>College/discipline</th>
<th>Accrediting Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts and Sciences</td>
<td>American Chemical Society</td>
</tr>
<tr>
<td>Chemistry</td>
<td>National Association of Schools of Music (NASM)</td>
</tr>
<tr>
<td>Music</td>
<td></td>
</tr>
<tr>
<td>Business Administration</td>
<td>American Assembly of Collegiate Schools of Business (AACSB)</td>
</tr>
<tr>
<td>(all disciplines)</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>Florida State Department of Education National Council for Accreditation of Teacher Education (NCATE)</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Instructional</td>
<td>Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET)</td>
</tr>
<tr>
<td>Technology</td>
<td>Technology Accreditation Commission (TAC) of the Accreditation Board for Engineering and Technology (ABET)</td>
</tr>
<tr>
<td>Engineering</td>
<td>Aerospace Engineering</td>
</tr>
<tr>
<td></td>
<td>Civil Engineering</td>
</tr>
<tr>
<td></td>
<td>Computer Engineering</td>
</tr>
<tr>
<td></td>
<td>Environmental Engineering</td>
</tr>
<tr>
<td></td>
<td>Electrical Engineering</td>
</tr>
<tr>
<td></td>
<td>Industrial Engineering</td>
</tr>
<tr>
<td></td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>Engineering</td>
<td>Computer Technology</td>
</tr>
<tr>
<td>Technology</td>
<td>Design Engineering Technology</td>
</tr>
<tr>
<td></td>
<td>Electronics Engineering Technology</td>
</tr>
<tr>
<td></td>
<td>Information Systems Technology</td>
</tr>
<tr>
<td></td>
<td>Operations Engineering Technology</td>
</tr>
<tr>
<td>Health and</td>
<td>American Registry of Respiratory Therapists (ARRT)</td>
</tr>
<tr>
<td>Professional</td>
<td>Council on Allied Health Education Accreditation Committee on Allied Health Education and Accreditation</td>
</tr>
<tr>
<td>Studies</td>
<td>National Accrediting Agency for Clinical Laboratory Services</td>
</tr>
<tr>
<td></td>
<td>National League for Nursing (NLN)</td>
</tr>
<tr>
<td></td>
<td>Council on Allied Health Accreditation</td>
</tr>
<tr>
<td></td>
<td>Council of Social Work Education</td>
</tr>
<tr>
<td>Nursing</td>
<td>American Speech Language and Hearing Association (ASHA)</td>
</tr>
<tr>
<td>Radiologic</td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td></td>
</tr>
<tr>
<td>Social Work</td>
<td></td>
</tr>
<tr>
<td>Speech Pathology</td>
<td></td>
</tr>
</tbody>
</table>

UCF is listed in *Transfer Credit Practices on Designated Educational Institutions* with the highest level of credit acceptability. This handbook is published by the American Association of Collegiate Registrars and Admission Officers, and lists the acceptability of transfer credits based upon the reporting institutions in the states, commonwealths, territories, and selected international institutions.

**EAST CENTRAL FLORIDA AREA**

UCF is located in East Central Florida, a region with an estimated population of 1.7 million. The area is well endowed with cultural, educational, industrial, and recreational facilities. Cultural opportunities include a symphony orchestra, civic theatre, dinner theatres, art galleries, and museums. The beauty of the Orlando area is evidenced through its numerous parks and flower gardens. In addition to UCF, quality public school systems, public community colleges, and several privately supported colleges and schools serve the educational needs of the area. Recreational opportunities abound in the Orlando area.

**THE ORLANDO CAMPUS**

The main UCF campus is situated on 1,227 acres some 13 miles east of downtown Orlando. The 44 permanent buildings—representing an investment of $100 million—exemplify the promise by the University's founders to retain a rustic charm while creating a modern experiment in higher education that has won international acclaim. Over $40 million in new construction, including a student union and field house, is planned for the next three years. The most recent major project was an $11.5 million second phase of the Center for Engineering and Business Administration. Recreational facilities include lighted tennis and raquetball courts, an outdoor swimming pool, golf driving range, volleyball and basketball courts and ball fields. The Education Complex houses a 2500-seat gymnasium.
UCF AREA CAMPUSES

In addition to the academic programs offered on the Orlando campus, the University of Central Florida offers a number of upper-division programs and graduate programs at Area Campuses in Cocoa, Daytona Beach and South Orlando.

UCF Brevard Area Campus
BCC/UCF Lifelong Learning Center
1519 Clearlake Road
Cocoa, FL 32922

Director:
Robert W. Westrick
(407) 632-0067 UCF Ext. 2815

Associate Director
TBA
(407) 632-0067 UCF Ext. 2815

Assistant Director, Student Services
James L. Nelson
(407) 632-4127 UCF Ext. 2102 or 2104

Admissions Officer/Registrar
Doyce Walter
(407) 632-4127 UCF Ext. 2102 or 2104

The University of Central Florida in Brevard is housed in a 5.8 million-dollar facility located on the Cocoa campus of Brevard Community College. At this site, the University offers junior, senior, and graduate-level courses and programs. Freshman and sophomore-level courses are provided by Brevard Community College. Students who have completed the Associate of Arts Degree are able to select from 20 baccalaureate programs offered by the University in Brevard. Newly admitted or currently enrolled UCF students may also register in selected upper division elective courses presented at UCF-Brevard. Graduate programs are offered in Education, Business, Public Administration, and Engineering.

The coordination between the University of Central Florida and Brevard Community College for the 2+2 baccalaureate degree has become a model for other institutions of higher education in the State of Florida.

UCF-Brevard offers junior, senior, and graduate-level degree programs in the following academic disciplines:
College of Arts & Sciences (407) 632-4129
- Computer Science (Minor)
- Criminal Justice
- Legal Studies
- Public Administration

College of Business (407) 632-0098
- Accounting (coursework only)
- General Business Administration

College of Education (407) 631-5339
- Elementary Education
- Exceptional Education
- Science Education
- Vocational/Technical Education

College of Engineering (407) 631-5366
- Computer Technology
- Design Technology
- Electronics Technology
- Information Systems Technology
- Operations Technology

College of Health (407) 631-5440
- Nursing

Department of Liberal Studies (407) 632-4127
- Liberal Studies (B.A.)
- Liberal Studies (B.S.)

Graduate Programs
- Masters of Business Administration (MBA)
- Masters of Education Administration & Supervision (MEd)
- Masters of Education Elementary Education (MEd)
- Master of Education Exceptional Education (MEd)
- Masters in Public Administration (MPA)
- Engineering (coursework only)
- FEEDS/ITV Graduate Engineering
  (Courses on videotape)

For information concerning the campus contact the Admissions Office at the University of Central Florida-Brevard.
UCF at Daytona Beach
UCF/DBCC Higher Education Center
1200 Volusia Avenue
P. O. Box 2811
Daytona Beach, Florida 32115
(904) 255-7423
Director: Sarah H. Pappas
Associate Director: David C. Jordan
Assistant Director: William J. Wetherell

The Daytona Beach Campus of the University of Central Florida is located in the $3.8 million Higher Education Center it shares with Daytona Beach Community College. The faculty and staff at the new facility have a strong commitment to serve the residents of Volusia and Flagler counties. In Daytona Beach, UCF offers junior, senior, and graduate level courses and programs. Freshman and sophomore level courses are provided by Daytona Beach Community College. At present, degree programs are available in:

**Baccalaureate Level**
- Criminal Justice
- Elementary Education
- Finance (partial)
- General Business Admin.
- Liberal Studies
- Management (partial)
- Marketing (partial)
- Nursing
- Psychology
- Vocational Education

**Master's Level**
- Admin. & Supervision/Ed.
- Business Administration (M.B.A.)
- Counselor Education
- Elementary Education
- Engineering (Video)
- Public Administration
- Vocational Education

Additional courses and programs will be added as needs are identified.
The South Orlando Campus of the University of Central Florida, located in Orlando Central Park near the intersection of I-4 and the Florida Turnpike, offers a variety of required courses and selected electives at a location convenient to students who live or work in the southwestern section of Orange County or northern Osceola County. Evening classes include upper division courses in Business Administration and the Arts & Sciences, and graduate courses in Engineering and Vocational Education. A variety of lower division courses are also offered through a joint-use arrangement with Valencia Community College. Times and dates for all courses are listed in the regularly published schedule of classes, and students may register on site at the South Campus for all UCF classes.

ENDOWED CHAIRS

Endowed chairs are established under terms of the 1980 Florida Eminent Scholars Act, which provides $400,000 in state funds to match $600,000 in contributions from private sources within a 6-year period. UCF presently has four endowed chairs:

Phillips-Schenck Chair in American Private Enterprise—Created in 1980 as the focal point for a continual dialog on major economic issues, comparative economic systems, and economic decision-making in business. The Chair: Dr. David F. Scott, Jr.

Charles N. Millican Chair in Computer Science—Created in 1983 and dedicated to probing the frontiers of computer science, with emphasis on the direction that the discipline will take over the next decade. The Chair: Dr. Narsingh Deo.

William and Alice Jenkins Chair in Community Arts—Created in 1986 to enable UCF to design and oversee programs covering art administration, art therapy and art education within the Central Florida community. The Chair: Dr. Kristin G. Congdon.

Cobb-L.J. Hooker Chair in Optical Sciences and Engineering—Created in 1988 as the largest academic gift ever received by UCF. The gift will support the work of an internationally recognized scholar in laser and optical sciences. The Chair: Dr. George I.A. Stegeman.

INTERNATIONAL STUDIES AND PROGRAMS

Coordinator: A. V. Cervone, HFA 209, Phone (407) 281-5375

The University of Central Florida offers a number of programs which give students an opportunity to gain first-hand information on the language, customs, economy, geography, politics, and the arts of societies abroad. Such programs involve travel abroad or study concentration on campus.
The Office of International Studies and Programs coordinates efforts of the various international programs on UCF's campus and provides students, faculty, and the community with information concerning both these programs and opportunities for study abroad. The office:

- promotes student and faculty exchange programs with universities abroad;
- cooperates with the directors and faculty of the Area Studies Programs to develop new courses and areas of concentration dealing with foreign cultures;
- assists any department in the University that wishes to internationalize its curriculum;
- assists individual faculty and departments in their application for grants to develop foreign language and culture teaching techniques;
- assists and promotes the development of extracurricular activities related to foreign cultures, both on campus and in the community;
- encourages public and private enterprise to explore and pursue those areas of common interest that will be of mutual benefit to students and companies involved;
- cooperates with the International Student Office to promote international students' participation in campus and community life.

The office is also a repository of faculty resource capabilities, programs, and research efforts in the field of international studies. These resources are available to the University and the community.

Ten to 15 semester credits may be earned through study abroad programs. Credit earned in these programs may be applied toward satisfying the summer credit requirement and the 30-hour residency requirement. Financial aid may be used on all UCF programs. All programs are approved by the Board of Regents and are open to all students in the State University System.

The primary purpose of study abroad programs is to improve the linguistic and cultural proficiency of the participants. Previous knowledge of the foreign language is advised but not required. Study abroad programs feature intensive language courses at the elementary, intermediate, and advanced levels. Students are placed in language classes according to their previous training. Admission requirements are a grade point average of 2.0 or better and evidence of good health, emotional stability, maturity, and adaptability.

**Cambridge Program**

This program consists of two, three, or four-week sessions at the International Summer School in Cambridge, England. Courses in English Literature and Arts History are available through this program. The number of credits varies according to length of stay. Contact: Dr. Gerald Schiffhorst, FA 450, (407) 275-2279.

**Florida-Tilburg Program**

The Florida-Tilburg Program is operated by UCF, FSU, and Tilburg University, The Netherlands. The four-course sequence addresses the economic issues of the European Community, combining academic study with travel to points of interest in the political and economic institutions of the European Community. All the classes are taught in English. Contact: Dr. Thomas Martin, CB II 322 (407) 281-5549.

**INSA Program in Lyon, France**

The program is based on an agreement between UCF and the Institut des Sciences Appliquees de Lyon which gives engineering students from these institutions an opportunity to do one year of internship. Two years of French are required for UCF students.

**Jerusalem—One Year of Science and Research at the Hebrew School**

The Rothberg School for Overseas Students offers visiting research opportunities for English-speaking students in the Arts and Sciences. The program is open to students with a B.A. degree or an equivalent in the field they wish to research. Other programs for undergraduate or graduate students are also offered. Many Scholarships and loans are available. Please contact the Office of International Studies for further information. Contact: Dr. Moshe Pelli, FA 550 (407) 281-5039.

**Lyon Exchange Program**

This program provides for an even exchange of student between UCF and the University of Lyon, France. Two years of college French are required. This program is open to students from any college, except the College of Engineering (see INSA Program).
unique feature of this program is that qualified students are able to study for one academic year in Lyon for approximately the same amount of money that would be required for them to attend UCF, plus air transportation. Contact: Dr. Anthony Cervone, FA 209, (407) 281-5375

Oviedo-Andalusia, Spain
The Department of Foreign Languages is offering a summer program in Spain from June 28 through August 7. In Asturias, students can enjoy a great variety of cultural activities, concerts and the famous international boat race. At the University of Oviedo, many cultural activities are available, in addition to field trips to points of interest in Seville. Contact: Dr. Armando Payas or Mrs. Maria Redmon, FA 443 (407) 275-2472.

Paris Internship Program
FULL SEMESTER—The University of Central Florida Paris Internship Program offers students who have at least four semesters (or equivalent) of college-level French the opportunity to study and gain international work experience in one of the world's great cities. The program combines a full semester of academic coursework with a nine-week internship in a wide variety of French and multinational institutions and businesses. The seventeen-week, sixteen-credit Paris Internship Program combines intensive French language coursework with an elective course and a nine-week internship. The first eight weeks of the semester are devoted to orientation and intensive language work to prepare students for their internships and to familiarize them with Paris and French society. In the classroom, students participate in an intensive language course (eight semester-hour credits) designed to give them as much exposure as possible to all uses of the language—written and oral.

The internship assignment depends primarily on the student's language ability, past work experience, and professional interests and goals. Internships are available in a variety of areas. Sample placements include: Media, PR and Advertising, Government, Financial Institutions, Food Products, Tourism and Entertainment, Fashion and Cosmetics, Publishing, and the Arts. Contact: Dr. Anthony Cervone, FA 209, (407) 281-5375.

Study and Research in the Andes
Study and research in Merida, Venezuela for six weeks in the summer. The first session is May 13-June 24 while the second session is June 24-August 5. Fall and Spring semesters are also available, with the Fall Program beginning on August 30 and continuing until December 4. Students have an option of taking intensive Spanish classes or doing research studies and internships. Included in the program are weekly conferences about folklore, architecture, the latest archaeological discoveries in the Andean region, literature and other topics. Participants have the opportunity to tour the sites of Merida and participate in sports. Contact: Dr. Anthony Cervone, HFA 209, (407) 281-5375.

Urbino, Italy
The Fourteenth Annual summer study program in Urbino is being offered from July 1 through August 7. Visits to Urbino, Rome, Tivoli, Pompeii, Florence, and Padua are part of the curriculum. Also, courses in intensive Italian and the history of Italy are offered in this city that is rich in Roman and Medieval history. For further information direct questions to Dr. Anthony Cervone, HFA 209, (407) 281-5375 or Dr. Nadia Patrone, FA 443, (407) 275-2466.

Other Programs
The Office of International Studies also makes available summer, semester, or year-long programs to the following countries: Austria, Brazil, Canada, Denmark, Germany, Israel, Mexico, and the USSR. All programs carry UCF credit unless otherwise noted. Contact: Dr. Anthony Cervone, FA 205, (407) 281-5375.

Asian Studies
This program offers a minor, but not a major, in Asian Studies. The program is interdisciplinary and is administered by the Department of Philosophy and Humanities. For further information, contact Dr. Kassim, FA 467, (407) 275-2273.

See additional international studies and programs under these listings:
Foreign Study Centers p. 88
Canadian Studies Program p. 94
The University Library, housed in a new facility of 200,200 square feet, has a collection of over 750,000 volumes with approximately 9,000 subscriptions (journals, newspapers, and other serials) all available on open shelves for students and faculty. The Library is a partial depository for US and Florida documents, and also US Patents. Catalog and circulation records for these materials are available in an on-line computer, so that library users can determine whether the UCF Library owns a particular item, and the location and availability of the item. On-line access to catalogs of all state university libraries in Florida is also available.

During school terms the University Library is open approximately 95 hours each week, including evenings and weekends. A shortened schedule is maintained during vacation periods, and extended hours during the last few weeks of each semester. A staff of professional librarians and support personnel is available to assist and advise those using the Library. Arrangements may also be made for class or small group instruction. Interlibrary loan service is available for faculty, staff, and students to obtain materials not available in the Library's collections. Computerized literature searching is available through end-user or mediated searching.

Special services are provided for the handicapped. By using a computer terminal either connected to the University's main computer or a modem, handicapped students can determine the books they need from college department or from home, and telephone the Library to ask that books be brought to them at a convenient location on campus. A Kurzweil reading machine is available in the Library for the visually impaired, and students or faculty may arrange for instruction in its use. Through the cooperation of the University's Office of Handicapped Student Services and the Florida Bureau of Blind Services, the library staff can aid handicapped students in obtaining special equipment they may need to utilize Library resources.

Students enrolled in the University's extended campus centers in Daytona Beach and Brevard County receive a full range of services from the Daytona Beach Community College Library and the Brevard Community College Library. Students at the South Orlando Campus have access to a small reference collection and "electronic" library. On-line access to the catalog of the main library collection is available from all branch campus locations and materials are delivered through a regular courier service.

UNIVERSITY OF CENTRAL FLORIDA PRESS

THE UCF Press is a member of UNIVERSITY PRESSES OF FLORIDA. The UCF Press actively solicits clearly-written scholarly manuscripts and original unpublished manuscripts of poetry for its Contemporary Poetry Series. Current submission guidelines may be obtained from: Director, UCF Press, Office of Graduate Studies, University of Central Florida, Orlando, FL 32816. The UCF Press selects a limited number of outstanding manuscripts for publication each year as UCF Press books. The printing, binding, distribution, and ordering of these books are handled through the central office of University Presses of Florida. A complete catalog may be obtained by writing to: University Presses of Florida, 15 NW 15th St., Gainesville, FL 32603.

The goal of the UCF Press is to assist the University's scholarly and creative activity by publishing works of the highest quality.
UNIVERSITY OF CENTRAL FLORIDA FOUNDATION, INC.

Chartered in 1968, the UCF Foundation, Inc. is a non-profit, tax-exempt corporation receiving and disbursing private gifts for the betterment of the University as a whole.

Through the leadership of the 60-member Board of Directors, the Foundation encourages, solicits, receives, and administers private gifts and bequests of property and funds for scientific, educational, and charitable purposes. All gifts to UCF are processed through the Foundation.

OFFICE OF INSTRUCTIONAL RESOURCES

The primary purpose of Instructional Resources is to improve instruction. To meet both the academic and administrative needs of the University, Instructional Resources provides the faculty with graphic, photographic, radio and television production; a full range of audiovisual and classroom support services; and a wide range of instructional development assistance and consultation. Instructional Resources also administers the Center for Faculty Support, the University Learning Center, the Listening Lab, Cable TV-Channel 35, Brevard Educational Cable Network, and WUCF-FM.

Instructional Resources, through the Division of Sponsored Research, will also provide design, production, and presentation support to University-affiliated organizations, other educational institutions, educational non-profit organizations which have UCF faculty or staff as members, and local non-profit public service organizations.

UNIVERSITY BOOKSTORE

The University Bookstore is owned and operated by the University of Central Florida. The University Bookstore is conveniently located in the Student Services Building and is open to the public. In addition to textbooks and school supplies, this facility offers a complete line of UCF insignia clothing and gift items. A brochure of UCF items is available for mail order purchases. Please call (407) 275-2355 to request a brochure or inquire about store hours.

INTERCOLLEGIATE ATHLETICS

Programs in Intercollegiate Athletics are coordinated by varsity coaches and staff under the general supervision of the Director of Athletics.

The University of Central Florida is a member of the National Collegiate Athletic Association (NCAA), Division I. Varsity athletic contests at the University of Central Florida are governed by the rules of play published by NCAA and all established eligibility standards are observed.

UCF's current varsity sports include baseball, basketball, cross country, golf, football, rifle, soccer, and tennis for men. The women's sports include basketball, cross country, golf, rifle, soccer, tennis, and volleyball. Crew and waterskiing are intercollegiate club sports for both men and women.

PROJECT FOR THE DEVELOPMENT OF THE HUMANITIES AND FINE ARTS

The Project for the Development of the Humanities and Fine Arts, established in 1987, serves as a cultural bridge between the University and the community by creating a positive climate for establishing high calibre, professional humanities and arts programs. Leading Renaissance and Elizabethan scholars, musicians, theatre professionals, and dancers offer community-wide lectures and demonstrations and conduct seminars for community college and high school humanities and arts faculty. The Project, and its director, Dr. Stuart Omans, served as the catalyst for the creation of the Orlando Shakespeare Festival, a professional theatre company which opened its inaugural season in 1989 and will continue an annual festival each spring. Dr. Omans offers an Orlando Shakespeare Festival class, and volunteer positions are available within the festival. For further information, contact: Orlando Shakespeare Festival, 605 East Robinson Street, Suite 100, Orlando, Florida 32801, 407/423-6905

CENTRAL FLORIDA RESEARCH PARK

The Central Florida Research Park, abutting the main UCF campus, is a university related research park established as a result of legislation passed by the Florida Legislature
in 1978. The Park is a cooperative effort between the University of Central Florida, the Orange County Research and Development Authority, and the Orange County Board of County Commissioners (who appoint the members of the Authority). The governing body of the Park is the Orange County Research and Development Authority.

The objectives of the Central Florida Research Park are in keeping with the legislative action which enabled its creation... "to encourage and promote the establishment... of research and development activity combining the resources of... institutions of higher learning, private sector enterprise involved in pure or applied research, and state or federal governmental agency research."

The ultimate goal of university-related research parks is to establish an academic/industry community resulting in a unique approach to the creation of a more effective cooperative academic/industrial endeavor. The University and officials of the Central Florida Research Park believe that the potential for the establishment of close ties between the University and industry will create an attractive environment conducive to the location of research-oriented industry in the Park. This activity will enrich and support the academic, teaching, and research programs of the University. The University, in turn, as a community of scholars, reservoir of knowledge past and present, and creator of new knowledge and discovery, can provide the necessary expertise and human resources to enhance the research and development activities required and planned by Park residents.

Totally planned to provide a campus-like environment for business adjacent to UCF, the Central Florida Research Park consists of over 1,000 areas of land. Businesses which desire a "university relationship" can purchase or lease land in the Research Park on which to construct a facility or can lease space for office, office/lab, or light manufacturing activities.

Four University organizations—the Institute for Simulation and Training, the Center for Research in Electro-Optics and Lasers (CREOL), the Sinkhole Institute, and the Small Business Development Center—are located in the Research Park. The U.S. Naval Training Systems Center, the focal point of the nation's simulation and training industry, has its headquarters in the Research Park. Nearly a billion dollars a year in federal contracts is granted by NTSC each year.

Currently over 65 companies are located in the Research Park pursuing activities in simulation and training, lasers, optical filters, behavioral sciences, diagnostic test equipment, and oceanographic equipment. Almost 4,000 employees currently work in the Research Park.

Research Park tenants are involved with the University of Central Florida through sponsored research, using faculty as consultants, and using graduate and undergraduate students for intern programs and part-time employment. Research Park tenants can also contract with the University for the use of the library computer resources and laboratory facilities. Cooperative projects range from technical research to developing business plans and employee training programs.
STUDENT AFFAIRS

INTRODUCTION

The term "student affairs" is used collectively to refer to the Student Affairs Division and its many functional departments responsible for the administration and management of programs, services, facilities, and activities designed to support the educational mission of the University. The Division of Student Affairs exists primarily to enhance the teaching and learning process through its programs and services. The Division, headed by a Vice President for Student Affairs, administers programs involving orientation, personal counseling, testing, housing, health services, international student services, recreational services, career planning and placement, student organizations, veterans' affairs, and other special activities. Students are invited to consult the staff of Student Affairs concerning any aspect of campus life.

Personal development may be enhanced through informed, experienced, and dedicated participation in University and community activities. Frequently, activities are referred to as "extracurricular," but at the University of Central Florida student activities are regarded as a part of the total educational program—a supplement to the individual student's academic program. The University, through student cooperation and with the assistance of student organizations, sponsors a variety of cultural and entertainment programs which contribute to the student's social, cultural, recreational, and academic development. Additionally, ample opportunity to become a member of occupational, professional, social, and honorary organizations is provided. It is the desire of the University to appeal to the interests of students and to provide opportunities for students to become acquainted with fellow students and faculty members through participation in student activities.

OFFICE OF DEAN OF STUDENTS

Services and programs are provided to facilitate learning and supplement academic instruction. The staff in the Office of the Dean of Students is available to help students in their attempts to become familiar with these services and activities and to become involved in educational experiences beyond the classroom. The Deans plan and assist in the development of University programs which provide for the personal, social, and academic adjustment of students. They counsel students confronted by personal, academic, financial, and social problems, and refer students to specialized professional services as necessary. In addition, the Deans supervise the student disciplinary process. Students are urged to take advantage of the many services and educational programs available beyond the classroom. The Deans are the primary source for students seeking information or assistance in non-academic areas of University operations.

The Division of Student Affairs annually publishes a student handbook called The Golden Rule. Information concerning more detailed aspects of student life is included in this handbook. Copies may be obtained from the Student Center Main Desk or from the receptionist in the Student Affairs Suite, Room 282, Administration Building.

STUDENT PRIVILEGES

Confidentiality of Student Records

The practices and procedures at the University of Central Florida for the confidentiality of student records are based upon Florida state regulations and the federal Family Educational Rights and Privacy Act of 1974. Students who have questions concerning the confidentiality of records or have specific requests concerning their records should write or call the Office of the Dean of Students. Details of the University practices for confidentiality are presented in The Golden Rule.

Student Government

The purpose of the Student Government is to represent student opinion, advance the cause of students both socially and academically, promote communication, cooperation, and understanding among students, and administer Activity and Service fees. Student Government represents students' needs and concerns at the state and federal level.
Student Government provides many services to students, including discount movie and attraction tickets, tutor referral, consumer affairs education, carpool coordination, and vehicles for student organization use.

Every student enrolled at the University of Central Florida is a member of Student Government. The interests of students are represented through three branches of government: the executive branch, headed by an elected student body president and vice president; the student senate (legislative branch) composed of representatives of every college; and the Judicial Council (judicial branch). In addition to these offices, there are many openings for appointed offices and on Student Government and University committees. By actively participating in Student Government, or by voicing opinions and ideas through representative legislators, a student may gain valuable experience in the freedoms and responsibilities of the democratic process. Students interested in working with Student Government may obtain information from the Student Government offices located in the Student Center.

Student Legal Services

Student Legal Services seeks to provide students with advice and consultation including court representation in selected areas of law such as landlord/tenant, consumer, simple wills, and non-criminal traffic. Each eligible student (an undergraduate enrolled in six UCF hours or graduate enrolled in four UCF hours) is entitled to consult with the Program Attorney about any legal matter not excluded by program guidelines, free of charge. Students in need of legal services should contact Student Legal Services at (407) 275-2538, or Student Center Room 210. This service is by appointment only, and no legal advice is given over the phone.

Student Responsibilities

Classroom Responsibility

Students are responsible for maintaining a classroom decorum appropriate to the educational environment. When the conduct of a student or group of students varies from
acceptable standards to such an extent that it becomes disruptive to normal classroom procedures, the instructor has the authority to remove the offending party from the room.

**Student Conduct**

Students are subject to federal and state laws and local ordinances as well as regulations prescribed by the University of Central Florida and the Florida Board of Regents. The breach or violation of any of these laws or regulations may result in disciplinary action. Detailed conduct regulations and procedures are presented in *The Golden Rule*.

A person applying for admission to UCF who has been charged with a criminal offense may have circumstances of the case reviewed by the appropriate Student Affairs administrator to consider eligibility for admission.

**SERVICES**

**Orientation**

The purpose of orientation at the University of Central Florida is to acquaint new students with the various academic curricula, to provide academic advisement, and to assist them in understanding college life. All new students will be given important information by members of the faculty, administration, and student body which can assist them in the achievement of their personal academic goals. Information is mailed to students indicating the date, time, and place for their orientation sessions. The Mathematics Placement Tests are given at Orientation for those new students who are required to take them.

**Academic Peer Advisement Program**

The Academic Peer Advisement Team consists of 50 outstanding sophomores, juniors, seniors, and graduate students selected each spring to assist faculty with the academic advisement of entering freshmen for the academic year. The central office is located in the Counseling and Testing Center, Recreational Services Building, Room 203, 275-2811.

**University Counseling and Testing Center**

The University Counseling and Testing Center (Recreational Services Building, Room 203) offers a professional staff of psychologists and counselors to assist students through educational, vocational, and career counseling; and personal, social, relationship, marriage, and family counseling.

The Center administers the following national testing programs: GRE, LSAT, GMAT, and MCAT. In addition, the Center administers the College Level Academic Skills Test (CLAST). A variety of interest, aptitude, career, occupational, and personality assessments are also offered.

The Center presents special programs throughout the year, including training in relaxation and coping skills, self-hypnosis training, stress reduction training, and group psychotherapy. All Center services are free to UCF students.

**Career Resource Center - Career Planning and Placement**

The Career Planning and Placement Office, located in Suite 124 of the Administration Building, is a career resource center for all University of Central Florida students and alumni. The office's placement professionals provide individualized counseling about current and projected trends in the job market. Services also include: resume advice and critiquing, CHOICES—computerized career guidance, career planning mini-classes, resume referrals at employers' request, on-campus interviews by employers, lists of full-time and part-time job vacancies, interviewing tips, and help in organizing a job search.

The Center Resource center is also a valuable career information center. A library in the office provides information about a broad cross section of employers.

Students just beginning studies at UCF are advised to begin preparing for a career. To make the most effective use of the Placement Service, seniors are urged to register with this office two semesters prior to graduation.

Further information may be obtained by visiting the Center or telephoning (407) 275-2361.
Housing

1. Regularly enrolled single students paying registration fees for a minimum of nine semester hours may apply for assignment to University residential units. Because of the limited amount of space in University housing facilities (444 spaces for females and 423 spaces for males), the University of Central Florida does not require any student to live on campus. There are no on-campus accommodations for married students.

   Priority for assignment is given to incoming Freshmen who will occupy approximately 50 percent of the University's housing capacity, and current residents who will occupy most of the remaining space. The spaces set aside for incoming Freshmen are limited by the University's overall housing capacity. Therefore, those desiring to reside on campus should apply for admittance to the University as soon as possible.

   Applications for housing can be accepted only from those applicants who have been admitted to the University. Priority for room assignments for new applicants is based on the date of receipt of the completed housing application in the Housing Office. Applicants should CAREFULLY READ the application before submitting it to the Housing Office along with the Letter of Acceptance to the University and the $150.00 prepayment.

2. Housing contracts, when issued for Fall Semester occupancy, serve as a two-semester (Fall AND Spring) obligation between the applicant and the Housing Office. Housing contracts issued for the Summer Semester are a one-semester (Summer Only) obligation, and do not extend to include an assignment to Fall housing accommodations.

3. Applicants have the option of choosing one of several Meal Plans available at the University. Specific information concerning University Meal Plans is available from Marriott Corporation, P. O. Box 26029, UCF, Orlando, FL 32816.

Applications and other information concerning University housing may be obtained by consulting the Department of Housing and Residence Life, P. O. Box 26000, UCF, Orlando, FL 32816.

Student Health Services

Recognizing the importance of lifestyle in health and the prevention of disease, the Student Health Service combines quality care for illness and accidents with an aggressive health education and lifestyle enhancement program. There is a Student Wellness Advocate Team to enhance the health promotion efforts of the Student Health Center.

The Student Health Center (SHC) is staffed by medical doctors, a certified nurse practitioner, physician's assistant, Registered Nurses, and a full complement of other medical support personnel. Full referral service to Orlando area specialists is established. Charges incurred outside the Student Health Center are the responsibility of the student. A variety of laboratory and x-ray tests are available at the Student Health Center. Testing for HIV (AIDS virus) is not done in our laboratory. Referral arrangements may be made for anonymous AIDS testing by contacting the Chief Nurse at the Student Health Center at (407) 275-2701, ext. 5275.

When the Student Health Center is not open, students can use the "Hot Line" phones at the front and back doors of the building to obtain help for urgent needs.

By Board of Regents regulation, each student must demonstrate Rubella and Rubella immunity prior to registration. The Student Health Center cannot provide immunization services to meet this requirement. It is a pre-registration requirement and prospective students are not eligible for services at the SHC. A routine health history form is also completed prior to registration, and this information is used for background purposes in providing medical care services. Medical records are held in the strictest confidence.

Each health fee paying student is entitled to the benefits outlined in the SHC brochure; faculty and staff can only be seen on an emergency basis, and then for a fee (except Worker Compensation cases). Optional health and accident insurance may also be purchased by contacting the office of Student Affairs or Student Government (please note optional health and accident insurance is not part of the Student Health Center program and will provide a variety of coverages for health needs outside of the Student Health Services).

Blood drives are held several times annually by the Central Florida Blood Bank. Students, faculty and staff are eligible for credits from the blood bank upon demonstrating need.
Student Center

Student life at the University of Central Florida emanates from the Student Center. As the focal point for campus activities, the Student Center serves students, faculty, staff, patrons, alumni, and guests with its many programs, services, and facilities. The Student Center is funded through Activity and Service fees as allocated by Student Government.

Several student organizations flourish in the Student Center. The Campus Activities Board sponsors a wide variety of educational and entertaining programs for the UCF campus community. The Student Government Association provides for active leadership experiences through the Senate and committees working for student rights. The Orientation Team coordinates Freshmen Orientation and provides Campus Tours for prospective students. Greek Council promotes membership in, and operation of, Fraternities and Sororities.

The Student Center provides other services for students as well. The Game Room offers billiards, ping pong and video games. Student Government Association operates a Macintosh computer lab. There are four food services facilities, an information desk, conference and meeting rooms, and the Student Center Auditorium. Reservations for university facilities can be made at the Student Center Information Desk. The Student Center Director is located in SC 198. For more information regarding the Student Center, call 275-2633.

Student Organizations

Student Organizations play a vital role in enhancing student life at the University of Central Florida. Departmental, honorary, military, minority/international, religious, service, social, special interest, and sports are the ten categories of the over 150 organizations available. The Student Organizations Office publishes a Student Organization Handbook listing all of the organizations at UCF and their purposes.

For further information regarding clubs and organizations, call (407) 281-5107 or visit the Student Organizations Office, Student Center, Room 215.

Recreational Services

The Office of Recreational Services offers a wide variety of sports and recreational opportunities to the students of UCF and their immediate families, as well as a limited number of opportunities to UCF faculty, staff, and the surrounding community.

The services provided include intramural sports leagues and tournaments, summer co-recreational leagues, organized recreation and fitness programs, unstructured open recreation, and sports-related special events. Equipment may be checked out for use on and off campus. Silkscreen printing and racquet stringing services are provided for students, faculty and staff.

Recreational Services exists to serve the UCF community and welcomes the opportunity to serve each individual. A friendly staff is ready and willing to assist with complete information on its programs. The Office of Recreational Services is located next to the pool. The phone number is (407) 275-2408.

Office of Student Information and Evening/Weekend Student Services

The Office of Student Information and Evening/Weekend Student Services is a one-stop communications network and information center committed to gathering and disseminating information to students. The office is also responsible for the administrative supervision of student affairs functions for all University students taking evening and weekend classes and for the administration and programming for the 24-hour Student Services Information and Events Hotline, (407) 281-5479. The office phone number is: (407) 275-2821.

Information Booth & Evening Student Services
9:00 a.m. to 9:00 p.m. Monday through Thursday
9:00 a.m. to 5:00 p.m. Friday (same locations as above)

Weekend Student Services
10:00 a.m. to 2:00 p.m. Saturday at SG Kiosk (407) 275-2060
2:00 p.m. to 5:00 p.m. Sunday at SG Kiosk (407) 275-2060
International Student Services

The International Student Office provides services for all international students and resident aliens. Its central role is to assist students and scholars attending UCF under F-1 or J-1 visas in their adjustment to the changing lifestyle in order to achieve their educational goals and gain a meaningful living experience in the United States. A wide range of special services is provided to the UCF international community, such as issuance of immigration forms I-20 A/B and IAP-66, assistance in locating off-campus apartments, counseling on personal, financial, academic, and cross-cultural communication matters, advisement in immigration and tax matters, promotion of social activities, and home visits in Central Florida. Further information may be obtained from the International Office, Administration Building Suite 225, or by calling (407) 275-2337.

Handicapped Student Services

Handicapped Student Services provides information and orientation to campus facilities and services, assistance with classroom accommodations, assistance with course registration, handicapped parking decals, counseling, and referral to campus and community services for students who are handicapped.

Services are available to students whose disabilities include, but are not limited to, hearing impairment, manual dexterity impairment, mobility impairment, specific learning disability (such as dyslexia), speech impairment, visual impairment, or other disabilities which require administrative or academic adjustments.

The University application for admission contains no question regarding disability. Therefore, students who have a disability or handicap which may require special assistance are requested to voluntarily contact the Office of Handicapped Student Services. All information is confidential and will be used only to assist the student.

Information and assistance are available for faculty members working with students who are handicapped.

A Telecommunication Device for the Deaf (TDD) is available for hearing-impaired or speech-impaired persons with TDD's to contact the University (phone (407) 275-2116 TDD calls ONLY).

Further information may be obtained from the Handicapped Student Services Office, Administration Building Suite 282, Phone (407) 275-2371.

Creative School for Children

The Creative School for Children provides an educational program, including kindergarten, for children two through five years old. The daily program is planned and conducted by Florida-certified teachers. The program provides a wide variety of experiences in art, music, language, motor skills, science, math, social studies, perceptual development, socialization, and self-discovery. Planned and spontaneous field trips and special family programs are a part of the yearly schedule. Experiences in observation and training in academic areas are also made available to University students. Opportunities for educational research are available to University faculty and graduate students.

The school conducts a Summer Day Camp for elementary school children during Summer "B" semester.

For further information, call the Creative School for Children, (407) 275-2726.

Office of Veterans' Affairs

The Office of Veterans' Affairs (OVA) is a center for all veterans, including students who are using VA educational benefits to further their education. The office, located in the room 132 of the Student Center, has a professional staff augmented by student veterans to assist in providing information concerning entitlements, filing claims to the Department of Veterans Affairs (DVA), and certifying enrollment at the University. The office also provides counseling for personal and academic concerns, tutorial assistance, and referral to various community agencies. Veterans and eligible dependents must be certified through the Office of Veterans' Affairs to receive DVA educational benefits. The office monitors the academic progress of all those receiving DVA educational benefits.

All veterans and eligible dependents are urged to consult the Office of Veterans' Affairs early in the process of applying for admission to UCF.
Veterans' Benefits

Students who are entitled to DVA educational benefits must make initial contact with the Office of Veterans' Affairs.

Undergraduates must carry at least 12 semester hours for full-time DVA benefits, 9 semester hours for three-quarter time benefits, and 6 semester hours for half-time benefits. Five semester hours or less will be reimbursed at cost of tuition and fees only. Those students with a baccalaureate degree who are classified by the University as post-baccalaureate must meet the same eligibility criteria as undergraduates and will be paid at the undergraduate rate.

Veterans and eligible dependents who are fully accepted in a graduate degree program, or post-baccalaureate students pursuing a Florida Teaching Certificate, are required to carry 6 semester hours in courses numbered 5000 and above for full-time benefits; 4 to 5 semester hours in courses numbered 5000 and above for three-quarter time benefits; and 3 semester hours in courses numbered 5000 and above for half-time benefits.

Students intending to enroll simultaneously at UCF and another institution have the option of receiving DVA benefits, but first must consult with the Office of Veterans' Affairs and obtain a Transient Permission Form from the Registrar's office. Veterans and eligible dependents who wish to change their major, or pursue a double major or add a minor may also receive VA benefits but must first make arrangement through the Office of Veterans' Affairs before taking any of the new courses.

In order to receive veterans' educational benefits, students must maintain satisfactory academic progress. Accordingly, benefits will be terminated for individuals who are disqualified or excluded from the University. If reinstated by the University following disqualification or exclusion, the veteran or eligible dependent must contact the Office of Veterans' Affairs to have their DVA educational benefits re-started. Individuals placed on academic probation will continue to receive benefits as long as a 2.0 or higher GPA is earned each semester. However, benefits will terminate once the required semester hours of course work for the program of study are completed, regardless of the GPA or eligibility for graduation.

Veterans and eligible dependents may also draw VA benefits during the periods of eligibility while on cooperative education assignments. The recipient may choose to receive benefits at the "co-op rate" which is approximately 80 percent of the entitled monthly DVA benefit. Payment is received during both the on-campus semesters and the off-campus work terms. Contact the Office of Veterans' Affairs at (407) 275-2707 for more specific benefit information on Cooperative Education.
ADMISSION

APPLICATION FOR ADMISSION

HOW TO APPLY: Applicants should complete the State University System application for admission, and include a 15-dollar non-refundable application fee. Applicants should also request official transcript(s) from each educational institution attended to be forwarded directly to the Admissions Office. Students are encouraged to apply several months in advance. Applications will be accepted up to one year prior to the start of the term desired. The application deadlines for lower-division students are March 15 for the Fall semester, October 15 for the Spring semester, and February 15 for the Summer term. The exact date for upper-division students appears in the college calendar. Applications should be mailed to the Admissions Office, University of Central Florida, Orlando, FL 32816.

The University encourages applications from qualified persons of both sexes from all cultural, racial, religious, and ethnic groups. The University does not discriminate on the basis of handicap in admission or access to its programs and activities. Additionally, both the Educational Testing Service (SAT) and the American College Testing program (ACT) have information describing special testing arrangements for handicapped applicants who are unable to take the required tests.

A summary of the general requirements for admission or readmission to the University is as follows:

1. A satisfactory academic record. Each applicant must furnish a complete chronological record of educational institutions previously attended. Official transcripts must be submitted in accordance with instructions on the application form.
2. Satisfactory scores on the Scholastic Aptitude Test (SAT) or the American College Test (ACT). Students whose native language is not English must also submit a Test of English as a Foreign Language (TOEFL) score. The required minimum TOEFL score is 550.
3. A satisfactory conduct record.

NOTE: Florida Board of Regents regulations provide that furnishing false or fraudulent statements or information in connection with an application for admission or residence affidavit may result in disciplinary action, denial of admission, and invalidation of credits or degrees earned.

Applicants should understand that minimum requirements are given and that admission to the University is a selective process. The satisfaction of minimum requirements does not automatically guarantee admission. Conversely, Florida Board of Regents policy allows the University to admit students to any semester as exceptions to the minimum requirements. The Admissions Office and the Admissions and Standards Committee are responsible for the admission of undergraduate students under this policy.

ADMISSIONS AND STANDARDS COMMITTEE

The Admissions and Standards Committee is composed of representatives from the University: representatives from the Faculty Senate, Minority Student Services, Student Affairs, Undergraduate Studies, the Student Body, and the Admissions Office. This committee normally meets on a regular schedule to review marginal cases and to consider the appeals of applicants. A letter of explanation to the Chair, Admissions and Standards Committee is recommended in establishing the basis for an appeal. Students have the option of appealing a decision in person before the Admissions and Standards Committee.

REACTIVATION

A student who has submitted an application for admission to UCF but never attended may reactivate his original application by submitting a reactivation form within two years of the date of the original application. The deadline date for reactivation is the same as the deadline for new applications for admission. (This date appears in the academic calendar.)

READMISSION

Students not in attendance for two consecutive academic semesters (exclusive of a summer term) must submit an application for readmission and such other information as may be required, including transcripts of courses attempted in the interim.

Readmission of a suspended (disqualified or excluded) student is never automatic. Students who have been disqualified or excluded must complete a readmission application. The student is also encouraged to write a letter of appeal to the Chair of the Admissions
and Standards Committee describing the particular circumstances since the time of disqualification or exclusion. Students may make a personal appearance before the committee if they desire.

Any former student readmitted whose all-college or UCF cumulative grade point average was less than 2.0 ("C") at the time of withdrawal will be readmitted on academic probation.

LIMITED ACCESS PROGRAMS

A limited access program uses selective admission to limit program enrollment. Limited access status is justified where student demand exceeds available resources, such as faculty, instructional facilities, or equipment, or when specific accrediting requirements apply. Criteria for selective admissions include indicators of ability, and indicators of performance creativity or talent to complete required work within the program. Community college transfer students with Associate of Arts degrees from Florida community colleges are given equal consideration with UCF students. Admissions to such programs are governed by 6A-10.24(8), the Articulation Agreement, and by 6C-6.01, FAC, of the Board of Regents rules.

RECORDS

Validity of Documents

All supporting admissions documents must be received directly from the issuing institution or testing agency, and if the University finds that an applicant has made a false or fraudulent statement or a deliberate omission on his application, residency affidavit, health report, or any accompanying document or statement, that applicant may be denied admission. Should the student be enrolled when such fraud is discovered, he may be immediately withdrawn (with no refund), further enrollment denied, and credit earned and any degree based upon such credit invalidated.

Medical History Report

Each student accepted for admission shall, prior to registration, submit a Medical History Report provided by the institution. Documentation of appropriate immunization for measles and rubella is required. Proof of immunization must be provided. This shall be a minimum requirement, and the institution may require, in addition, such other evidence of examination as may be determined necessary. Where physician examinations or certificates are required, they must be signed by a doctor of medicine or a doctor of osteopathy.

Students 40 years of age or over are exempt from the Immunization Requirement but are required to submit the Medical History Report.

The University reserves the right to refuse registration to any student whose health record or report of medical examination indicates the existence of a condition which may be harmful to members of the University community.

The Medical History Report form will be mailed to the applicant with receipt for the Application for Admission. Applicants should return the Medical History report to the Registrar’s/Records Office.

Deadline

All supporting admissions documents, such as official transcripts and test scores should be received by the Admissions Office no later than 20 days preceding the first day of classes. In some cases applicants may be allowed to register on a temporary basis without all records if eligibility for admission can be determined from available records or consultation with the student.

A Transfer Summary Report (TSR) will not be prepared on a priority basis for students from whom final transcripts from each educational institution attended have not been received by the 20th class day. Those students who have not submitted completed records by the 35th class day will be placed on administrative hold and will be changed to non-degree seeking status and will not be permitted to pre-register. Students with incomplete records will not be permitted to register for a future term until all transcripts and other required documentation have been received.

FRESHMAN APPLICANTS

Any student who meets the minimum admission requirements and is interested in attending the University of Central Florida is urged to submit an application. The University will do everything possible to accept all qualified applicants who apply before the applica-
tion deadline date. If the number of qualified applicants exceeds the number that the University is permitted to enroll, admission will be on a selective basis. An applicant's total high school record including grades, test scores, educational objective and pattern of courses completed, school recommendation, and personal record will be considered in the selection process. An application pool will be maintained when the number of applicants exceeds the number of qualified students to whom admission may be offered. Based on the number of cancellations received, selections will be made from the applicant pool approximately two months prior to the first day of classes.

The University reaffirms its Equal Educational Opportunity (EEO) commitments and will seek ways to increase the enrollment of minority students.

High School Diploma

Beginning freshman students who are applying for admission to the University are normally required to have a diploma from a Florida public high school or an accredited out-of-state high school. Foreign diplomas must meet the requirements specified in Florida Statutes, section 229.814. Students admitted under acceleration mechanisms are exempted from this requirement.

Entrance Examination Scores

All applicants for admission must submit test scores from the Scholastic Aptitude Test (SAT) or from the American College Testing (ACT) program.

A total score of at least 840 on the Scholastic Aptitude test (SAT) is required with a minimum verbal score of 340, a minimum quantitative score of 400, and a minimum score of 30 on the Test of Standard Written English (TSWE). On the American College Test (ACT), a composite score of 18 is required. These are minimum scores to meet Board of Regents requirements; however, UCF gives priority consideration to students who earn a 1000 SAT or 24 ACT. Should space permit, others will be considered for admission, provided their grades are superior.

High School Academic Units and Grade Point Average

All applicants must have earned a minimum number of high school academic units (year-long courses which are not remedial in nature) as shown in the table below to be considered for admission. The academic grade point average (GPA) will be computed only on these units. Grades in honors courses, International Baccalaureate, and College Entrance Examination Board (CEEB) Advanced Placement (AP) courses will be given additional weight in the computation of the academic grade point average.

The high school academic unit requirements are as follows:

<table>
<thead>
<tr>
<th>ACADEMIC SUBJECT</th>
<th>UNITS REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4¹</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3²</td>
</tr>
<tr>
<td>Natural Science</td>
<td>3³</td>
</tr>
<tr>
<td>Social Science</td>
<td>3⁴</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>2⁵</td>
</tr>
<tr>
<td>Additional academic electives</td>
<td>4</td>
</tr>
<tr>
<td>from the above five subject</td>
<td></td>
</tr>
<tr>
<td>areas and courses recommended</td>
<td></td>
</tr>
<tr>
<td>by the Florida Association of</td>
<td></td>
</tr>
<tr>
<td>School Administrators, or</td>
<td></td>
</tr>
<tr>
<td>other groups, and courses</td>
<td></td>
</tr>
<tr>
<td>recommended by the Articulation Committee, and approved by the Department of Education.</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL: 19

1. Three of which must have included substantial writing.
2. At or above the Algebra I level.
3. Two of which must have included substantial laboratory requirements.
5. Both credits must be in the same language.

Eligible Applicants

Eligibility for admission is subject to satisfactory receipt and review of all items required in the admission process.

*All applicants must meet the following State University System (SUS) minimum eligibility index standards:
If the High School GPA in academic core courses is:

<table>
<thead>
<tr>
<th>HSGPA</th>
<th>SAT or</th>
<th>ACT or</th>
<th>E-ACT**</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>1050</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>2.1</td>
<td>1020</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>2.2</td>
<td>990</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>2.3</td>
<td>960</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td>2.4</td>
<td>930</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>2.5</td>
<td>900</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td>2.6</td>
<td>890</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td>2.7</td>
<td>880</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>2.8</td>
<td>870</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>2.9</td>
<td>860</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>3.0</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
</tbody>
</table>

* The University may establish higher admissions requirements beyond these state standards.
** E-ACT represents the new Enhanced ACT Program scores.
*** Academic eligibility for admission is determined by a 3.0 or better grade point average and submission of admissions test scores.

A student applying for admission who does not meet these requirements may bring to the University other important attributes or special talents and may be admitted if, in the judgement of the Admissions and Standards Committee, it is determined from appropriate evidence that the student can be expected to do successful academic work. The University will provide an individual learning plan for each student admitted under this alternative.

Any student admitted without two years of one foreign language in high school or the equivalent (minimum 8 semester hours) of such instruction at the post-secondary level, must satisfy the admission requirement prior to graduation.

**TRANSFER APPLICANTS**

**Applicants with Fewer Than 60 Credit Hours**

All college transfer applicants with fewer than 60 semester hours of acceptable credit must be in good standing and eligible to return to the last institution attended as a degree-seeking student, meet freshman high school unit entrance requirements with at least a 3.0 high school academic grade point average and a minimum SAT total score of 1000 or an ACT composite of 23/24 enhanced, and have at least a B average for all college-level academic courses attempted.

**Applicants with an A.A. Degree from a Florida Public Institution**

All college transfer applicants with at least 60 semester hours of acceptable credit must be in good standing and eligible to return to the last institution attended as a degree-seeking student, and have a grade point average of at least 2.0 on a 4.0 system on all college-level academic courses attempted.

Transfer applicants are encouraged to review the current edition of UCF’s TRANSFER STUDENT COUNSELING MANUAL available in Florida community college counseling offices. The manual gives the recommended community college course requirements for all majors as well as other helpful information.

Admission of Associate of Arts (A.A.) degree graduates from Florida public community colleges and Florida state universities will be governed by the Articulation Agreement between the state universities and public community colleges of Florida, as approved by the Board of Regents and the State Board of Education. The agreement states that within curriculum, space, and fiscal limitations, admission as a junior to the upper division of the University shall be granted to any graduate of a state-approved Florida community college or State University System institution who has completed the university parallel program and who has received the Associate of Arts degree which included all of the following:

1. At least 60 semester hours of academic work exclusive of occupational courses and basic required physical education courses.
2. An approved general education program of at least 36 semester hours.

38
3. A grade point average of at least 2.0 on a 4.0 system on all college-level academic courses attempted, provided that only the final grade received in courses repeated by the student shall be used in computing the average.

4. One year of college instruction in a single foreign language. (This requirement applies to those students without the required two units of foreign language in high school.) Students who receive an Associate of Arts degree from a Florida public community college or university but have not met the foreign language requirement and do not qualify in one of the exempt groups defined below may only be admitted to the lower division of the University. Admission to the upper division will be granted when the foreign language requirement is satisfied.

Two groups of students are exempt from the foreign language portion of the admission requirement. These groups are:
A. Students who receive an Associate of Arts degree prior to September 1, 1987.
B. Students who enroll prior to August, 1989 in an Associate of Arts program at a Florida public community college and maintain continuous full-time enrollment through the completion of the A.A. degree and their transfer to UCF. Continuous full-time enrollment shall be defined as enrollment for a minimum of 24 credit hours during any 2 semesters and a related summer term.

Any student admitted without two years of one foreign language in high school or the equivalent (minimum 8 semester hours) of such instruction at the post-secondary level, must satisfy the admission requirement prior to graduation.

Applicants with an A.A. Degree from a Private or Out-of-State College
Applicants with an Associate of Arts degree from a regionally accredited private or out-of-state institution must meet freshman admission requirements.

Any student who received an Associate of Arts degree prior to September 1, 1987 is exempt from the foreign language portion of the admission requirements.

Any student admitted without two years of one foreign language in high school or the equivalent (minimum 8 semester hours) of such instruction at the post-secondary level, must satisfy the admission requirement prior to graduation.

Applicants with an A.S. Degree
Only in one case does the A.S. degree assure admission to UCF: applicants who have received an Associate of Science degree in Engineering Technology from a Florida public college or university will be admitted only to the Bachelor of Science in Engineering Technology program. All other A.S. degree applicants must meet the appropriate admission requirements defined in this section.

The A.S. degree does not certify the student as having completed General Education requirements.

Applicants—More Than 60 Hours, Have Not Received an A.A. Degree
In addition to meeting the requirements which apply to all transfer applicants, undergraduates who wish to be admitted to UCF as upper division students must have met all of the following requirements:
1. A minimum of 60 semester hours of academic coursework.
2. The English and mathematics requirements of the Gordon Rule.
3. Passing scores on three of the four parts of the College Level Academic Skills Test.
4. Eight to 10 semester hours of college instruction in a single foreign language. (This requirement applies to those students admitted to the University without the required two units of foreign language in high school.)

Applicants who have not met the above requirements may only seek admission into the lower division, and consequently must meet lower-division application requirements (a 3.0 GPA for the academic subjects completed in high school, the required high school units, a 1000 SAT or 24 E-ACT score, and a "B" average (3.0) for all college work attempted, in addition to meeting requirements which apply to all transfer applicants.

Applicants from Unaccredited Institutions
Transfer applicants who otherwise meet all requirements, but who enter from a "regionally" unaccredited college or university will be considered on an individual basis. Admission may
be granted on a probationary and/or non degree-seeking basis, depending upon the applicant's record including high school units, entrance examination scores, and high school GPA. The "Transfer Credit" portion of this section provides information relating to transfer of credit for courses taken at unaccredited colleges or universities.

TRANSFER CREDIT

All grades earned at a regionally accredited college or university in transfer courses that are normally a part of a baccalaureate degree program are shown on the student’s permanent record. Credits earned in courses transferred with "D" grades will count toward the credits required for the baccalaureate degree; however, the department or college offering the major determines whether courses with "D" grades in the major may satisfy requirements in the major field.

No credit will be awarded for college-level GED (General Education Development) tests, for courses given without a grade, or for courses carrying grades but not credit hours.

Military Service School Courses

Completed military service school courses may be evaluated on the basis of the recommendations of the American Council of Education (A.C.E.) when official credentials have been properly presented. Credit may be granted when courses are equivalent to those offered by the University. However, recommendations by the A.C.E. are not binding upon the University.

General Education Credits Transfer

Transfer students from Florida public community colleges or universities may satisfy the General Education Program requirements of UCF by completing the general education program prescribed by the previous community college or university. Transfer applicants with incomplete general education programs from state institutions will have their credits evaluated on a course-by-course basis.

Grade Forgiveness Transfer

UCF honors grade forgiveness if part of an A.A. degree from a Florida public community college or university, with the exception of courses taken previously at UCF.

Credits from Private and Out-of-State Institutions

The credits of transfer applicants from private junior and senior colleges and out-of-state institutions will be evaluated on a course-by-course basis. Each student must submit the necessary petition(s) to the appropriate office(s) to determine which courses will transfer with regard to degree progress at UCF. Transfer courses which meet the requirements of the General Education Program and the Gordon Rule are determined through the process described in this catalog under "University Degree Requirements." Each College has different petition procedures, but generally the petitioning of transfer courses for satisfaction of college and major requirements should be done during the second full term of the student's residency at UCF in order that the accepted transfer courses are clearly understood by the student and the faculty advisor early in the student's program.

Credits from a Previous Baccalaureate Degree

Graduates from other accredited four-year U.S. institutions who apply for admission to work toward a second undergraduate degree must meet the regular requirements of the University (as defined in the "Undergraduate Degree Requirements" section of this catalog). A baccalaureate degree or higher from another accredited four-year U.S. institution satisfies the General Education Program requirements and also provides exemption from the foreign language requirements for admission and graduation.

ACCREDITED INSTITUTIONS

For the purposes of this catalog "Accredited Institutions" means those institutions accredited by any of the following six regional associations:

- New England Association of Schools and Colleges
- Middle States Association of Colleges and Secondary Schools, Commission on Institutions of Higher Education
North Central Association of Colleges and Schools, Commission on Colleges and Universities
Northwest Association of Secondary and Higher Schools, Commission on Higher Schools
Southern Association of Colleges and Schools
Western Association of Schools and Colleges, Accrediting Commission for Senior Colleges and Universities and Accrediting Commission for Junior Colleges.

Foreign institutions are evaluated through World Education Services, Inc.

COLLEGE PREPARATORY INSTRUCTION

State statutes require that new students be evaluated in terms of their potential to successfully complete required coursework at the University. Those students who are identified as likely to have difficulty in the areas of mathematics, writing, or reading may be required to take college preparatory courses prior to enrollment in college-level courses in those areas. State law provides that students must begin any required preparatory instruction during their first 12 semester hours and finish all such coursework within 3 semesters. New students will be notified of the need to take placement examinations during orientation, or of coursework that will be required.

INTERNATIONAL STUDENTS

The University of Central Florida is authorized under Federal law to enroll non-immigrant alien students. Undergraduate applicants should refer to the ‘Admission’ section of this catalog, and graduate applicants to the graduate catalog. In addition, the following is required for admission:

1. International student applications and records required for admission must meet all applicant deadlines.
2. Only those students with an Associate of Arts degree from a Florida public community college, or those who have completed their general education requirements (as defined in the Articulation Agreement), or those students with superior academic records (i.e., upper 20th percentile or U.S. “B” average equivalent) will be considered for admission. Students who have attended any foreign institution(s) must provide an official course-by-course evaluation from World Education Services, Inc. (Evaluation applications may be obtained from the Admissions Office or by writing WES, P.O. Box 745, Old Chelsea Station, New York, NY 10011.)
3. All applicants whose native language is not English must submit an official score report from the Test of English as a Foreign Language (TOEFL). Undergraduates who have not earned an Associate of Arts degree, nor completed their general education requirements (as defined in the Articulation Agreement) from a Florida public community college must have a minimum TOEFL score of 550. Graduate applicants should consult the coordinator of their respective program to determine minimum TOEFL scores as well as any other requirements.
4. All students who have not earned an A.A. degree from a Florida public institution must also submit an official SAT or ACT score and a high school transcript and WES evaluation, where applicable, in order to be considered for admission.
5. Applicants must file a Confidential Financial Statement confirming availability of finances for each year of study.

The Admissions Office may require additional documents and/or transcripts before an admissions decision is made.

INTERNATIONAL STUDENT MANDATORY HEALTH AND ACCIDENT INSURANCE

Each international student accepted for admission shall, prior to registration, submit proof of compliance with the University’s mandatory health and accident insurance requirement (effective Fall semester 1990).

Minimum coverage required as follows:

<table>
<thead>
<tr>
<th>Plan</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic plan</td>
<td>US $3,000.00</td>
</tr>
<tr>
<td>Supplemental</td>
<td>US $30,000.00</td>
</tr>
<tr>
<td>Repatriation</td>
<td>US $3,000.00</td>
</tr>
<tr>
<td>Evacuation</td>
<td>US $3,000.00</td>
</tr>
</tbody>
</table>

Written proof of insurance must be provided to the International Student Services Office and must be valid for one calendar year from the date of first enrollment.
If insurance is issued by a foreign carrier or underwriter, a notarized statement must be provided, in English, insuring coverage is valid in the United States.

The University reserves the right to refuse registration to any international student who fails to comply with the insurance requirement or is unable to provide adequate proof of insurance.

TEMPORARY STUDENTS

Any student who applied before the application deadline date and is permitted to register and attend classes without a complete admission file is granted a maximum of 4 weeks (first 20 class days) to furnish all required records. Records indicating ineligibility may result in cancellation of the student’s registration.

TRANSIENT STUDENTS

Students in good standing with a 2.0 overall academic average in any accredited college or university who wish to enroll for one term at UCF may be considered for admission as transient students. Such enrollment terminates at the end of one term and does not presuppose regular acceptance by any college or department of the University. A transient form indicating the parent institution’s willingness to accept the credits and that the student is in good standing with a minimum “C” (2.0) grade point average and an official transcript are required to support the application for admission. Transient student applications must be received by the appropriate deadlines for lower-division and upper-division students, depending on the number of credit hours the applicant has completed at the time the application is submitted.

AUDIT STUDENTS

To audit a class, a student must file a regular application and be accepted as a degree-seeking or non degree-seeking student, obtain an audit application at the records counter, and take it to the instructor for his/her signature of approval. Requests to audit a class will be processed the first working day following the add/drop period and will be approved on a space-available basis. Finance and Accounting will bill students for audit classes separately from credit classes. Students registering for credit during regular or late registration, or during add/drop may not change to audit status, but must remain in the course or withdraw through normal withdrawal procedures.

NON DEGREE-SEEKING STUDENTS

This classification allows qualified students to enroll in selected courses at the University without satisfying requirements for admission to degree-seeking status. Successful completion of courses while in this classification does not necessarily provide a basis for regular admission at a later date. Non degree-seeking status is granted in exceptional cases only, and will usually be reviewed by the Admissions and Standards Committee.

The following regulations will apply to non degree-seeking students:

1. Students are required to provide evidence of their educational qualifications for attending classes in order to meet the intent of this enrollment classification.
2. Non degree-seeking students are subject to the same rules and regulations as degree-seeking students.
3. Registration is permitted on a space-available basis. Students should consult the registration calendar in the Schedule of Classes or contact the Admissions Office for the appropriate registration time.
4. A maximum of 15 undergraduate baccalaureate semester hours earned as a non degree-seeking student may be applied toward a degree if a non degree-seeking student is later accepted as a baccalaureate student.
5. An applicant who has been denied admission or who has been disqualified or excluded may not register as a non degree-seeking student.
6. International students may not register as non degree-seeking since immigration regulations prevent foreign nationals from enrolling without admission to a degree or certificate program.

SENIOR CITIZENS

Senior citizens who are Florida residents and who are 60 years old or over may enroll as audit students by completing a specially-marked non degree-seeking student form at the Admissions Office. A Florida Residency Affidavit will be required in order to establish Florida residency. A completed Student Health History must be filed prior to registration.
# TUITION AND FEES

## SCHEDULE OF FEES

A student's basic expenses at the University will be for registration fees, room and board, textbooks, other instructional supplies, and miscellaneous items.

Required fees are established by the Board of Regents and the Florida State Legislature and are subject to change without notice. Fees are affected by residency status. Information on residency is contained in the "Admission" section of this catalog.

All University fees must be paid at or before the end of the add/drop registration period. Failure to pay fees on or before due date will result in cancellation of the current registration.

The following schedule applies to all University of Central Florida students:

### General Fees and Costs

A. Application fee. Must be paid by U.S. check or money order (required with all applications for admission to the University and not refundable) ....... $15.00.

B. Registration Fees per semester for campus, centers, and continuing education courses. Minimum registration of one credit hour (at the level the student is classified) must be charged for students registering for zero hours (co-op student on work assignment, applicant for graduation during the semester that student is not registered).

### Fall, Spring and Summer Semester 89-90 Rates

(A rate increase is anticipated for 1990-91)

<table>
<thead>
<tr>
<th></th>
<th>Florida Resident</th>
<th>Non-Florida Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate1</td>
<td>$40.85 per hour</td>
<td>$132.82 per hour</td>
</tr>
<tr>
<td>Graduate Level2</td>
<td>70.59 per hour</td>
<td>205.54 per hour</td>
</tr>
</tbody>
</table>

1 Undergraduate courses are those courses numbered 0-4999
2 Graduate courses are those courses numbered 5000-7999

C. Room and Board (Based on accommodations and meal plan selected)

<table>
<thead>
<tr>
<th></th>
<th>Florida Resident</th>
<th>Non-Florida Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dormitory Rooms (per semester)</td>
<td>$750-$1,000</td>
<td></td>
</tr>
<tr>
<td>Board (meal plans, per semester)</td>
<td>$490-$930</td>
<td></td>
</tr>
<tr>
<td>Charge for late payment</td>
<td></td>
<td>$25.00</td>
</tr>
</tbody>
</table>

D. Books and supplies (estimated) per semester

<table>
<thead>
<tr>
<th></th>
<th>Florida Resident</th>
<th>Non-Florida Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$225.00</td>
<td></td>
</tr>
</tbody>
</table>

E. Late Registration Fee—not refundable (for students who register during late registration periods or who fail to pay full fees by the established deadline) ....... $25.00

F. Vehicle Registration (required of everyone operating a motor-powered vehicle on campus) per calendar year for full-time, part-time students, and courtesy students from other institutions. Student’s fee (1990-91) .................. $30.00

G. Student Health Fee—not refundable (per semester)

Assessed to all students except those enrolled exclusively in Continuing Education courses. This fee must also be waived for senior citizens, for employees under the fringe benefit plan, and for Intern Participation holders. Students on training session under the Cooperative Education Program will be required to pay the Student Health Fee. University employees who use the Tuition Fee Waiver for class attendance may not elect to pay the Student Health Fee, regardless of the number of semester hours taken.

Fall & Spring Semesters (1990-91) .................. $34.00

Summer Semester (1991) .................. $25.50

H. Intern Participation Holder .................. $ 4.76/hr.

I. I.D. Card replacement .................. $ 5.00

J. (Scientific Laboratory fees—fee per student on specific course(s)) ... $2.00 - $15.00
FLORIDA RESIDENCY FOR TUITION PURPOSES
To qualify as a Florida Resident for tuition purposes, students must:

- Be a U.S. Citizen, Resident Alien, Parolee, Cuban National, Vietnamese Refugee, or other refugee or asylee so designated by the U.S. Immigration and Naturalization Service, AND

- Have established a legal residence in this state and maintained that legal residence for 12 months immediately prior to the term in which they are seeking Florida resident classification. The student residence in Florida must be as a bona fide domiciliary rather than for the purpose of maintaining a mere temporary residence or abode incidental to enrollment in an institution of higher education, and should be demonstrated as indicated below (for dependent students, as defined by IRS regulations, a parent or guardian must qualify), AND

Submit the following documentation (or in the case of a dependent student, the parent must submit documentation) prior to the last day of registration for the term for which resident status is sought:

1. Documentation establishing legal residence in Florida (this document must be dated at least one year prior to the first day of classes of the term for which resident status is sought). The following documents will be considered in determining legal residence:
   A. Declaration of Domicile.
   B. Proof of purchase of a home in Florida in which the student resides.
   C. Proof that the student has maintained residence in the state for the preceding year (e.g., rent receipts, employment records).

2. Documentation establishing bona fide domicile in Florida which is not temporary or merely incidental to enrollment in a Florida institution of higher education. The following documents will be considered evidence of domicile even though no one of these criteria, if taken alone, will be considered as conclusive evidence of domicile:
   A. Declaration of Domicile.
   B. Florida voter registration.
   C. Florida vehicle registration.
   D. Florida driver license.
   E. Proof of real property ownership in Florida (e.g., deed, tax receipts).
   F. A letter on company letterhead from an employer verifying permanent employment in Florida for the 12 consecutive months before classes begin.
   G. Proof of membership in or affiliation with community or state organizations or significant connections to the State.
   H. Proof of former domicile in Florida and maintenance of significant connections while absent.
   I. Proof of reliance upon Florida sources of support.
   J. Proof of admission to a licensed practicing profession in Florida.
   K. Any other factors peculiar to the individual which tend to establish the necessary intent to make Florida a permanent home and that the individual is a bona fide Florida resident, including the age and general circumstances of the individual.

3. No contrary evidence establishing residence elsewhere.

4. Documentation of dependent/independent status (notarized copy of most recent IRS tax return).

   OR

   Become a legal resident and be married to a person who has been a legal resident for the required 12-month period,

   OR

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

   OR

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

   OR

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

File a notarized residence affidavit with the Admissions Office.

The Admissions Office reserves the right to require additional documentation as seen necessary to accurately determine the resident status of any student.

APEALS

Students who wish to appeal a late registration, late payment, or return check service charge fee may make their appeal to the "Committee for Resolving Fee Payment Questions" by initiating a student petition (Form 41-561). This form can be obtained from the Office of Undergraduate Studies, Student Affairs, University Cashier, or Student Accounts Section of Finance and Accounting. Students must then submit their petitions to Student Accounts, Room 112, Administration Building, and may appear (not mandatory) before the committee which meets once each week. Time, date, and place are subject to change.

CHECK CASHING

For a nominal fee the University Bookstore will cash personal checks not exceeding $50.00. The University is required to collect a $10.00 Service Fee for any check, draft, or order which may be returned by the bank for any reason, and future check-cashing privileges will be denied.

PAST-DUE ACCOUNTS

All financial obligations to the University must be met by the student if good standing is to be maintained. Failure to meet such obligations can result in the withholding of grades and transcripts, and denial of registration and readmission to the University. The services of a professional collection agency and recourse to the courts may also be invoked if deemed necessary by the University Controller. All costs of collection, including attorney's fees, shall be borne by the debtor.

PAYMENT ON ACCOUNT

The University cashier will accept personal checks for accounts due to the University. Students are urged to make their own financial arrangements through their choice of financial institutions.

REFUND OF FEES

A refund of fees, or a reduction in fee liability for those students who have an authorized deferment, will be made under certain conditions upon presentation to the Student Accounts Office a Certification of Withdrawal issued by the Registrar. No refund or reduction in fee liability will be made under this policy except upon proper application.

1. A FULL REFUND will be made when:
   A. Withdrawal is made before the end of the add/drop period. Summer refunds will not be made until after Term B Registration and add/drop, except by written application to Student Accounts, Room 112 Administration Building.
   B. The course is cancelled by the University, or
   C. A student is denied admission to an offered course for any reason.

2. A partial refund (25 percent of the total fees paid, less building and capital improvement fees) will be made when complete withdrawal from the University is made prior to the end of the fourth week of classes, during a 16 (or 17) - week semester or at the end of the first quarter of classes during a mini-semester or summer semester (rounded to the end of the week in which the first quarter occurs).

3. Refunds up to 100 percent of tuition and registration fees will be made upon withdrawal from one or more courses when exceptional circumstances exist, as determined by the University. Exceptional circumstances include, but are not limited to sickness, death, involuntary call to military service, and administrative error created by the University.

   Application for a full refund is made through the Office of Undergraduate Studies (AD210) or the Office of Graduate Studies (AD143).
TUITION FEE WAIVERS FOR STATE OF FLORIDA EMPLOYEES

State employees, faculty, and staff who utilize a tuition fee waiver for coursework without payment of the registration fees must register on the day and time provided by the Registrar. Employees who register prior to the prescribed time and date will have an invalid fee waiver, and will be liable for all applicable fees on courses enrolled. The employee is held responsible to register only on a space-available basis, and only during the prescribed times indicated by the Registrar. In addition, the tuition fee waiver can not be used for courses involving increased costs (such courses as Thesis, Dissertation, and Directed Individual Study).

TUITION FEE WAIVERS FOR SENIOR CITIZENS

Persons 60 years of age or older who meet Florida residency requirements may register for credit classes without payment of application fee, registration fee, and health fee. The senior citizen is held responsible, however, to register only on a space-available basis, and only during the last hour of the add/drop registration period prescribed by the Registrar. No academic credit shall be awarded for completed courses, and the waiver can not be used for courses which involve increased costs. These courses would include, but not be limited to Thesis, Dissertation, and Directed Individual Study.
The following Financial Aid policies and procedures are based upon federal, state and University regulations current for the 1990-91 academic year. Please be aware that regulations are subject to change at any time.

DETERMINING ELIGIBILITY

In order to qualify for federal and state financial aid programs, a student must be a citizen or permanent resident of the United States, the Mariana Islands, or the Pacific Trust Territories.* In order to qualify for financial aid at UCF, students must be classified by the Admissions Office as degree-seeking. Some financial aid programs are available to part-time students; generally at least 6 credit hours enrollment per term is required.

The Financial Aid Office encourages all such students to apply for financial aid and to begin the process early. There are many grant, loan and employment programs available (described below). Almost all programs require the determination of financial need.

Financial need is calculated by national processors who use a standardized formula: financial need equals the cost of education (specific to the school to be attended) minus the expected family contribution (specific to each applicant). Students or their parents provide detailed financial information on a need analysis form and send it to the processor. Once the calculations have been made, the results will be forwarded to the UCF Financial Aid Office.

*Eligible non-citizens include I-151, I-551 and I-688 cardholders as well as some I-94 classifications.

UCF APPLICATION DEADLINES

Pell Grants and Stafford Loans are available on a year-round basis. Therefore, students may apply for financial aid in advance of any term and receive aid from these programs if eligible.

However, to be considered for the full range of aid available for the academic year (beginning Fall Term), students must complete the application procedures listed below by March 15 of the preceding Spring.

Incoming students should not wait to be admitted to UCF before applying for financial aid.

Returning students must reapply yearly for financial aid.

APPLICATION PROCEDURES

The following steps can take 4 to 6 weeks to complete. Students should therefore apply well in advance of the March 15 deadline or the term for which aid is being requested. Students who wish to enter UCF in Spring Term may apply by the March 15 deadline of the preceding spring in order to be eligible for the maximum aid available.

1. Complete a Need Analysis.

UCF requests students use the ACT Family Financial Statement* and makes this form available after January 1. The form can also be obtained from high school guidance offices and other post-secondary institutions.

It is crucial to read the instruction booklet carefully while filling out the form. Errors, omissions, or submission without the filing fee can prevent students from receiving aid for which they would otherwise be eligible.

*A CSS need analysis will also be accepted.
2. Submit a UCF Financial Aid Application.
   This one-page form is available from our office.
3. Request Financial Aid Transcripts
   Our office must receive an official Financial Aid Transcript from every post-secondary institution a student has attended, even if financial aid was not received. UCF has transcript forms that the student can mail to such schools, or students can write a letter which includes their name, SS#, school ID#, the name used while attending that school, and the student's signature. Please request that the school include your SS# on the transcript they mail to us. Allow 2 to 4 weeks for processing.
4. Follow-through.
   Students' applications will not be complete until all documents requested have been submitted and reviewed by the Financial Aid Office. It is very important to read and save any information and documents received regarding financial aid. It is to the student's advantage to respond promptly to requests for additional information—especially if required for Verification (see below).
   Students will receive a Student Aid Report (SAR) in the mail from the processor to confirm receipt and information on their need analysis. Students must bring this SAR to the Financial Aid Office, even if found ineligible for a Pell Grant.

Helpful Tips:
- Make a copy of tax return forms before submission to IRS.
- Start a folder NOW to save financial aid information and photocopies of all documents filed and received.
- Put the student's name and SS# on top of everything submitted to the Financial Aid Office.
- Keep the student's address current in the REGISTRAR'S OFFICE; all financial aid correspondence will be mailed to that address.
- Fill out all items necessary to apply for both a Pell Grant and a Stafford Loan, even if it doesn't seem advantageous at the time. Law requires that students be considered for a grant before a loan is offered; choosing a lender now does not obligate the student to undertake a loan but will make it easier if additional funds are needed.

VERIFICATION
   Federal regulations require that students meeting specific criteria be asked to verify the information submitted on their need analyses. Such students will be asked to provide additional information or documentation such as copies of tax return forms, verification of household size, independent status, etc. Financial aid cannot be received until the verification process is complete.

TRANSFER STUDENTS
   The UCF Financial Aid Office must have on file a Financial Aid Transcript from every post-secondary school ever attended by the transfer student, whether or not financial aid was received. If the transfer student has been determined eligible to receive aid at another institution for the academic year in question, please be aware that the only transferable programs are Pell Grants and Florida Student Assistance Grants.
   To apply for financial aid at UCF, the transfer student should complete the procedures listed above—with one exception. If a need analysis for the year in question has already been filed, the student need only request the processor forward a copy to UCF. (Refer to the Family Financial Statement Confirmation Report for instructions.) UCF's code number will have to be provided; it is 0735 for ACT or 5233 for CSS. Further information can be obtained from ACT at 319/337-1200 or from CSS at 1-800-772-3537.
   To transfer the remainder of a Pell Grant, students should also request the need analysis processor to send them a duplicate set of their Student Aid Reports (SAR's). These must be submitted to the UCF Financial Aid Office once the student has received them.
   To transfer the remainder of an FSAG, students should send a copy of their state award letter and UCF's name and address to: State of Florida, Office of Student Financial Assistance, Department of Education, Tallahassee, FL 32301. Please do this before their stated deadline.
INDEPENDENT STUDENT STATUS

The financial resources of parents/guardians do not have to be included in the determination of students' financial need if they are:

- 24 years old
- an orphan or ward of the court
- a veteran
- legally responsible for dependents other than a spouse
- an unmarried undergraduate not claimed as an income tax deduction by anyone other than a former spouse for the previous two consecutive years AND if they can document that their annual income was at least $4,000 for the 2 years preceding that year in which they first received financial aid, beginning with 1987-88
- a married or a graduate/professional student who will not be claimed as an income tax deduction by their parents/guardians in the first year of the award year (1990 for academic year 90-91).

PROGRAMS AVAILABLE AT UCF

The following programs require that need be established yearly. Those which appear with an asterisk preceding their names are available to only those students who meet UCF's March 15 deadline.

GRANTS

*Pell Grants* form the basis of undergraduate financial aid packages; six credit hours enrollment required (though some very high need students may receive Pell funds based on less than 6 hours). $200 - $2,300 per academic year.

*Supplemental Education Opportunity Grants (SEOG) and *Lottery Grant Awards are available to undergraduates in UCF's highest need category; 12 credit hours enrollment required. Amounts vary yearly.

*Florida Student Assistance Grants (FSAG) are awarded to Florida residents who will attend college on a full-time basis; application must be completed in April. Please refer to the state application form for the specific deadline date and residency requirements. $400 - $1,200 per academic year if 2.0 GPA is maintained in college.

LOANS

*Perkins Loans are low interest loans (currently 5%) awarded to high-need UCF students enrolled for at least 6 credit hours. Loans are deferred until 6 or 9 months after students graduate or drop below 6 hours enrollment; $2,000 per academic year.

*Stafford Loans, made through private lenders, are currently being offered at 8% interest (increases to 10% after fourth year of repayment). Students must be enrolled in UCF classes for a minimum of 6 credit hours at the time of enrollment to receive a Stafford Loan check. First-time borrowers at UCF must attend an Entrance Interview before a loan check will be released to them.

Freshmen and sophomores may borrow $2,625 per academic year; juniors, seniors and post-bac students may borrow $4,000 per academic year up to $17,250. Graduate students may borrow $7,500 per academic year up to $54,750 (including undergraduate total). Payment is deferred until students graduate or drop below 6 hours enrollment. (Dual Enrollment Students) who drop below 6 hours enrollment at UCF, must provide their lender with proof of total hours enrolled in order to maintain their deferment status.)

Once eligibility has been determined by a need analysis, students must request a Stafford Loan by the dates printed below so that processing can be completed in time to receive loans during the term indicated.

- October 1 — Fall Term Loan
- February 1 — Spring Term Loan
- May 1 — Summer Term Loan

EMPLOYMENT

*College Work-Study jobs are awarded as part of a student's financial aid package if need so indicates; a minimum of 6 hours enrollment is required. Jobs are on-campus and efforts are made to match job assignments with the student's academic program. Awards average $1,000 per semester paid as an hourly wage.
The Florida College Career Work Experience Program provides off-campus jobs related to the student's major to help fill unmet financial need established by a current need analysis. Six hours enrollment is necessary. This program is administered by the Office of Cooperative Education, (407) 275-2314.

LOANS AND EMPLOYMENT NOT BASED ON NEED

Supplemental Loans for Students (SLS) / Parent Loans for Undergraduate Students (PLUS) are not based on financial need and are available with 6 hours UCF enrollment at the time of disbursement. SLS/PLUS interest rates are tied to the treasury bill, but are capped at 12%. Graduates and independent undergraduates may borrow $4,000 per academic year; parents may borrow $4,000 per academic year per dependent in college; aggregate total of all borrowers is $20,000. Repayment begins within 60 days unless a deferment has been agreed upon with the lender at the time of application. Research lenders carefully; policies differ on options for deferment and interest capitalization.

Before receiving an SLS loan, students must have a need analysis on file in order to determine if they can first be offered a Stafford Loan. An Entrance Interview is required of all first-time borrowers at UCF before loan checks are released.

Co-operative Education (Co-op) jobs related to students' educational goals are available off-campus and are not based on need. Contact the Office of Cooperative Education, (407) 275-2314.

OPS (Other Personnel Services) jobs are available on-campus and are not related to financial need. Application is made directly to the Department advertising the position.

OTHER SERVICES

UCF Short Term Loans are available to currently-enrolled students for emergencies other than tuition and fee payment; service charges are only 1% and an origination fee of 1% is deducted at the time of disbursement (as are any other debts owed the university). The normal repayment period is 30 to 60 days.

Food Service Loans are available to students who have already been awarded financial aid and who live on campus. Food Service Loans are processed by the Financial Aid Office.

Scholarships

Scholarships based on many different criteria are available to UCF students; please refer to UCF's Scholarship brochure. Some scholarships are based on need and may actually be offered to students who have a current need analysis on file in the UCF Financial Aid Office. We therefore recommend that students considering applying for scholarships complete a financial aid application.

AWARD PACKAGES

An award letter offering a financial aid package will be mailed to students who are eligible to receive aid at UCF. This letter lists estimated awards by program (outlined above). Students may choose to accept or reject any or all of their financial aid awards by marking, signing, and returning the award letter. This decision must be made within 15 days.

Actual awards will be calculated once a student's enrollment has been confirmed, as well as the student's housing in the case of Pell Grant awards. Students who do not enroll for the number of credit hours required by each program may have those awards reduced or cancelled. See the chart below.

<table>
<thead>
<tr>
<th>Programs requiring 12 hours enrollment</th>
<th>Programs requiring 6 hours enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEOG</td>
<td>Pell*</td>
</tr>
<tr>
<td>FSAG</td>
<td>CWS</td>
</tr>
<tr>
<td>LGA</td>
<td>Stafford/Perkins</td>
</tr>
</tbody>
</table>

*Students who PGI is zero (indicated in the right-hand corner of the SAR) may receive a portion of their Pell Grant with less than 6 hours enrollment.
AUTOMATIC DEFERMENT

Students awarded financial aid who have fulfilled all Verification requirements will automatically receive full or partial deferment of their tuition and fees once they have registered for a minimum of 6 credit hours at UCF for the term. To calculate the amount of a deferment, students should:

1. Find the total of all awards and scholarships except College Work Study, PLUS, and scholarships which require UCF to bill the donor. (See above for the requisite number of credit hours enrollment to receive each program award.)
2. Subtract 10% of Stafford loan award amounts.
3. If the total is less than your tuition and fees, you must pay the difference at the Cashier’s Office by the Fee Deadline. If the total equals or exceeds your tuition and fees, the full amount will be automatically deferred.
4. If students decide to drop classes or withdraw, they must go through the regular Add/Drop process or they will be held fee liable.

DISBURSEMENTS

Financial aid awards are not available at the time of registration. (No checks, including Stafford and Short Term Loan checks, will be disbursed before the first day of classes.) Therefore, students should make themselves aware of the Automatic Deferralment policies and procedures described above AND be prepared to use personal savings or a UCF Short Term Loan to pay for books and other expenses anticipated until about the 4th week of the term.

Award checks are disbursed for the award amount minus any debts owed the university, such as deferred tuition and fees, library and/or parking fines. In most cases checks will be mailed to the student at the address on file. Checks not handled through the Net Checking system (i.e., Stafford Loans) and Perkins Loans will be disbursed at the Cashier’s Office (open 9:00 am to 3:30 pm, Monday through Friday); a picture ID is required.
REFUND AND REPAYMENT POLICIES

Students should be aware that if they withdraw from the University after having received financial aid, they may be liable for repayment of a portion of that aid. Students who received Stafford Loans should also know that the Financial Aid Office is required to notify lenders of student withdrawals.

Refunds

Financial aid recipients planning to withdraw from UCF should first consult the University’s Withdrawal Policy published under Academic Policies and Procedures in this Catalog. If the student is due a refund according to this policy, the financial aid program(s) from which the student received aid will first be reimbursed. Any remaining balance after refunding all appropriate aid programs will be refunded to the student. In no case will the amount refunded to the aid program exceed the amount disbursed.

Repayment

A portion of the financial aid disbursed to the student for non-instructional costs must be repaid by the student to the University. The amount of repayment due from the student will be based upon the schedule printed below.

A student who owes a financial aid repayment will not be allowed to receive further financial aid funds until the repayment is paid in full. In addition, academic and financial aid transcripts will be withheld until repayment is complete.

<table>
<thead>
<tr>
<th>Week of withdrawal</th>
<th>Fall and Spring Terms</th>
<th>Amount of repayment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st week</td>
<td>100% of total aid* received</td>
<td></td>
</tr>
<tr>
<td>2nd or 3rd week</td>
<td>Total aid* - book allowance x 75%</td>
<td></td>
</tr>
<tr>
<td>4th or 5th week</td>
<td>Total aid* - book allowance x 50%</td>
<td></td>
</tr>
<tr>
<td>6th or 7th week</td>
<td>Total aid* - book allowance x 25%</td>
<td></td>
</tr>
<tr>
<td>8th week or after</td>
<td>No repayment due</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week of withdrawal</th>
<th>Summer A, B, and C Terms</th>
<th>Amount of repayment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st week</td>
<td>100% of total aid* received</td>
<td></td>
</tr>
<tr>
<td>2nd week</td>
<td>Total aid* - book allowance x 75%</td>
<td></td>
</tr>
<tr>
<td>3rd week</td>
<td>Total aid* - book allowance x 50%</td>
<td></td>
</tr>
<tr>
<td>4th week or later</td>
<td>No repayment due</td>
<td></td>
</tr>
</tbody>
</table>

*Total excludes monies received from the following programs: College Work Study, Stafford Loans, Supplemental Loans for Students, and Parent Loans for Students.

REQUIREMENTS TO RECEIVE AID

• Financial aid funds cannot be disbursed until the student’s financial aid file is complete and the verification process has been completed. Verification must be completed 45 days prior to the end of the enrollment period in order to have time to process a Stafford Loan application.

• Students must not be in default on any educational loan or owe repayment on a grant at UCF or any other post-secondary institution.

• It is necessary for students who have received financial aid to maintain UCF’s standards for Satisfactory Academic Progress, as defined below. Upper-level students must also pass the CLAST in order to receive state aid.

• Students must notify the Financial Aid Office of any changes in housing, marital, or financial status.

• Application for financial aid must be made yearly.

Satisfactory Academic Progress

In order to remain eligible to receive financial aid, continuing students must meet the following standards for Satisfactory Academic Progress instituted by UCF in accordance with federal law.
UNDERGRADUATE STANDARDS

GPA: Acceptable academic standing is reserved for those students who achieve and maintain a GPA of 2.0 or higher. (Please refer to the complete guidelines under Academic Policies and Procedures.)

Hours Completed: Students receiving financial aid must successfully complete the following number of credit hours per term. Incompletes, Withdrawals, and audits are not considered completed courses.

<table>
<thead>
<tr>
<th>HOURS ENROLLED</th>
<th>HOURS REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 or more hours,</td>
<td>10 hours</td>
</tr>
<tr>
<td>9 - 11 hours</td>
<td>8 hours</td>
</tr>
<tr>
<td>6 - 8 hours</td>
<td>5 hours</td>
</tr>
<tr>
<td>less than 6 hours</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

Time Limits: Undergraduates are expected to obtain their degree within 10 full-time semesters or the equivalent thereof for part-time students. Transfer students entering UCF with either an A.A. degree or 70 or more hours will be allowed 4 full-time semesters (or the equivalent thereof) before a Permanent Notice is issued.

Graduate Standards

GPA: A GPA of at least 3.0 is required for the courses specified in the graduate student’s program.

Hours Completed: Full-time graduate students must complete at least 6 credit hours per semester; half-time students must complete at least 4 hours per semester. Incompletes, Withdrawals, and audits are not considered completed courses.

Time Limits: Graduate students receiving financial aid will be given 5 full-time semesters (or the equivalent thereof) to attain their Master’s Degree. Doctoral candidates may have 10 full-time semesters to earn their Ph.D. Cases will be reviewed on an individual basis when additional time is needed.

Permanent Notice, Final Warning, and Cancellation

The first time students fail to meet any of the criteria for Satisfactory Academic Progress, they will be on Permanent Notice for the duration of their enrollment at UCF. A second failure will result in students being given a Final Warning. Any further infractions will result in permanent Cancellation from financial aid at UCF.

Appeals

Financial Aid Notice, Warning or Cancellation will remain on students’ records unless overturned through the established appeals process. Students may file an appeal based upon extenuating circumstances. A student’s status is never overturned automatically; a Satisfactory Academic Progress Appeal must be initiated.

Grades/Hours Completed: The University has established academic standards for graduate students and a Grade Forgiveness policy for undergraduates, outlined in the Academic Policies and Procedures section of this catalog. Students who improve their grades or make up deficit hours under the Grade Forgiveness Policy must still file a Satisfactory Academic Progress Appeal with the Financial Aid Office.

Mitigating Circumstances: Appeals may also be filed on the basis of extenuating circumstances. These might include death in the student’s immediate family, accidents, personal tragedy, or medical emergencies as defined by the University of Medical Withdrawals (see below). Such appeals will be reviewed by the financial Aid Committee. Documentation relating to the mitigating circumstances will prove beneficial to the student’s appeal.

Appeal Ruling: Should a Satisfactory Academic Progress Appeal be approved, the student’s status will revert to the status existing before the contested Notice, Warning, or Cancellation was issued. Students who wish to further pursue a denied appeal should refer to the procedures contained in the Golden Rule Handbook.

Medical Withdrawals: Once an appeal has been granted on the basis of a Medical Withdrawal, any subsequent requests based on Medical Withdrawal will be subject to review by the Financial Aid Committee.

Cancellation: Once the appeal process has been exhausted, cancellation from financial aid at UCF is permanent. Any student cancelled from financial aid who leaves UCF and

53
later gains readmittance will not be eligible to receive financial aid unless a petition is filed and approved for Financial Aid Reinstatement.

FINANCIAL AID FOR GRADUATE STUDENTS

There are several sources of financial assistance available to UCF graduate students. Perkins and Stafford loans and the College Work Study Program, described above, require that financial need be established. Supplemental Loans for Students (SLS) are also available to graduate students. Though SLS loans are made by private lenders and do not require that financial need be established, applicants must have a current need analysis on file in our office.

Out-of-state Tuition Waivers are offered by each college and the Office of Minority Student Services to outstanding non-Florida residents. Some colleges give priority to graduate students in making award selections.

Eligibility and application guidelines for Teaching or Research Assistantships and Graduate Assistant Positions are established by the colleges or in some cases by departments, as are pay scales. To apply for an assistantship position, contact the Dean's Office in the Colleges of Business Administration and Education or the department's graduate coordinator in the Colleges of Arts and Sciences, Engineering, and Health and Professional Studies.

There are also scholarships available to graduate students. Please request a UCF Scholarship brochure.

Student Rights and Responsibilities

• Students have the right to complete information about the financial aid programs available at UCF, our application procedures and deadlines, and the criteria used to determine a financial aid package.
• Students have the right to appeal decisions made by the financial aid office.
• Students have the right to equitable treatment of their financial aid applications. Although each student's case is analyzed individually, eligibility standards are applied uniformly without regard to race, gender, religion, creed, national origin, or physical handicap.
• All student records are confidential.

It is the student's responsibility to review and understand all information and instructions, meet all deadlines, and provide all information and documentation accurately. Errors and omissions can cause delays and prevent students from receiving aid. Misrepresentation is a violation of the law.
ACADEMIC ETHICS

Policy
The faculty of the University of Central Florida is committed to a policy of honesty in academic affairs. Conduct for which students may be subject to administrative and/or disciplinary penalties up to and including suspension or expulsion include:
1. Dishonesty consisting of cheating of any kind with respect to examination, course assignments, or illegal possession of examination papers. Any student helping another to cheat is considered as guilty as the student assisted.
2. Plagiarism consisting of the deliberate use and appropriation of another’s work without any indication of the source and the presentation of such work as the student’s own. Any student who fails to give credit for ideas or materials taken from another source is guilty of plagiarism.

Procedure
In cases of cheating or plagiarism the instructor shall take whatever academic action he/she deems appropriate. This action may range from loss of credit for a specific assignment, examination, or project to removal from the course with a grade of "F." The instructor should seek to resolve the problem with the student to their mutual satisfaction. In addition, the instructor may also request disciplinary action through the Dean of Students, if necessary, who shall proceed in accordance with provisions outlined in the APA Chapter 6C7-5.041.

STUDENT CLASSIFICATIONS

Students will be classified by level, on the basis of semester hours satisfactorily earned:
- Freshman: Through 29 semester hours.
- Sophomore: 30-59 semester hours.
- Junior: 60-89 semester hours and have fulfilled CLAST and Gordon Rule requirements.
- Senior: 90 or more semester hours, prior to completion of baccalaureate requirements.
- Post-Baccalaureate: Any student enrolled in courses, regardless of course level (except one working toward another baccalaureate degree), who has a baccalaureate degree but has not been admitted to a graduate program.
- Graduate: Any student enrolled in graduate courses who has been admitted to a graduate program.
- Auditor: A student registered for any credit course who is not seeking credit.
- Co-op Student: A student enrolled in the Cooperative Education Program remains a registered student during all off-campus assignment semesters. Furthermore, there is no lapse in continuity in the co-op school calendar: a co-op student is either on assignment or attending class during each school semester. (See Veterans’ Benefits for co-ops.)
- Special Student: A student of demonstrated academic ability who does not meet the regular requirements for admission (Early Admission, non-degree-seeking, transient, and auditor).
- Temporary: A student who applied before the deadline and is permitted to register and attend class pending completion of the admission file.
- Transient: Students temporarily registered (for one semester) at the University of Central Florida with the approval of some other university or college where they are regularly enrolled, or a UCF student temporarily in attendance at another university or college,
with the approval of UCF. A UCF student may not be enrolled as a transient student in another institution during the term in which the baccalaureate degree or the Associate of Arts degree is to be awarded.

Non Degree-Seeking: A student earning credit, but not working on a degree program.

Provisional: A student entering from a regionally unaccredited high school, college, or university may be admitted on provisional status where appropriate. By obtaining a 2.0 GPA ("C" average) or better at the end of the first semester of attendance, the provisional status will be removed. Earning less than a "C" average the first term would result in disqualification.

SEMESTER HOURS EXPLAINED
The graduation credit value of each course of instruction is stated in terms of semester hours. A semester hour of credit represents one class hour of work (or two or more laboratory hours of work) per week for a semester.

Classes may be offered for a six-week period during the summer semester. Two class hours of work (or four or more laboratory hours of work) per week are required to represent a semester hour of credit.

The University reserves the right to establish maximum course loads for students at any level. Course load limitations will be published in the term Class Schedule and made available prior to the beginning of the term.

GRADING SYSTEM
The University will use an alphabetic system to identify student grades and other actions regarding student progress or class attendance. This system, with a grade point equivalent per semester hour, is as follows:
Grades

A—Excellent ........................................................ 4 grade points
B—Good ................................................................ 3 grade points
C—Average ................................................................ 2 grade points
D—Passing ............................................................... 1 grade point
F—Failure .................................................................. 0 grade point

Other Actions

W—Withdrawn ............................................................ 0 grade point
WP—Withdrawn Passing .............................................. 0 grade point
WF—Withdrawn Failing ............................................... 0 grade point
WM—Medical Withdrawal ........................................... 0 grade point
I—Incomplete ............................................................ 0 grade point
S—Satisfactory (with credit)/Satisfactory Progress (Research, Thesis, or Dissertation) .................................................. 0 grade point
U—Unsatisfactory (no credit) ........................................ 0 grade point
T—(followed by grade) ................................................ 0 grade point
—Subsequently repeated (no credit) .............................. 0 grade point
R—(followed by grade) ................................................ 0 grade point
—Repeated course (grade forgiveness) .......................... 0 grade point
N—No grade reported by professor .............................. 0 grade point

The grade point average (GPA) is the average number of grade points per semester hour attempted and is computed by dividing the total number of grade points assigned by the total number of semester hours attempted, less hours resulting from W, WP, and I grades. The grade point average for graduation requirement is 2.0 ("C") and will be computed on both the student’s total academic program and the UCF program.

The designation of "N" will be temporarily assigned by the Records Office only in the case when a grade has not been submitted by the faculty by the "grades due" deadline. The designator will be replaced by the earned letter grade at the earliest opportunity in the semester which immediately follows. The "N" designator may not be assigned by faculty.

A request for grade change will be considered only during the term immediately following the one in which the grade was assigned, an exception being that grades assigned during the spring semester may be changed during either the following summer or fall terms. Academic Actions do not change when an incomplete grade is completed nor when a course is repeated. A change in a grade must be approved by the dean of the college.

ACADEMIC STANDING

All Academic Actions are shown on grade reports and transcripts. The action is generated due to course completion. Changing a course grade does not necessarily change academic action. An exception can be made when an error is committed and is so stated on the Change of Grade request form by the professor.

Semester Average Grade Point Average on work attempted during any given semester.
UCF Average Grade Point Average on all work attempted while in attendance at the University of Central Florida.
Overall Average Grade Point Average on all work attempted since entering college, including work from all previously attended institutions.
Academic Warning Some first-time-in-college applicants who do not meet University admission requirements may be admitted on Academic Warning. By obtaining a 2.0 GPA ("C" average) or better at the end of the first semester of attendance, Academic Warning will be removed. Earning less than a "C" average the first term will result in Academic Probation. A student may be on Academic Warning only once.
Academic Probation Action taken when a Student’s UCF cumulative or overall GPA drops below 2.0. A student may also be admitted on Academic Probation. Academic Probation will continue until the current term, UCF cumulative, and overall GPA reach 2.0 or better.
Disqualified (First Suspension) A student on Academic Probation is disqualified upon failure to achieve a 2.0 GPA during the subsequent semester. A student who
Exclusion (Second Suspension) A student readmitted following disqualification who fails to achieve a 2.0 GPA is excluded from the University. Exclusion is most serious and readmission will not be considered prior to a minimum suspension period of one year.

Readmission If a student has dropped out of the University for any reason, he or she must reapply on the appropriate form (see calendar for deadline).

First-time-in-college students may be admitted on Academic Warning (see above) or Academic Probation at the discretion of the Admissions Office or the Admissions and Standards Committee. Transfer students may be admitted on Academic Probation at the discretion of the Admissions Office or the Admissions and Standards Committee. Academic Probation is intended to inform students making unsatisfactory progress of their need to alter study habits and to seek additional counseling. Early recognition will indicate to the student the possible jeopardy to academic goals, and will also allow an opportunity to demonstrate acceptable performance.

EARNING CREDIT WHILE DISQUALIFIED OR EXCLUDED

Students disqualified or excluded while a Freshman or Sophomore who subsequently receive an A.A. degree with a "C" average (2.0 GPA) on all college work attempted from a Florida public community college may be readmitted to the University with credit earned in accordance with standard University policies.

Students who attend other colleges or universities following disqualification will be classified as transfer students and their readmission will be based on their total educational record.

INCOMPLETE GRADE

A grade of "I" (incomplete) is assigned by the instructor when a student is unable to complete a course due to extenuating circumstances, and when all requirements can be completed in a short time following the end of the term. The student is responsible to arrange with the instructor for the completion of the incomplete grade by the deadline published in the Academic Calendar for the next term. If the incomplete is not changed by the established deadline, it may become a part of the student's permanent record with no credit given for the class, or the instructor may assign a grade of "F." An "I" can not be removed by Grade Forgiveness. Academic actions are not affected by the change of an "I."

INSTRUCTORS PLEASE NOTE: A grade is assigned using the Change of Grade Form. After the form is signed by the Dean of the College offering the course, the Dean sends it to the Registrar's Office.

SCHEDULE CHANGES—ADD/DROP POLICY

Add: A student may add a course during the official add/drop period (the first three to five days of each term, as listed in the academic calendar). After the add/drop period, no course may be added.

Drop: A student may drop a course during the official add/drop period. The fact that the student was enrolled in a class so dropped will not appear on the permanent record. For withdrawal after the add/drop period, the Withdrawal Policy must be consulted.

WITHDRAWAL POLICY

A student may withdraw from a class and receive the notation of "W" until the end of the eighth week of any regular semester or until the midpoint of any summer term by
completing a Course Withdrawal form available in the Office of Records and Registration, first floor of the Administration Building.

A student is never automatically withdrawn from a class for not attending, nor can an instructor withdraw a student from a class. Upon request, however, the instructor will provide the student with an assessment of the student’s performance in the course prior to the last day of withdrawal.

No withdrawal is permitted after the deadline except in extraordinary circumstances such as serious medical problems. Unsatisfactory academic performance is not an acceptable reason for withdrawal after the deadline. Students who need to petition for a late withdrawal should consult the Office of Undergraduate Studies, Administration Building, Room 210. At the time of the request an Assistant Dean from the Office of Undergraduate Studies will ascertain from the instructor whether the student was passing or failing the course. If the student was passing, a “WF” will be recorded on the student’s permanent record; if failing, a “WF” will be entered.

Students who seek a late withdrawal from class on medical grounds must apply for the withdrawal no later than that term following the one from which the withdrawal is sought. Students seeking a late withdrawal because of medical conditions must follow the medical withdrawal procedure. The student’s physician provides the University physician with the appropriate medical information, using the forms available in the Office of Undergraduate Studies. The University physician evaluates this information and forwards a recommendation to Undergraduate Studies.

If a medical withdrawal is approved, a “WM” will be recorded for each course.

If a medical withdrawal is not approved, the request may be approved as a late withdrawal, and grades of “WP” or “WF” will be recorded.

A grade of “WF” will affect the calculation of the student’s grade point average (the procedure used for calculating is further defined in the paragraph titled “Grading System” earlier in this section).

If a student withdraws from a course while an alleged academically dishonest act is under consideration, and the case is not subsequently resolved in favor of the student, the University reserves the right to assign the appropriate grade for the course.

TRANIENT ENROLLMENT AT OTHER INSTITUTIONS

A UCF degree-seeking student who wishes to earn credit at another college or university for transfer back into a degree program must obtain prior approval for specific courses from the Dean or Department Chair of his respective college. Approval of courses for the General Education Program should be obtained from the Office of Undergraduate Studies. Credit earned without this transient approval may not be accepted. A student may not be enrolled as a transient student in another institution during the term in which the baccalaureate degree or the Associate of Arts degree is to be awarded. Transient forms are available in the Records Office. Transient credit cannot be used to reduce the last 30 semester hour residency requirement or be considered as continuous enrollment.

GRADE FORGIVENESS

Policy

Limits: Grade forgiveness is limited to two courses.

Grade forgiveness can be used only for courses taken at UCF. Grade forgiveness is not retroactive, and therefore may not be used for a course repeated before Fall 1981. UCF does not honor grade forgiveness granted at other institutions unless it is part of an Associate of Arts degree transferred to UCF from a Florida public community college or university. Because of the two-course limit, a student who has used grade forgiveness twice at another institution, and has included those courses in the transfer of an Associate of Arts degree may not use grade forgiveness again at UCF.

A course taken at UCF may not be repeated at another institution for forgiveness by UCF.

Grade forgiveness may not be used twice for the same course.

Exception: If a student who repeated a course at UCF before Fall 1981 did not use the previous forgiveness policy and wishes to repeat the course again to take advantage of the forgiveness policy, he may do so. In this case, the lower of the previous two grades will be forgiven. This special circumstance is the only one in which a student will be allowed to repeat a course more than once.
**General Policy:** All grades will remain on the student’s official transcript. The original course grade will be marked with a "T" to indicate that the course has subsequently been repeated, and the repeat course grade will be marked with an "R." The original grade will not be computed in the grade point average except in a case in which the student withdraws from a course he is repeating or takes a grade of incomplete.

With prior approval of the dean of the college in which the course is offered, the student may substitute a course different from the original one if (1) the substitute course has been changed in prefix, number, hours, or title, but not in substance, or (2) the substitute course replaces a course no longer offered by UCF.

Grade forgiveness awarded for repeated courses will not retroactively alter any previous academic action. For example, a Probation or Disqualification status will not be removed from the records of the quarter or semester in which the student originally took the course. In addition, no academic records can be altered after a student graduates.

If it is determined that the student is ineligible for the forgiveness policy, neither a refund of fees nor automatic withdrawal from the course will be made.

**Procedure**

Students who wish to exercise Grade Forgiveness must complete the following steps before registering to repeat a course:

1. Complete a “Grade Forgiveness Request Form” from the Office of Records and Registration for each course to be repeated.
2. If the course is a substitution for the original one (see above), secure the signature of the dean of the college in which the course is offered.
3. Turn the completed form in to the Office of Records and Registration no later than the last day of add/drop. No petitions will be accepted after the deadline.

Any questions about Grade Forgiveness should be directed to the Office of Undergraduate Studies, Extension 2691.

**ACADEMIC HONORS**

1. **President’s Honor Roll Certificate**
   The President’s Honor Roll Certificate is awarded in recognition of scholastic honors to regular undergraduate students who register for and complete 12 or more hours, excluding pass-fail coursework, and maintain a 4.0 GPA with no incomplete or “U” grades for the given term or who complete 15 semester hours during any 2 consecutive terms at UCF with no more than 11 hours in any one term, excluding pass-fail work, and maintain a 4.0 GPA for the 2 terms.

   Hours utilized in the awarding of a President’s Honor Roll Certificate may not be utilized in the determination of a subsequent certificate.

2. **Dean’s List**
   The Dean’s List is compiled in recognition of scholastic honors for students who earn a 3.4 GPA with no grade less than "C" and no incomplete or "U" grades during a term. To be eligible for the Dean’s list students must register for and complete a minimum of 12 semester hours in a Fall or Spring semester or 9 semester hours in a Summer semester.

3. **Baccalaureate Honors**
   The University shall confer baccalaureate honors recognition on those students who have completed a minimum of 48 semester hours at UCF and who:
   
   A. Attain an overall grade point average which is in the upper 15% of the range established by all students graduating in the same college during the previous two years
   B. Attain at least a 3.0 overall grade point average
   C. Honors awarded will be
      1. Summa Cum Laude for those students in the upper 5%
      2. Magna Cum Laude for those students in the upper 10%, but not in the upper 5%
      3. Cum Laude for those students in the upper 15%, but not in the upper 10%

   Since records for the semester of graduation are incomplete at the time of graduation, that term is excluded in determining recognition in the commencement bulletin and at graduation. Identification of these students at graduation is therefore presumptive of honors and not conclusive since final term grades may result in changes in relative rankings.
TIME-SHORTENED DEGREE OPPORTUNITIES

The University of Central Florida provides a number of options by which students may shorten the time required to complete the baccalaureate degree. These options permit the University to recognize high levels of academic achievement and acquisition of knowledge prior to or during attendance at the University. Procedures which may be used include the Early Admission Program, the College Level Examination Program (CLEP), the Advanced Placement Program (AP), the International Baccalaureate, and University Course Credit by Examination.

Early Admission Program

Students who have demonstrated exceptional academic ability may be permitted to enroll as students at the University of Central Florida any time after completion of their junior year in high school. To be considered for Fall Semester Early Admission, applicants must have:

1. Superior test scores (SAT 1100 or above, ACT 27 or above).
3. A recommendation from the student's high school counselor.
4. A letter of permission from parents or guardian.
5. A campus interview to ascertain the student's maturity and ability to adjust to collegiate responsibilities.

Qualified students may enroll dually on a part-time basis, taking one or two courses while completing their high school programs. An interview and letters of recommendation from parents and principal are required in addition to a superior record.

Students desiring admission prior to high school graduation should contact the Admissions Office for an appointment.

College Level Examination Program (CLEP)

The University of Central Florida grants University credit for examinations taken under the CLEP program provided the score obtained is at the 50th percentile or above on the National Sophomore CLEP norms. The University of Central Florida will award up to 45 semester hours of University credit under the CLEP program.

CLEP credit may be earned by the following methods: CLEP general examinations, CLEP general examination subtests, and CLEP subject examinations. A student may earn a maximum of 45 semester hours of credit through this program. Successful completion of CLEP examinations means performance at or above the 50th percentile.

Awarding of CLEP credit is subject to the conditions listed below.

1. Credit may be awarded in the CLEP general examination area, CLEP general subtest area, or CLEP subject examination area, provided the student (a) is not within 60 semester hours of graduation, (b) has not previously received comparable college course credit in the CLEP examination area, (c) does not receive comparable college credit in the CLEP examination area in the same semester the examination is taken or in a subsequent semester, (d) has not previously completed nor received credit by UCF (transfer or otherwise) in a more advanced course in the examination area, and (e) does not complete nor receive credit by UCF (transfer or otherwise) in a more advanced course during the semester in which the CLEP examination is taken.

2. Partial credit may be awarded in Humanities and Social Science-History general examinations to students who have course duplication in one subtest area but not in the other subtest area. For example, a student who has completed Humanities but has not completed Introductory Literature or a more advanced literature course would be eligible to receive credit in the literature subtest area, provided that he receives a satisfactory total score and a satisfactory subtest score.

The following table provides information related to the CLEP general examination areas and subtest areas for which credit may be awarded. In addition, this table delineates the number of credit hours per examination, and the minimum qualifying score. A table is also provided which contains information about CLEP subject examinations. The table delineates CLEP subject examinations which are available, qualifying scores for each examination, the UCF course for which each examination can substitute, and semester hours which will be awarded.

It is important to note that a maximum of 45 semester hours in any combination of extension, correspondence, CLEP, Armed Forces Service School Credits, and University Credit by Examination will be accepted by the University for application toward an
undergraduate degree. In addition, CLEP credit cannot be used to reduce a grade point deficiency. For example, CLEP cannot be substituted for a grade awarded for a previously completed course. CLEP may not be used to fulfill the senior institution requirement.

**CLEP GENERAL EXAMINATIONS**
Qualifying scores on CLEP General Examinations earn only general (lower division) elective credit.

<table>
<thead>
<tr>
<th>CLEP General Examination</th>
<th>Qualifying Score</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition with Essay*</td>
<td>500</td>
<td>6</td>
</tr>
<tr>
<td>Humanities</td>
<td>489</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics</td>
<td>497</td>
<td>6</td>
</tr>
<tr>
<td>Natural Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological Science</td>
<td>50</td>
<td>3</td>
</tr>
<tr>
<td>Physical Science</td>
<td>49</td>
<td>3</td>
</tr>
<tr>
<td>Social Science</td>
<td>488</td>
<td>6</td>
</tr>
</tbody>
</table>

*The General Examination in English Composition with Essay is not given in July or August.

**CLEP SUBJECT EXAMINATIONS**

<table>
<thead>
<tr>
<th>CLEP Subject Exam</th>
<th>Semester Hours</th>
<th>Qualifying Score</th>
<th>UCF Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afro-American History</td>
<td>3</td>
<td>50</td>
<td>None</td>
</tr>
<tr>
<td>American Government</td>
<td>3</td>
<td>50</td>
<td>POS 2041</td>
</tr>
<tr>
<td>American History I***</td>
<td>3</td>
<td>49</td>
<td>AMH 2010</td>
</tr>
<tr>
<td>American History II***</td>
<td>3</td>
<td>49</td>
<td>AMH 2020</td>
</tr>
<tr>
<td>American Literature***</td>
<td>6</td>
<td>50</td>
<td>AML 3031 and AML 3051</td>
</tr>
<tr>
<td>Analysis and Interp. Lit.***</td>
<td>6</td>
<td>51</td>
<td>ENC 1101 and LIT 3000</td>
</tr>
<tr>
<td>Calculus w/Elem. Functions and Calculus w/Anal. Geometry</td>
<td>6</td>
<td>49</td>
<td>MAC 3311 and 3312 or MAC 3253 and 3254</td>
</tr>
<tr>
<td>Clinical Chemistry**</td>
<td>6.7</td>
<td>50</td>
<td>MLS 4630</td>
</tr>
<tr>
<td>College Algebra</td>
<td>3</td>
<td>48</td>
<td>MAC 1104</td>
</tr>
<tr>
<td>College Algebra &amp; Trig</td>
<td>3</td>
<td>50</td>
<td>MAC 1104 or MAC 1114</td>
</tr>
<tr>
<td>College Comp. w/Essay***</td>
<td>6</td>
<td>50</td>
<td>ENC 1101 and ENC 1102</td>
</tr>
<tr>
<td>(Duplicate CLEP Exam - Subj: Trig)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer &amp; Data Proc.</td>
<td>3</td>
<td>51</td>
<td>CGS 1060</td>
</tr>
<tr>
<td>Educ. Psychology</td>
<td>3</td>
<td>49</td>
<td>None</td>
</tr>
<tr>
<td>Eng. Literature***</td>
<td>6</td>
<td>49</td>
<td>ENL 3031 or ENL 3051</td>
</tr>
<tr>
<td>Freshman Eng. w/Essay***</td>
<td>6</td>
<td>51</td>
<td>ENC 1101 and ENC 1102</td>
</tr>
<tr>
<td>General Biology</td>
<td>6</td>
<td>49</td>
<td>BSC 1020</td>
</tr>
<tr>
<td>General Chemistry</td>
<td>6</td>
<td>50</td>
<td>CHM 1020 and 1032 or CHS 1440</td>
</tr>
<tr>
<td>General Psychology</td>
<td>3</td>
<td>50</td>
<td>PSY 2013</td>
</tr>
<tr>
<td>Hematology**</td>
<td>6.7</td>
<td>51</td>
<td>MLS 3305</td>
</tr>
<tr>
<td>Human Growth and Devel.</td>
<td>3</td>
<td>51</td>
<td>None</td>
</tr>
<tr>
<td>Immunohematology**</td>
<td>6.7</td>
<td>50</td>
<td>MLS 4550</td>
</tr>
<tr>
<td>Intro. Accounting</td>
<td>6</td>
<td>50</td>
<td>ACG 2001 and 2011 or ACG 3023</td>
</tr>
<tr>
<td>Intro. Business Law</td>
<td>6</td>
<td>51</td>
<td>BUL 3111</td>
</tr>
<tr>
<td>Intro. Management</td>
<td>3</td>
<td>49</td>
<td>None</td>
</tr>
<tr>
<td>Intro. Macroeconomics</td>
<td>3</td>
<td>50</td>
<td>ECO 2013</td>
</tr>
<tr>
<td>Intro. Microeconomics</td>
<td>3</td>
<td>50</td>
<td>ECO 2023</td>
</tr>
<tr>
<td>Intro. Marketing</td>
<td>3</td>
<td>50</td>
<td>MAR 3023</td>
</tr>
<tr>
<td>Intro. Sociology</td>
<td>6</td>
<td>50</td>
<td>SYG 2000</td>
</tr>
<tr>
<td>Examination</td>
<td>Passing Scores</td>
<td>Semester Hours Awarded</td>
<td>UCF Courses</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>----------------</td>
<td>------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Biology*</td>
<td>3-4</td>
<td>3</td>
<td>BSC 1020</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>6</td>
<td>BSC 1020 + 3 hours general elective</td>
</tr>
<tr>
<td>Chemistry*</td>
<td>3</td>
<td>3</td>
<td>CHM 2045</td>
</tr>
<tr>
<td></td>
<td>4-5</td>
<td>7</td>
<td>CHM 2045 and 2046</td>
</tr>
<tr>
<td>Computer Sci A</td>
<td>3-4</td>
<td>3</td>
<td>General Elective</td>
</tr>
<tr>
<td>Computer Sci A</td>
<td>5</td>
<td>3</td>
<td>COP 2000</td>
</tr>
<tr>
<td>Computer Sci AB</td>
<td>3-5</td>
<td>3</td>
<td>COP 2000</td>
</tr>
<tr>
<td>Language &amp; Composition**</td>
<td>3-5</td>
<td>3</td>
<td>ENC 1101</td>
</tr>
<tr>
<td>Literature &amp; Composition**</td>
<td>3-5</td>
<td>3</td>
<td>ENC 1101</td>
</tr>
<tr>
<td>Microeconomics***</td>
<td>3-5</td>
<td>3</td>
<td>ECO 2023</td>
</tr>
<tr>
<td>Macroeconomics***</td>
<td>3-5</td>
<td>3</td>
<td>ECO 2013</td>
</tr>
<tr>
<td>French</td>
<td>3-4</td>
<td>3</td>
<td>FRE 1120</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>6</td>
<td>FRE 1121 + 3 hours general elective</td>
</tr>
<tr>
<td>German</td>
<td>3-4</td>
<td>3</td>
<td>GER 1120</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>6</td>
<td>GER 1120 + 3 hours general elective</td>
</tr>
<tr>
<td>History (AM)**</td>
<td>3-4</td>
<td>3</td>
<td>AMH 2010</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>6</td>
<td>AMH 2010 + 3 hours general elective</td>
</tr>
<tr>
<td>History (EUR)**</td>
<td>3-4</td>
<td>3</td>
<td>EUH 2000</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>6</td>
<td>EUH 2000 + 3 hours general elective</td>
</tr>
</tbody>
</table>

* Those students receiving six or nine hours are allowed to complete these courses.

** Each student must also satisfactorily complete a lab and an essay exam. Both exams will be given by the College of Health.

***Satisfactory completion of these exams does not reduce the 24,000 word requirement of the Gordon Rule.

**Advanced Placement Program (AP)**

Students who have participated in the Advanced Placement Program in high school and received a score of three, four, or five on the national examinations will receive college credit in the appropriate subject areas. Students should consult their high school guidance counselor or write to the Educational Testing Service, Princeton, NJ 08540, for additional information.
<table>
<thead>
<tr>
<th>Subject</th>
<th>Qualifying Score</th>
<th>Credit Awarded</th>
<th>UCF Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Chemistry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher Level</td>
<td>4,5,6,7</td>
<td>3</td>
<td>CHM 1032</td>
</tr>
<tr>
<td>Subsidiary Level</td>
<td>4,5,6,7</td>
<td>3</td>
<td>CHM 1032</td>
</tr>
<tr>
<td>Art/Design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher Level</td>
<td>4,5,6,7</td>
<td>3</td>
<td>*</td>
</tr>
<tr>
<td>Biology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher Level</td>
<td>4,5,6,7</td>
<td>3</td>
<td>*</td>
</tr>
</tbody>
</table>

International Baccalaureate Program

Students who have participated in the International Baccalaureate program in high school may receive a maximum of thirty hours of credit for scores of 4 or higher in the subsidiary and higher level program areas.

* DOES NOT SATISFY GENERAL EDUCATION PROGRAM SCIENCE LABORATORY REQUIREMENT

** MAY BE USED TO SATISFY THREE HOURS OF GORDON RULE COMPOSITION REQUIREMENT

*** DOES NOT SATISFY GORDON RULE COMPOSITION REQUIREMENT

****STUDENTS WHO RECEIVE CREDIT FOR BOTH OF THE AP ENGLISH EXAMS WILL RECEIVE CREDIT FOR ENC 1101 AND ENC 1102
<table>
<thead>
<tr>
<th>Subject</th>
<th>Higher Level</th>
<th>Subsidary Level</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry</td>
<td>4,5,6,7</td>
<td>4,5,6,7</td>
<td>CHM 1032</td>
</tr>
<tr>
<td>Computer Science</td>
<td>4,5,6,7</td>
<td></td>
<td>No direct equivalent, will satisfy GEP computer science requirement</td>
</tr>
<tr>
<td>Economics</td>
<td>4,5,6,7</td>
<td></td>
<td>No direct equivalent</td>
</tr>
<tr>
<td>English</td>
<td>4,5,6,7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental Psychology</td>
<td>4,5,6,7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Languages</td>
<td>4,5,6,7</td>
<td></td>
<td>FREN 3420, SPN 3420, GRE 3420</td>
</tr>
<tr>
<td>Geography</td>
<td>4,5,6,7</td>
<td>GEO 1200 &amp; GEO 3370</td>
<td></td>
</tr>
<tr>
<td>History</td>
<td>4,5,6,7</td>
<td></td>
<td>No direct equivalent</td>
</tr>
<tr>
<td>Mathematics with Further Studies</td>
<td>4,5,6,7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>4,5,6,7</td>
<td>MAC 3311</td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>4,5,6,7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Studies</td>
<td>4,5,6,7</td>
<td></td>
<td>No direct equivalent</td>
</tr>
<tr>
<td>Philosophy</td>
<td>4,5,6,7</td>
<td></td>
<td>PHI 2010</td>
</tr>
<tr>
<td>Physics</td>
<td>4,5,6,7</td>
<td>PHY 3053C &amp; PHY 3054C</td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>4,5,6,7</td>
<td>PSY 2013</td>
<td></td>
</tr>
<tr>
<td>Social Anthropology</td>
<td>4,5,6,7</td>
<td>4,5,6,7</td>
<td>ANT 2003, ANT 3422, ANT 2003, ANT 3410</td>
</tr>
</tbody>
</table>
* - to be determined by department review
University Course Credit by Examination

Regularly enrolled* undergraduate students at the University of Central Florida may obtain credit for specific university courses through departmental examinations. Those who feel they have acquired the knowledge and/or skills of a specific University course should consult their advisor and the chair of the department in which the course is offered to arrange for an examination. Degree credit will be awarded for those courses successfully completed by departmental examination. Credit by examination may not be attempted in a course in which the student has previously enrolled and may not be used to reduce the last 30 semester hours residency requirement. Credit by examination will not be given for any course lower in content than courses in the same discipline (i.e., with the same rubric) in which students are currently enrolled or which they have already completed. Permission to take an examination is approved by the chair of the department and the Dean of the college in which the course is offered.

*Excludes transient and non degree-seeking students.

TRANSCRIPT REQUESTS

Transcripts of a student’s UCF academic record may be requested by the student through the Office of the Registrar. A student's academic record can be released only upon written authorization by the student. Include in the request the full name and social security number. Indicate names and addresses to whom transcripts are to be sent. If grades or degree statements for the current term are needed, indicate that the transcript request is to be held until the final semester reports are posted. No charge is assessed for transcripts at the present time. Students requesting transcripts may do so in person or by writing to: Office of the Registrar, Transcript Request, University of Central Florida, Orlando, FL 32816-0114.
UNDERGRADUATE DEGREE REQUIREMENTS

REQUIREMENTS FOR GRADUATION

Students must fulfill both the requirements for a major and University graduation requirements to receive a degree from the University of Central Florida.

To earn a bachelor’s degree from UCF, students must:

• Fulfill the requirements for the chosen major
• Earn a minimum of 120 unduplicated semester credit hours with at least a “C” average (2.0 GPA, both UCF and overall) for coursework attempted. Some majors require more than 120 hours.
• Earn a minimum of 60 of these 120 semester credit hours from a senior institution (an institution which offers baccalaureate degrees).
• Earn at least 48 of these 120 semester credit hours in 3000-level courses or above.
• Earn the last 30 semester hours in regular courses at UCF. Credit by examination may not be used to satisfy this requirement.
• Earn a minimum of 30 semester hours in residence at UCF.
• Earn a minimum of 60 semester hours after CLEP credit has been awarded.
• Apply no more than 45 semester hours in any combination of extension, correspondence, CLEP, University Credit by Examination and Armed Forces credits toward an undergraduate degree.
• Fulfill the General Education requirements defined elsewhere in this section.
• Fulfill the Gordon Rule requirements defined elsewhere in this section.
• Fulfill the Foreign Language Proficiency requirement defined elsewhere in this section.
• Fulfill the CLAST requirement defined elsewhere in this section.
• Earn a minimum of nine semester hours during summer terms, if applicable.
• Complete an Intent to Graduate form by the end of the first full week of classes of the term of graduation.

CHOICE OF CATALOG

A student must graduate under the provisions of any UCF catalog in effect since the student began continuous enrollment at UCF. However, students transferring from Florida public community colleges or state universities may use the UCF catalog in effect at the time they began the most recent period of continuous enrollment in academic good standing at any of the Florida public institutions. Continuous enrollment is defined as being enrolled in classes without a break of two or more consecutive regular semesters (i.e., Fall and Spring). Continuous enrollment is automatically broken when a student moves from one transfer institution to another following academic disqualification or exclusion.

Students must use a single catalog and not a combination of catalogs for graduation. In cases when required courses are no longer taught by the university, the appropriate department, college, or university office may designate a reasonable substitute. If students should wish to change their catalog for graduation, they should first discuss with their advisors how such a change would affect university, college, and major requirements. If students should decide to request a change, they should fill out a catalog change form in the Student Academic Support Services (SASS) Office, Phillips Hall, Room 202.

GENERAL EDUCATION PROGRAM

The General Education Program (GEP) is designed to provide insight into the major areas of knowledge at the University. The GEP further supplies the background for making a more knowledgeable selection of major and elective courses.

Courses which fulfill the General Education requirements are specified, but in some cases an advanced course in the same discipline may be substituted for GEP requirements with the approval of the Office of Undergraduate Studies. Students should consult both with an advisor and with the Office of Undergraduate Studies before substituting any course. Undergraduate students who have not completed requirements for the Associate of Arts
degree and who wish to transfer to another Florida public university can have their transcripts stamped GENERAL EDUCATION REQUIREMENTS MET if they have completed UCF's GEP requirements with a GPA of 2.0 or better. UCF will accept a similar statement on transcripts received from Florida public community colleges and universities in lieu of completion of the University's General Education Program.

**GENERAL EDUCATION PROGRAM COURSES**
(40 semester hours required)

<table>
<thead>
<tr>
<th>A. Communication Foundations</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. &quot;ENC 1101 English Composition I &quot;</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>2. &quot;ENC 1102 English Composition II PR: ENC 1101&quot;</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>3. SPC 1600 Fundamentals of Oral Communication</td>
<td>3(3,0)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Cultural and Historical Foundations</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. * Take one of the following two-semester sequences:</td>
<td>6</td>
</tr>
<tr>
<td>*EUH 2000 Western Civilization I</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>*EUH 2001 Western Civilization II PR: EUH 2000</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>*HUM 2211 Western Humanities I</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>*HUM 2230 Western Humanities II PR: HUM 2221</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>*AMH 2010 U.S. History: 1492-1877</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>*AMH 2020 U.S. History: 1877-present PR: AMH 2010</td>
<td>3(3,0)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Take one course from the following:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARH 2050 The History of Art I</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>ARH 2051 The History of Art II</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>MUL 2010 Enjoyment of Music</td>
<td>3(2,1)</td>
</tr>
<tr>
<td>THE 1020 Theatre Survey</td>
<td>3(2,1)</td>
</tr>
<tr>
<td>THE 2071 Cinema Survey</td>
<td>3(2,2)</td>
</tr>
<tr>
<td>REL 2300 World Religions</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>PHI 2010 Introduction to Philosophy</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>*LIT 2110 World Literature I PR: ENC 1102</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>*LIT 2120 World Literature II PR: ENC 1102</td>
<td>3(3,0)</td>
</tr>
</tbody>
</table>
C. Mathematical Foundations

Take one course from each group. Some majors require a specific course or a higher level course in this area. Consult your advisor.

1. **MAC 1104 College Algebra** 3(3,0)
   **MGF 1203 Finite Mathematics** 3(3,0)
2. **CGS 1060C Introduction to Computer Science** 3(3,0)
   **STA 2014 Principles of Statistics** 3(3,0)

D. Social Foundations

1. ECO 2013 Principles of Economics I 3(3,0)
2. POS 2041 American National Government 3(3,0)
3. Choose one:
   - PSY 2013 General Psychology 3(3,0)
   - SYG 2000 General Sociology 3(3,0)
   - ANT 2003 General Anthropology 3(3,0)

E. Science Foundations

Take one course from each group; one of which must include a laboratory. Some majors require a specific course or a higher level course in this area. Consult your advisor.

1. PSC 1512 Physical Science PR: MAC 1104 or MGF 1203 3(3,0)
   PHY 3053C College Physics PR: MAC 1104 or MGF 1203 4(3,3)
   CHM 1020 Concepts in Chemistry PR: MAC 1104 or MGF 1203 3(3,0)
2. BSC 1020C Biological Principles 4(3,2)
   BSC 1030C Biology and Environment 4(3,2)
   GLY 1030 Geology & Its Applications 3(3,0)
   GEO 1200 Physical Geography 3(3,0)
   BOT 1000C Plant Science 4(3,2)
   ANT 3511 Human Species 3(3,0)

* A grade of "C" or better in this course satisfies three hours of the Gordon Rule requirement in English composition. In addition, any upper-division course in composition or literature taught by the UCF English Department and selected upper-division courses taught by the UCF History Department also satisfy three hours of the English composition requirement, if the course is completed with a grade of "C" or better. A list appears in "The Golden Rule" this section.

** A grade of "C" or better satisfies three hours of the Gordon Rule requirement in mathematics. In addition, a grade of "C" or better in any higher level course in mathematics, statistics, or computer science also satisfies three hours of the mathematics requirement.

Substitution Of Courses - General Education Program

The Student Academic Support System (SASS) Office routinely coordinates the evaluation of transfer courses for the University's General Education Program and Foreign Language Proficiency requirements. When the transfer coursework is entered into the UCF computer system (usually during the first semester at UCF), the SASS Office will request course descriptions and other information to provide a sufficient basis for evaluation. Courses are evaluated on the basis of equivalency with the content of the courses required by the university. The evaluation conducted by the SASS Office is entered into a computerized Degree Audit System and is then available to the colleges and departments through the University's computer network.

Appeals of decision made by the SASS Office should be directed to Dr. David Dees, Assistant Dean, Undergraduate Studies. Further appeal of decisions made by Dr. Dees should be directed to the University Appeals Committee, Administration 210.

Substitution requests for college or major requirements are processed within those administrative offices.
Alternative Courses - General Education Program

Courses which may be taken in substitution for the stated GEP requirements are given below.

GEP REQUIREMENTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 1104</td>
<td>(College Algebra)</td>
</tr>
<tr>
<td>ECO 2013</td>
<td>(Macro Economics)</td>
</tr>
<tr>
<td>PHY 3053C</td>
<td>(Physics)</td>
</tr>
<tr>
<td>CHM 1020</td>
<td>(Chemistry)</td>
</tr>
<tr>
<td>BSC 1020C</td>
<td>or BSC 1030C (Biology)</td>
</tr>
<tr>
<td>GEO 1200</td>
<td>(Geography)</td>
</tr>
<tr>
<td>CGS 1060C</td>
<td>(Intro to Computer)</td>
</tr>
<tr>
<td>STA 2014</td>
<td>(Statistics)</td>
</tr>
</tbody>
</table>

ACCEPTABLE SUBSTITUTIONS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 1114, MAC 3233, MAC 3253, MAC 3254, MAC 3311, MAC 3312, MAC 3313</td>
<td></td>
</tr>
<tr>
<td>Any higher level ECO course which has ECO 2013 as a prerequisite.</td>
<td></td>
</tr>
<tr>
<td>PHY 3048, PHY 3049, PHY 3054C, PHY 3014C, PHY 5015, CHM 2045, CHM 1032, CHS 1440</td>
<td></td>
</tr>
<tr>
<td>BSC 2010C</td>
<td></td>
</tr>
<tr>
<td>CGS 3000, CGS 3422, COP 1200, COT 3100</td>
<td></td>
</tr>
<tr>
<td>STA 3023, STA 3032</td>
<td></td>
</tr>
</tbody>
</table>

FOREIGN LANGUAGE PROFICIENCY REQUIREMENT

The Foreign Language Proficiency requirement applies to all students seeking their first baccalaureate degree. Students graduating with a Bachelor of Science degree must demonstrate proficiency in a foreign language equivalent to one year of college instruction. Students graduating with a Bachelor of Arts degree must demonstrate a proficiency equivalent to Intermediate Language and Civilization I (FRE 2200, GER 2200, SPN 2230, etc.). This requirement supercedes all greater requirements in previous catalogs. This requirement may be met either by successful completion of the appropriate college-level course or by examination. Languages which may be used include those taught at UCF and any others for which the University can obtain standardized proficiency tests.

1. This requirement is for proficiency and not a requirement for a particular number of hours of coursework. For example, successful completion of only SPN 1121 (Elementary Spanish Language and Civilization II) would satisfy the B.S. requirement. Appropriate scores on Advanced Placement and CLEP examinations will also satisfy the requirement.
2. This is a University-wide requirement for all majors and replaces the previous Enhancement Option section of the General Education Program.
3. The Testing Administrator of the Office of Counseling and Testing will offer the Foreign Language Proficiency Examination periodically in each semester. Students must register in advance with that office to take the examination (RS 203).
4. The foreign language proficiency requirement does not apply to students seeking a second baccalaureate degree.
5. A student who is required to furnish a passing TOEFL (Test of English as a Foreign Language) score for admission to the university and does so is considered to have satisfied the requirements.

THE GORDON RULE

The Gordon Rule (State Rule 6A-10.30) applies to students who first enrolled in any college or university after October 1982. The rule requires students to complete 24,000 words of composition in 4 courses (12 semester hours) and to complete 2 courses (6 semester hours) of mathematics at the level of college algebra or higher. Each course must be completed with a grade of “C” or better. CLEP and other forms of credit by examination may not be used to satisfy the composition portion of the Gordon Rule Requirement.

UCF courses which are required by the General Education Program may also be used to satisfy the Gordon Rule. Gordon Rule requirements may be satisfied by the General Education Program as follows:

Gordon Rule Requirement:

1. 6 hours of math at the level of college algebra or higher

GEP Courses Which Satisfy:

(1) college algebra or finite math
(2) statistics or computer science
Any 3000-level or above course in math, statistics, or computer science may also be used toward fulfillment of the math portion of the Gordon Rule Requirement.

2. 12 hours of coursework in which the student must complete 24,000 words of composition (1) 6 hours of English Composition
(2) 6-hour sequence of Western Humanities, U.S. History, or Western Civilization

All literature and composition courses taught by the Department of English, and each of the courses listed below fulfill 6,000 words of the composition portion of the Gordon Rule Requirement.

ADV 4101 Adv Copy & Campaigns
JOU 3100 News Reporting
JOU 4302 Editorial/Column Writing
JOU 4310 Freelance Writing
JOU 4300 Feature Writing
JOU 4104 Public Affairs Reporting

(1) 6 hours of English Composition
JOU 4306 Critical Writing
PUR 4800 Public Relations Campaigns
RTV 3501 Broadcast Copywriting
RTV 3300 Broadcast Newswriting
RTV 4402 Broadcast Criticism
THE 4072 Principles of Motion Picture Art

Each of the courses listed below fulfill 3,000 words of the composition portion of the Gordon Rule Requirement.

AMH 3402 History of the South to 1865
AMH 3403 History of the South Since 1865
AMH 3441 History of the Frontier: Eastern America
AMH 3442 History of the Frontier: Western America
AMH 3445 Spanish Borderlands
AMH 3460 History of Urban America
AMH 3540 Military History
AMH 3560 Women in American History
AMH 3570 Black American History
AMH 3800 Canadian History
AMH 4110 Colonial America, 1607-1763
AMH 4130 The Age of the American Revolution 1763-1789
AMH 4140 Jeffersonian America
AMH 4160 Jacksonian America
AMH 4170 Civil War and Reconstruction
AMH 4201 Robber Baron Era
AMH 4231 United States History: 1914-1945
AMH 4270 United States History: 1945-Present
AMH 4311 American Culture I
AMH 4313 American Culture II
AMH 4510 Rise of the US to World Power, 1776-1914
AMH 4511 US as a Great Power: 1914-Present
ANT 3145 Archae of Complex Soc
ANT 3162 Archae of Mid & S. Am
ANT 3163 Mesoam Arch
ANT 3328 Maya Arch
ANT 3930 Seminar in Arch Meth
ARH 4350 Baroque Art
ARH 4430 19th Century Art
ARH 3456 Art After 1945
ARH 3530 Asian Art
ARH 4450 20th Century Art
ARH 4655 Meso American Art

ARH 4311 Early Italian Renaissance Art
ARH 4312 Late Italian Renaissance Art
ASH 3300 Survey of East Asia
ASH 4404 China in 19th and 20th Centuries
ASH 4442 Modern Japan, 19th & 20th Centuries
EUH 3121 Age of Transition
EUH 3122 Medieval Society and Civilization
EUH 3142 Renaissance and Reformation
EUH 3235 Romanticism and Realism
EUH 3242 The Emergence of Modern Soc. 1870-1930
EUH 3281 Second World War & Rebirth of Europe
EUH 3401 Ancient Greece
EUH 3411 Ancient Rome
EUH 3651 War and Society
EUH 4284 Fascism & the Totalitarian Dictatorships
EUH 4456 France, 1914-Present
EUH 4461 Rise of Modern Germany
EUH 4465 Hitler's Third Reich
EUH 4500 English History to 1485
EUH 4501 English History to 1485-1815
EUH 4502 British History: 1815-Present
EUH 4530 British Empire & Commonwealth
EUH 4571 History of Russia to 1801
EUH 4574 History of Russia 1801-1917
EUH 4576 History of the Soviet Union: 1917-Present
EUH 4620 European Great Powers: 1815-1914
EUH 4621 War & International Politics in Europe 1914 to present
FIL 4201 Film Production II
HIS 4150 History and Historians
HUM 3431 Ancient World: Greece
HUM 3432 Ancient World: Rome
JOU 4300 Feature Writing
JOU 4104 Public Affairs Reporting
JOU 4306 Critical Writing
LAH 3130 Latin American History I
LAH 3200 Latin American History II
LAH 3400 History of Mexico & Central America
LAH 3470 History of the Caribbean
LEA 3012 Legal Writing
PHH 3100 Ancient Philosophy
PHH 3200 Modern Continental Philosophy
PHI 1100 Critical Thinking
PHI 3600 Ethics
PHI 3800 Aesthetics
PHI 3803 Philosophy & Creativity
REL 3203 Hebrew & Christian Heritage
RTV 4403 Radio TV & Society
SOW 3104 Assessing Human Development
SYP 3400 Social Change
THE 3112 Theatre History I
THE 3113 Theatre History II

COLLEGE LEVEL ACADEMIC SKILLS TEST—(CLAST)
The College-Level Academic Skills Test (CLAST) is designed to ensure that students have achieved communication and computation skills commensurate with successful completion of the Lower Division. All students seeking an Associate of Arts or Baccalaureate degree from UCF are required to pass CLAST. CLAST must be taken no later than the term in which a student enrolls for the 55th credit hour. Transfer students with more than 55 credit hours who have not had the opportunity to take CLAST may be admitted, but must take CLAST during their first term at UCF. Students with 60 or more hours of credit must pass 3 of the 4 CLAST subsections to be permitted to enroll in additional upper division courses.

CLAST is offered only once per term. Students must register in advance at the Office of the Registrar, AD, 1st Floor. Further information regarding CLAST may be obtained from the Office of Undergraduate Studies, AD 210, Phone (407) 275-2691.

CORRESPONDENCE COURSES
The Department of Independent Study by Correspondence, Division of Continuing Education, University of Florida, Gainesville, FL 32609, administers all correspondence instruction for the State University System. Phone: (904) 392-1711.

SUMMER ATTENDANCE REQUIREMENT
A student entering the State University System with less than 60 semester hours of credit is required to enroll in a minimum of 9 hours of credit in the summer at a state university. Courses taken at the University during the summer for which the student receives a “W” or “F” may be counted toward this requirement. Petitions for exemption are sent to Dr. David Dees in Undergraduate Studies on the form supplied by the Office of Undergraduate Studies (AD 210).

ADMISSION TO THE UPPER DIVISION
To be classified as an upper-division student at the University of Central Florida, a student must complete the following:
1. A minimum of 60 semester hours of academic work.
2. The English and mathematics requirements of the Gordon Rule.
3. Passing scores on three of the four parts of the College Level Academic Skills Test (CLAST).
4. One year of college instruction in a single foreign language. (This requirement applies to those students admitted to the University without the required two units of foreign language in high school.)

STEPS IN THE GRADUATION PROCESS
A student should apply to the Registrar for graduation before registering for his final semester of attendance and not later than the end of the first full week of classes of the term of graduation.

Upon completion of 100 undergraduate semester hours of coursework, the student is notified to report to his Academic Advisor.

The following steps are required of students who are near or in their last semester before graduation:
1. The student must complete an "Intent to Graduate" form, available in the Registrar's Office, not later than the end of the first full week of the term of graduation.

2. The candidate for graduation must initiate a checksheet for graduation with his/her advisor. At the end of the semester the checksheet will be completed and forwarded for approval to the Dean of the college in which the student is enrolled. If approved, the Dean will forward the checksheet through appropriate channels to the Registrar's Office for inclusion in the student's permanent University record.

Successful completion of the degree requirements stated in the catalog under which the student wishes to graduate shall constitute a recommendation of the respective college faculty that the degree be awarded, assuming the student is in good standing in the University.

A student must complete all requirements for a baccalaureate or graduate degree no later than the date of the semester graduation ceremony. A student may not be enrolled as a transient student in another institution during the term in which the baccalaureate degree or the Associate of Arts degree is to be awarded.

TEACHER CERTIFICATION REQUIREMENTS

Since July 1, 1980, initial certification requirements (Temporary Certificate) in Florida have included three basic components with a fourth now added as prerequisite to (Regular Certificate) full certification. The components are:

1. General Preparation
   Courses included in this category are normally classified as general education (i.e., General Education Program). A graduate with a Bachelor's degree from an accredited institution shall be considered to have met the General Preparation requirements.

2. Teaching Specialization
   Courses included in this category are normally classified as the major area in a student's college program. Other subjects can be shown if the specific requirements in 6A-4.07 through 6A-4.35 Florida Requirements for Teacher Certification have been met.

3. Professional Preparation
   Students can complete a program of Professional Preparation by one of two means at UCF. These means are:
   A. The State-Approved Program of Teacher Education (i.e., a major in the College of Education) and satisfaction of state requirements for SAT or ACT scores.
   B. The Basic Certification Program (i.e., a major in some other college) and admission to the professional phase of the program.

4. Comprehensive Examination
   Competency must be demonstrated on a written examination in the areas of Mathematics, Reading, Writing, and Professional Skills. Examinations will be administered at least three times per year throughout the State of Florida.

Beginning July 1, 1981, a Regular Florida Teacher's Certificate may be issued to persons meeting all requirements for the Temporary Certificate and satisfactorily completing a year-long beginning teacher program approved by the State Board of Education.
OFFICE OF UNDERGRADUATE STUDIES

Associate Vice President and Dean: Charles N. Micarelli, AD 210, Phone (407) 275-2691
Associate Dean: Paul R. McQuilkin, AD 210, Phone (407) 275-2691
Assistant Dean: David Dees, AD 210, Phone (407) 275-2691
Assistant Dean: Robert L. Belle, Jr., AD 225, Phone (407) 275-2716
Assistant to the Dean: C. Barth Engert, AD 210, Phone (407) 275-2691

The Office of Undergraduate Studies was established in July 1980 to assist in the development of University-wide programs and to assist undergraduate students in the pursuit of their academic goals. The activities in which Undergraduate Studies is involved include the Office of the Registrar, Admissions and Financial Aid, the General Education Program, placement examinations, CLAST, intercollege programs, academic advisement, and the Gordon Rule. Undergraduate Studies reviews student problems in such areas as class schedules, withdrawals, grade forgiveness policy, and admissions and standards policies (through the University Admissions and Standards Committee). The office works to improve teaching conditions through the Learning Resource Council and administers various University scholarships.

Undergraduate Studies also administers the Gerontology Certification Program, the Honors Programs, and the Liberal Studies Program; and it oversees Academic Resource Center, Air Force and Army ROTC Programs, the Center of Excellence, Cooperative Education, the Office of Community College Relations, the University Honors Program, the Hospitality Management Program, the Office of Minority Students Services, and the Student Academic Support System (SASS).

AEROSPACE STUDIES

Chair: R. E. Ceruti, BIO 306, Phone (407) 275-2264
Faculty: Cannon, Chapoy, Daly, Dennehy, Willis

The Department of Aerospace Studies provides pre-commissioning education for qualified students who desire to serve as commissioned officers in the active duty Air Force. The department offers both the four-year and two-year Air Force ROTC programs. The four-year program provides on-campus study during the freshman through senior years. The two-year programs allow community college transfer students and other students with two academic years remaining in either undergraduate or graduate status to earn an Air Force commission while completing their studies. Both programs offer scholarships for selected students. Students are invited to write or visit the Department of Aerospace Studies to obtain additional information.

CURRICULUM

Students enrolled in the Air Force ROTC program may major in any academic discipline and earn a minor in Aerospace Studies. A major is not offered by this department. An Aerospace Engineering Degree is offered under the College of Engineering. AFROTC courses are listed under the prefix AFR. The curriculum is divided into two phases:

1. General Military Course (GMC)
   The General Military Course of the freshman and sophomore courses for students in the four-year AFROTC program. These courses deal with the mission, organization, and structure of the U.S. Air Force, and the development of air power into a prime element of American national security.

2. Professional Officer Course (POC)
   The Professional Officer Course consists of Aerospace Studies offered during the junior and senior years. The POC must be completed by all students who seek a commission through the Air Force ROTC. The curriculum involves the study of concepts of leadership and management in the Air Force and an analysis of the formulation and implementation of American defense policy.

REQUISITE FOR ADMISSION TO THE PROFESSIONAL OFFICER COURSES (POC)

1. Be at least 17 years of age at the time of acceptance.
2. Be able to complete the Professional Officer Course and complete all degree requirements prior to reaching age 26½ if entering Flight Training, or before age 30 if entering a non-flying Air Force specialty.

3. Pass the Air Force Officer Qualifying Test.


5. Complete the application and examination process, preferably prior to January 14 of the year in which they plan to enroll.

6. Selection by the Professor of Aerospace Studies and acceptance by the University.

7. Successful completion of a summer Field Training course.

8. Enlistment in the Air Force Reserve certifying agreement to complete the POC and accept an Air Force Commission. This enlistment is terminated upon receipt of a commission.

MONETARY ALLOWANCE
All students enrolled in the Professional Officer Course receive a tax-free monetary allowance of $100 per month.

AIR FORCE ROTC SCHOLARSHIP PROGRAM
Scholarships are phased at 4, 3½, 3, 2½, and 2-year intervals. This system provides opportunities to those enrolled in both the four-year and two-year programs. These scholarships provide for full tuition, and an allowance for fees and textbooks. Scholarship recipients also receive the $100 monthly tax-free monetary allowance.

SUMMER TRAINING
All students must attend a summer Field Training course conducted at an Air Force base. This course includes junior officer training, officer career orientation, and physical conditioning. Students enrolled in the four-year AFROTC program will attend a four-week summer course, normally upon completion of the General Military Course, and they will receive approximately $550. A six-week summer course, which includes a modified version of the General Military Course, is required for students entering the two-year AFROTC program. These students must complete their summer training prior to their formal enrollment in the Professional Officer Course. Students who complete the six-week course receive approximately $800.

OFFICER COMMISSIONS
Students who complete the Professional Officer Course are appointed Second Lieutenants in the United States Air Force Reserve. After completing the training program and entering active duty as reserve officers, they will serve a minimum active duty tour which varies in length depending on their particular career area. Such obligations are explained in detail during the one-on-one counseling sessions conducted with each prospect by detachment officers. During their period of active service, new officers are given the opportunity to attain career status and to obtain a regular commission in the United States Air Force.

MINOR
The Department of Aerospace Studies offers a minor consisting of a minimum of 16 semester hours. Required courses: AFR 1101, 1111, 2130, 2131, 3220, 3230, 4201, 4210.

ARMY ROTC-MILITARY SCIENCE
Chair: Daniel J. Conn, Trailer 522/525/527, Phone (407) 275-2430
Faculty: Bray, Cromwell, Herbig, Powell, Runyon, Thomson

The University of Central Florida, in cooperation with the U.S. Army, provides an opportunity to earn a commission as a lieutenant and compete for an active duty assignment or accept a guaranteed Army Reserve or National Guard position. The program offers both a four-year and two-year option for students working on their Associate of Arts, Baccalaureate or Graduate degrees. The two-year option allows students with at least two academic years remaining in either undergraduate or graduate studies to meet all requirements for commissioning. Students may be eligible for the Army's new Simultaneous Membership Program (SMP), which combines Reserve Forces duty with Army ROTC officer training courses on campus. Students earn about $2,700 in their last two years.
MINOR
The Department of Military Science offers a minor consisting of a minimum of 19 semester hours. Required courses: MIS 3301, 3410, 4421, 4430 and AMH 3540.

CURRICULUM
The Military Science curriculum is divided into three phases:
1. Basic Military Science
The Basic Military Science courses, open to both men and women, are designed for four-year participants and are normally offered during the freshman and sophomore years. These courses address military organization, equipment, weapons, map reading, land navigation, use of a compass, grade structure, the Threat, communications, and leadership. There are no contractual obligations for students in the basic course and no commitments. It's an opportunity to see what Army ROTC is all about.
2. Advanced Military Science
The Advanced Military Science courses are normally taken during the junior and senior years. These courses specialize in small unit tactics, how to prepare and conduct military training, military justice system, staff procedures, decision making, and leadership. Students who desire a commission as a second lieutenant are contracted and paid a subsistence allowance of $100.00 a month up to ten months during the school year. Each student is required to take courses that meet the Professional Military Educational Requirements. These requirements require taking at least one course in the following areas: Written Communication Skills, Human Behavior, Military History, Computer Literacy, and Math Reasoning.
3. Summer Camp
Prior to commissioning, each cadet must successfully complete an evaluation of skills learned. This evaluation is conducted at Ft. Riley, Kansas, during June and July. Summer Camp requirements apply only to Advanced Military Science students. Students attending the advanced camp receive approximately $700.00.
4. A student can earn placement credit for the Basic Course classes and allowed entry into the Advanced Courses by attending a six-week course at Fort Knox, Kentucky, thereby allowing completion of all requirements for commissioning within two years. Students attending the summer course at Fort Knox will receive approximately $700 pay for the period. Additionally, all lodging, meals, transportation, and uniforms will be provided at no expense.
5. Daytona Beach Campus students contact the Professor of Military Science at Embry Riddle Aeronautical University, Daytona Beach, FL, (904) 239-6469.

SUMMER TRAINING
1. A summer training program is offered for students who are to be academic juniors without previous ROTC or military training. A student can earn placement credit for the Basic Course classes and allow entry into the Advanced Courses by attending a six-week course at Fort Knox, Kentucky, thereby allowing completion of all requirements for commissioning within two years. Students attending the summer course at Fort Knox will receive approximately $700 pay for the period. Additionally, all lodging, meals, transportation, and uniforms will be provided at no expense.
2. Qualified students can be selected to attend specialized military training during the summer months. Some of the areas of training available are:

MONETARY ALLOWANCE
All students enrolled in the Advanced Military Science Course receive a tax free monetary allowance of $100 per month.

SCHOLARSHIPS
Four-, three-, and two-year scholarships are available for all students who qualify. These scholarships provide full tuition, fees, and required textbooks. Additionally, scholarship recipients receive $100 (tax free) per month. Scholarship applications are processed in the December-February time frame.

REQUISITES FOR ADMISSION TO THE BASIC COURSE
1. Enrollment in a Baccalaureate or Masters degree program.
2. 17 years of age at the time of entry but not more than 30 years of age at the time of commissioning.
3. Full-time student status.
REQUISITES FOR ADMISSION TO THE ADVANCED COURSE
1. Successful completion of Basic Course, Basic Camp, JROTC, prior military service, or permission of Department Chair.
2. Successful completion of an Army physical examination.
3. Agreement to complete the Advanced Course requirements and serve on active, reserve, or national guard duty as a commissioned officer.
4. Full-time student status.

COMMUNITY COLLEGE RELATIONS
Director: Ralph Boston, AD 210, Phone (407) 275-2231

Community College Relations is responsible for: keeping community college students and counselors informed about UCF, its programs and policies; making state-wide and local visits to community colleges; conducting advanced orientations for AA transfers; annually publishing the UCF “Transfer Student Counseling Manual”; annually providing updated transfer information for the developing “Student OnLine Advisement and Articulation (SOLAR)” Statewide Network; monitoring the state-wide community college/university articulation agreement; serving as liaison with community college officials; and conducting appropriate workshops/meetings to maintain and improve community college relations.

COOPERATIVE EDUCATION
Director: Sheri Dressler, PH 210, Phone (407) 275-2314

Many university students actively plan their careers through participation in cooperative education. Co-op is an academic program combining on-campus classroom study with off-campus study-related work experience for which the student receives a salary. It offers a blend of theory and practice, integrating formal university preparation with practical work experience. Through this program, students develop professional work skills, test career goals, improve academic performance, generate income, and increase prospects for full-time employment upon graduation.

Students choose between two scheduling options, the alternating plan in which they alternate terms of full-time work with full-time school and the parallel plan in which they attend classes full time and work part time concurrently. Additionally, for students who qualify for financial aid, co-op administers the Florida College Career Work Experience Program (FCCWEP) through which employers are reimbursed 50% of the student’s salary for providing career-related work opportunities.

Eligibility requirements include 1) full-time enrollment in an undergraduate or graduate degree program at UCF 2) completion of a minimum of 20 post-secondary semester hours 3) having a minimum of 1 academic semester remaining before graduation 4) maintenance of a minimum of a 2.5/4.0 UCF grade point average.

Co-op is available to students on all campuses in all five colleges.

Gerontology Certification Program
In recognition of the special needs of the elderly citizens of Central Florida, the University offers a fifteen-hour interdisciplinary program leading to a Certificate in Gerontology. The program is completed along with the undergraduate major of the student and is administered by the Dean of Undergraduate Studies, AD 210. While the program may be of particular interest to students who are majoring in health sciences, psychology, social work, or sociology, it is compatible with many disciplines—for example, music, music education, physical education, or art education.

To be certified in gerontology, each student must successfully complete the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEP 3464</td>
<td>Psychology of Aging</td>
<td>3</td>
</tr>
<tr>
<td>HSC 4564</td>
<td>Health Care Needs of the Elderly</td>
<td>3</td>
</tr>
<tr>
<td>SYP 4730</td>
<td>Sociology of Aging</td>
<td>3</td>
</tr>
<tr>
<td>SOW 4644</td>
<td>Social Services for the Elderly</td>
<td>3</td>
</tr>
</tbody>
</table>

In addition, an approved clinical experience/practicum in gerontology or geriatrics must be completed for a minimum of three semester hours credit. Thus, the certification program requires fifteen semester hours of course work in addition to the major.

Students who are interested in certification should consult Dr. David Dees in Undergradu-
ate Studies to enroll in the program and see one of the following faculty members for advisement:

Health Sciences - John F. Bergner, Ph.D., Professor of Health Sciences, HPB 124.
Psychology - Richard D. Tucker, Ph.D., Professor and Chair, Psychology, PH 317.
Social Work - Eileen M. Abel, M.S.W., Assistant Professor, Sociology, FA 414.
Sociology - Charles M. Unkovic, Ph.D., Professor of Sociology, FA 408.

Students whose major does not fall within one of these departments should report to the Office of Undergraduate Studies for advisement.

UNIVERSITY HONORS PROGRAM
Director: Mark Stern, FA 415, Phone (407) 275-2076

The University Honors Program is designed to enhance and broaden the talents and abilities of the most able students who matriculate at the University of Central Florida. The program includes intensified course work within traditional discipline boundaries, as well as interdisciplinary, integrated courses, independent study, international studies work, and activities beyond the classroom. The University Honors Program is oriented to accepting the best available students and expanding their horizons so that they can perform at the highest level of excellence. It is the intent of this program to prepare students for entry into the best graduate and professional schools, as well as for distinguished careers in business and public service.

Although entry into the Honors program is predicated on excellence in academic work, students are also expected to participate in extracurricular activities of the Honors Program, e.g., receptions, retreats, or attendance at special guest lectures and presentations, and to participate in University-related service activities, such as peer advising and tutoring. The Honors program is designed to provide students with the advantages of both an excellent undergraduate college experience and a major research university experience.

There are two distinct Honors curricula available to the student: University Honors and Honors in the Major.
University Honors. Admissions into the University Honors program will usually be by invitation of the University Honors Committee. The student will normally be required to meet the following sliding scale of minimal admission criteria:

<table>
<thead>
<tr>
<th>HIGH SCHOOL ACADEMIC GRADE</th>
<th>COMBINED SAT SCORE</th>
<th>COMBINED ACT SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.9+</td>
<td>and 1000</td>
<td>or 24</td>
</tr>
<tr>
<td>3.7 - 3.89</td>
<td>and 1100</td>
<td>or 25</td>
</tr>
<tr>
<td>3.5 - 3.69</td>
<td>and 1200</td>
<td>or 28</td>
</tr>
<tr>
<td>3.3 - 3.49</td>
<td>and 1300</td>
<td>or 30</td>
</tr>
<tr>
<td>3.0 - 3.29</td>
<td>and 1400&gt;</td>
<td>or 33&gt;</td>
</tr>
</tbody>
</table>

All Florida Academic Scholars, Merit and Achievement finalists, and International Bacca­laureate graduates with a 3.2+ GPA, are automatically eligible for admission into the University Honors program. Students who do not meet the above requirements are encouraged to apply for admission to the program if they have done outstanding work after one or more semesters at the University of Central Florida. Mature students who are returning to do college work after having been out of college for a period of several years, or who have never been previously enrolled in college, are strongly encouraged to apply for admission to the program after one or more semesters of outstanding work at the University of Central Florida. Transfer students who seek admission will have their requests granted automatically if they meet the high school GPA and SAT/ACT criteria listed above and have a 3.2 GPA in their transfer work.

Students must maintain a 3.2 overall GPA and 3.0 GPA in Honors Courses in order to remain in the University Honors Program. In addition to meeting the GPA requirements, to graduate with University Honors a student must also meet the following requirements: (1) complete 12 hours of course work in Honors Sections of the General Education Program;¹ (2) complete, with a “satisfactory” grade, “Honors Symposium I” and “Honors Symposium II”;² (3) complete one “Honors Lecture” course;³ and (4) complete two upper division “Honors Seminars” outside of the major field of study.⁴

Students who complete a semester abroad or receive six or more hours of upper-division credit for study abroad as part of the University International Studies Program, will receive credit for completion of one upper division “Honors Seminar.”

By the end of the second week of the term in which a student plans to graduate with honors, the student must file a completed “Intent to Graduate with Honors” form with the University Honors Director.

A student who completes all of the requirements for University Honors will have the designation of “Graduation with University Honors” entered on the Diploma and the University transcript.

¹When a student has an exceptionally high number of dual enrollment, Advanced Placement, CLEP or other work which is substituted for GEP course hours, he or she may petition the University Honors Committee to substitute, on a credit for credit basis, Honors Lecture course work or Honors Seminar course work for Honors GEP course work.

²“Honors Symposium I” and “Honors Symposium II” designate one credit hour courses which will be offered, respectively, in the Fall and Spring semester of each year. This course will include guest lectures, video and film presentations, and live performances by guest artists, e.g., musicians or poets. During each semester a field trip will be included as part of the Honors Symposium. Attendance at this series will be mandatory for all students seeking University Honors. Only one unexcused absence is permitted. The course is graded on a “satisfactory”/“unsatisfactory” basis.

³Each Fall and Spring term a three credit “Honors Lecture” course will be offered. The Lecturer will offer an integrative and original course that will be open only to Honors students. The purpose of this course is to explore cross-disciplinary domains and broaden the student’s perspective beyond the usual notion of a “major” field of study. Students may take more than one Honors Lecture course, but at least one such course must be taken as part of the requirements for graduation with University Honors.

⁴The three credit hour “Honors Seminar” is offered within the department major areas or programs, but is broad-based in the topics which are pursued. These seminars are designed especially for Honors students and are intended for non-major participation. With the consent of the Instructor, majors will also be invited into an Honors Seminar.
Honors in the Major. Application for admission to the Honors in the Major program will be made to the department or college in which Honors are sought. Requirements for admission to Honors in the Major are: the completion of sixty hours of college credits; a cumulative 3.2 or higher grade point average, including at least twelve graded upper-division hours at the University of Central Florida; and permission of the department in which such Honors are sought. Upon application and approval of the major department or college, and with notification to the University Honors Committee, GPA requirements may be waived in cases where prior work at the college level was taken at least three years previous to the current period of continuous enrollment at the college level. Participation in the University Honors Program is not a requirement for participation in Honors in the Major. Honors in the Major is awarded upon completion of an advanced Honors Project or Thesis, and the completion of at least one upper division Honors Seminar or an Honors Directed Readings and Study course in the department in which Honors is taken. Each department or college reserves the right to set additional requirements for Honors in the Major to be achieved. Upon petition to the Honors Committee and with the consent of the major department, a student may be awarded credit for an Honors Seminar in the major if six hours of upper-division credit accepted by the major department or college is taken abroad as part of the University International Studies Program or other overseas program directly connected with the University. The Honors Project or thesis is to be completed under the direction of a committee of three faculty members, one of whom is the major adviser. Up to six hours of 4000-level thesis credit may be awarded for student work on the Honors Project. This program is designed to encourage original and independent work on the part of the student. A copy of the thesis, creative work or project that is the expected outcome of this course will be placed in the library. With the approval of the major department or college and notification to the University Honors Committee, an Honors student may be permitted to waive any and all of the usual requirements for completion of the major and pursue a course of study designed to fit his or her individual needs. A student who completes all of the requirements for Honors in the Major will have the designation of "Honors in the Major" noted on the diploma and the University transcript.

Summary Table of Minimum Requirements for University Honors and Honors in the Major

<table>
<thead>
<tr>
<th></th>
<th>GEP*</th>
<th>Seminars*</th>
<th>Symposium*</th>
<th>Lecture*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Univ. Honors</td>
<td>12 Hrs.</td>
<td>6 Hrs.</td>
<td>2 Hrs.</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>Hon. in Major</td>
<td>Up to 6 Hrs.</td>
<td>AND</td>
<td>3 Hrs.</td>
<td>OR 3 Hrs.</td>
</tr>
</tbody>
</table>

*Denotes Honors Hours

Honors in the Major also designates a program in which a particular college may undertake to award Honors for upper-division work within the college. In the case of a college-wide Honors in the Major program, the student should consult the Office of the Dean of the College for information concerning procedures and requirements related to this program. Honors in the Major work is available only at the option of each department or college.

It is the responsibility of the Honors student to obtain a faculty adviser who will undertake the responsibility of directing the Honors Reading and Study Course. The student is responsible for notifying the Honors Director, in advance, when he or she intends to pursue the Honors Reading and Study Course. Prior to entry in the readings course, the student must file with the department or college and the University Honors Committee a readings list and study proposal signed by the faculty member under whose direction the course will be given. Credit towards Honors in the Major will be awarded by a department or college for a readings course if a grade of "A" or "B" is received by the student.
LIBERAL STUDIES PROGRAM

Dean: Charles N. Micarelli, AD 210, Phone (407) 275-2691
Director: Dennis Kamrad, AD 384, Phone (407) 275-2351

PURPOSE

The Liberal Studies curriculum is a university-wide general purpose program leading to the Bachelor of Arts or Bachelor of Science degree with a major in Liberal Studies. The determination of whether the Arts or Science degree shall be awarded will depend upon the course areas selected.

The program is administered through the office of Undergraduate Studies and is designed for liberal education and academic flexibility. It recognizes that, apart from the professional curricula, there are many combinations of courses which can be structured into meaningful programs to meet the needs of individual students.

The Liberal Studies program has two main purposes:

1. It accommodates students who desire a liberal, non-professional education encompassing several fields.
2. It provides a means for students to start a productive university education while delaying a decision on professional curricula until the sophomore year.

Students who are undecided about their major should pursue the Liberal Studies program until they can select a specific major area.

Students fulfilling the requirements for a degree in Liberal Studies must complete either the UCF General Education Program or the General Education requirement at a Florida State Community College. In addition, foreign language proficiency is required.

The Liberal Studies student must complete:

1. A minimum of four course area groupings in which at least three disciplines are represented.
2. A minimum of 15 semester hours in each area, with an additional 20 semester hours to be completed in a fifth area or used to strengthen one or more of the four course area groupings. Students choosing only four course area groupings may include a maximum of 11 semester hours of general electives as well as 9 hours of supporting electives in completing the fifth area.**
3. A minimum of 48 upper-level hours must be earned in the 5 areas.

In addition to the university-wide degree requirements, a minimum grade point average of 2.0 must be achieved in each course grouping.

The areas of Education and Engineering may be used twice, provided a specific concentration corresponding to a traditional major is chosen for one of the area course groupings.

The area of Mathematical Sciences may be used twice, provided a concentration in Computer Science courses is chosen for one of the area groupings.

Course Area Groupings

DISCIPLINE #

(Four Course Area Groupings must be chosen from three different Discipline #’s)

I  Business Administration
   Accounting, Business Administration, Economics*, Finance, Hospitality Management, Management, Marketing

II  Education*
   Art Education, Business Education, Educational Media, Exceptional Child, Physical Education, Teaching Analysis, Vocational Education, and selected courses from Elementary and Secondary Education

III  Engineering
   Selected courses from the Engineering core and departmental offerings. The minor in Engineering Technology and Society may also be used.

IV  Health Sciences
   Communicative Disorders, Health Sciences, Medical Record Administration, Medical Laboratory Sciences, Nursing, Radiologic Sciences, Cardiopulmonary Sciences, and other Health Related Professions

V  Fine Arts
   Art, Music, and Theatre
V Humanities  
   English, Foreign Literature, History, Humanities, Philosophy, and Religion

V Languages  
   Chinese, French, German, Hebrew, Italian, Latin, Russian, Spanish

VI Biological Sciences  
   Biology, Botany, Limnology, Microbiology, Zoology

VI Mathematical Sciences  
   Computer Science, Mathematics, and Statistics

VI Physical Sciences  
   Astronomy, Chemistry, Forensic Science, Geography (Physical), Geology, Physics, and general courses in the Earth and Space Sciences.

VI Air Force or Army ROTC  
   For students who take and complete the Air Force or Army ROTC four-year program or two-year upper division program.

VII Behavioral Sciences  
   Anthropology, Psychology, Sociology, and Social Welfare

VII Communication  
   Film, Journalism, Radio-Television, Speech, and general courses in Communication

VII Social Sciences  
   Criminal Justice, Economics+, Geography (Social), Legal Studies, Political Science, and Public Administration

*Consult your advisor. Many Education courses require concurrent public school practicum.  
+This course shown in two areas.

**Courses used to satisfy the GEP cannot also be used to satisfy the hours needed to complete a course area grouping.

The Liberal Studies disciplines are: (Three must be represented within the four areas chosen)

I. Business Administration  
II. Education  
III. Engineering  
IV. Health  
V. Fine Arts, Humanities, and Languages  
VII. Air Force or Army ROTC, Behavioral Science, Communication, and Social Sciences

MINORITY STUDENT SERVICES  
Director: Robert L. Belle, Jr., AD 225, Phone (407) 275-2716

The Office of Minority Student Services is responsible for coordinating special programs, projects, and special services for minority students. The office cooperates with existing student services in the recruitment, admission, and retention of minority students, and is responsible for monitoring and facilitating the academic progress of minority students. Minority Student Services also assists in developing cultural and social programs to enhance the development of the individual.

STUDENT ACADEMIC RESOURCE CENTER  
Director: Mary Helen Callarman, PC1-102, (407) 281-5130

The Student Academic Resource Center (SARC) provides students with individualized tutoring in math, English, reading, foreign language, physics, statistics, and many other disciplines.

Every semester the SARC offers a series of CLAST Review Workshops in each of the four CLAST competencies. The SARC staff can also prescribe self-paced programs specifically designed for CLAST preparation.

The SARC provides English grammar materials for non-native students who want to develop their written English skills.
Each semester the SARC provides a series of study skills workshops and materials on Time Management, Note Taking, Test Taking, Memory, Left-brain, Right-brain Thinking, and Research Paper Writing. The SARC is designed to meet the individual needs of students. Its major objective is to provide students with academic support to ensure their success in college.
ACADEMIC PROGRAMS

UNDERGRADUATE DEGREES
Associate of Arts Degree

University of Central Florida students who satisfactorily complete 60 semester hours of acceptable college work may apply for an Associate of Arts degree. University requirements include achievement of an overall and UCF grade point average of 2.0 or above, fulfillment of the General Education Program requirements, and completion of the last 20 credit hours in residence at UCF. In addition, any student who wishes to receive an A.A. degree must have satisfied the Gordon Rule requirement and passed the College Level Academic Skills Test.

The Associate of Arts degree is awarded only upon application. The application form may be obtained in the Registrar's Office and should be completed by the end of the fifth week in the semester in which the Associate of Arts degree is to be awarded. A student may not be enrolled as a transient student in another institution during the term in which the Associate of Arts degree is to be awarded. An Associate of Arts degree will not be awarded in the same term that the baccalaureate degree is to be awarded or in any term following the completion of the baccalaureate degree.

Baccalaureate Degrees

The University offers the degrees of Bachelor of Arts, Bachelor of Engineering Technology, Bachelor of Fine Arts, Bachelor of Science, Bachelor of Science in Business Administration, Bachelor of Science in Engineering, Bachelor of Science in Nursing, and Bachelor of Science in Social Sciences. These degrees are available in the following Colleges with majors or areas of specialization as indicated:

College of Arts and Sciences
Bachelor of Arts (B.A.)
Majors: Anthropology, Art, Communication, Economics, English, Film (RTV), Foreign Languages (General), French, History, Humanities, Humanities and Fine Arts (Intr.), Journalism, Music, Music Education, Philosophy, Political Science, Psychology, Radio-Television, Sociology, Spanish, Speech, Theatre

Bachelor of Fine Arts (B.F.A.)
Major: Art

Bachelor of Science (B.S.)
Majors: Biology, Botany, Chemistry, Computer Science, Forensic Science, Limnology, Mathematics, Microbiology, Physics, Psychology, Social Sciences (interdisciplinary), Statistics, Zoology

College of Business Administration
Bachelor of Science in Business Administration (B.S.B.A.)
Majors: Accountancy, Economics, Finance, General Business Administration, Management, Marketing

College of Education
Bachelor of Science (B.S.)
Major: Elementary Education, Exceptional Child
Major: K-12--Art Education, Physical Education
Major: Secondary Education, English Language Arts, Foreign Language, Mathematics, Science Education Social Science, Speech, Vocational Education and Industry Training

College of Engineering
Bachelor of Science in Engineering (B.S.E.)
Majors: Aerospace Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Environmental Engineering, Industrial Engineering, Mechanical Engineering

Bachelor of Science in Engineering Technology (B.S.E.T.)
College of Health and Professional Studies
Bachelor of Arts (B.A.)
 Majors: Communicative Disorders, Criminal Justice, Legal Studies, Public Administration
Bachelor of Science (B.S.)
 Major: Cardiopulmonary Sciences, Hospitality Management, Medical Laboratory Sciences, Medical Record Administration, Radiologic Sciences
Bachelor of Science in Nursing (BSN)
 Major: Nursing
Bachelor of Social Work (B.S.W)
 Major: Social Work
Office of Undergraduate Studies
Bachelor of Arts (B.A.)
 Major: Liberal Studies
Bachelor of Science (B.S.)
 Major: Liberal Studies

Double Majors
Any UCF student working toward a single bachelor's degree (a B.A. degree or a B.S. degree) who satisfies the requirements for two majors will be awarded one diploma, but both majors will be indicated on the student's permanent record. Since the requirements for Bachelor of Arts and Bachelor of Science degrees are different, a student completing a major with a B.A. and a major with a B.S. must satisfy the requirements for both the B.A. and the B.S. degrees. Although both majors will be indicated on the student's permanent record, only one diploma (a B.A. or a B.S., at the student's option) will be awarded. A double major does not require a minimum number of hours beyond those necessary for completing degree requirements, while a second degree has specific minimum requirements. (See Second Baccalaureate Degree.)

Second Baccalaureate Degree
Any UCF student desiring to obtain two baccalaureate degrees must meet the requirements for both degrees and earn a minimum of 150 hours. A separate diploma will be awarded for each degree.
Transfer graduates from accredited four-year U.S. institutions who apply for admission to work toward a second baccalaureate degree at the University of Central Florida must meet the regular graduation requirements of the major department, and the 30 semester-hour residency requirement. Students holding the baccalaureate degree from accredited U.S. institutions are considered to have completed all General Education Program Requirements. Students who hold degrees from foreign institutions may be required by the Dean of Undergraduate Studies to fulfill all or part of the UCF General Education Program requirements.
The University requirements specified in the preceding paragraphs are minimum requirements. Departments and colleges may require more than 150 hours for a second degree or more than 30 hours to be taken in residence at UCF. Students should confirm department and college requirements with their academic advisors.

Minors
Minors in a limited number of programs have been authorized for certification with baccalaureate degrees. Minors must be indicated on the Intent to Graduate card and must be certified at the same time as the student's baccalaureate degree. Unless a second baccalaureate degree is earned, certification will not be made at a later time even if additional courses have been completed.

GRADUATE DEGREES
See listing at the beginning of each College section. For further information, contact the Office of Graduate Studies, Administration 143, University of Central Florida, Orlando, FL 32816-0112, Phone (407) 275-2766.
COLLEGE OF ARTS AND SCIENCES

UNDERGRADUATE PROGRAMS

Anthropology (BA)  Limnology (BS)
Art (BA)  Mathematics (BS)
Art (BFA)  Microbiology (BS)
Biological Science (BS)  Music (BA)
Biology (BS)  Music Education (BA)
Botany (BS)  Philosophy (BA)
Chemistry (BS)  Physics (BS)
Communication (BA)  Political Science (BA)
Computer Science (BS)  Psychology (BA) (BS)
Economics (BA)  Radio-Television (BA)
English (BA)  Social Sciences (Int.) (BS)
Film (BA)  Sociology (BA)
Foreign Language Combination (BA)  Spanish (BA)
Forensic Science (BS)  Speech (BA)
French (BA)  Statistics (BS)
History (BA)  Theatre (BA)
Humanities (BA)  Zoology (BS)
Journalism (BA)  

PREPROFESSIONAL PROGRAMS

Predental  Prepharmacy
Prelaw  Prepodiatry
Premedical  Preveterinary
Preoptometry  

OTHER PROGRAMS

Afro-American Studies  Judaic Studies
American Studies  Latin-American Area Studies
Canadian Studies  Soviet Area Studies
Community Arts  Women's Studies

See also: Summer Study Programs under Department of Foreign Languages.

GRADUATE PROGRAMS*

Biological Science (MS)  Microbiology (MS)
Chemistry, Industrial (MS)  Physics (MS, Ph.D.)
Communication (MA)  Political Science (MA)
Computer Science (MS, Ph.D.)  Psychology, Clinical (MS)
English (MA)  Psychology/Human Factors (Ph.D.)
History (MA)  Psychology, Industrial (MS)
Mathematical Science (MS)  Sociology, Applied (MA)
  Statistical Computing (MS)

*See the Graduate Studies catalog for detailed descriptions of these programs.
COLLEGE OF ARTS AND SCIENCES

Dean: Edward P. Sheridan, FA 511, Phone (407) 275-2251
Associate Dean: L. Armstrong, FA 511, Phone (407) 275-2251
Assistant Dean: K. Seidel, FA 511, Phone (407) 275-2251
Acting Assistant Dean: Bruce A. Whisler, FA 511, Phone (407) 275-2251

The College of Arts and Sciences, the largest academic unit in the University, includes
the following departments: Art; Biological Sciences; Chemistry; Communication; Computer
Science; English; Foreign Language; History; Mathematics; Music; Philosophy and Humani-
ties; Physics; Political Science; Psychology; Sociology and Anthropology; Statistics; and
Theatre.

In keeping with the aims of the University of Central Florida, the College is responsible
for all programs in the broad areas of the humanities, the fine arts, the natural sciences,
and the social sciences. The departments offer more than sixty baccalaureate, graduate,
and preprofessional programs in these areas. For additional information concerning gradu-
ate programs, please refer to the Graduate Catalog.

In addition to providing strong academic degree programs in the areas noted above, the
College of Arts and Sciences functions in a service mode by making available a wide
selection of courses designed to complement the offerings of the other four colleges of the
University. These offerings include most of the courses necessary to satisfy the University's
general education requirement for all students.

A student enrolled in the College as an undergraduate must fulfill all University degree
requirements including that for general education, as well as the particular requirements set
forth by the department for each area of specialization. To be certified for graduation, a
student must achieve at least a "C" grade point average (2.0) in the courses of his or her
major. Some departments also require a 2.0 in each major course; consult advisors for
specific policies.

A student whose written or oral communication in any course is deemed unsatisfactory
may be referred to the Dean by the instructor. Additional course work or an individual study
program may be assigned consistent with the needs of the student and must be completed
before the degree is granted.

PREPROFESSIONAL PROGRAMS

Pre-Health Coordinator: Dr. O.M. Berringer, BL 103, Phone (407) 275-2968

The College of Arts and Sciences offers preprofessional programs in the health disci-
plines leading to further study in schools of dentistry, medicine, osteopathic medicine,
optometry, pharmacy, podiatry, and veterinary medicine. They are administered through the
Pre-Health Professions Advisement Office, located in the Biological Sciences Building,
Room 103. Other programs associated with the health-related professions (i.e., the allied
health sciences) are administered through the College of Health. Curricular guidelines are
listed under the Pre-Health Professions Programs Advisement Office.

Prelaw Program

There is no preferred major for prelaw. Law schools accept superior students with a good
liberal arts background, regardless of major field. A Bachelor of Arts or Bachelor of Science
degree with approximately three-fourths of the course work representing theory content is
typically required. Majors such as English, History, Humanities, Legal Studies, Sociology,
and Political Science meet this criterion. The quality of undergraduate education for the
legal profession, according to the Association of American Law Schools, is grounded in
three basic skills and insights: comprehension and expression in words, critical understand-
ing of the human institutions and values with which the law deals, and the creative power of
thinking. Law schools require that the Law School Admission Test (LSAT) be taken prior to
consideration for admission.

Advisement of prelaw students will be provided in the area where a major is chosen; for
example, a prelaw student who wishes to emphasize the historical foundations should seek
advisement in the Department of History; for emphasis in political science advisement
should be sought in the Department of Political Science; emphasis in economics should be
gained through advisement in economics programs in either the College of Arts and

87
Sciences or the College of Business Administration; emphasis in Legal Studies can be pursued in the Department of Public Service Administration.

ADVISEMENT
Office of Academic Support and Information Services
Director: Ms. Judith Boyte, FA 208, Phone (407) 275-2492

The Office of Academic Support and Information Services (OASIS) assists students in the College of Arts and Sciences in matters concerning College and University requirements and procedures. Petitions for the substitution of courses for requirements in the General Education Program and evaluation of CLEP and TSD credit are processed through this office for all students in the college. Questions concerning University and College academic policies affecting Arts and Sciences majors should be directed to the OASIS staff in FA 208 or by calling (407) 275-2492.

Program Planning
Although suggested curricula are available in most areas, students will plan their program in consultation with a faculty advisor appointed by the chair of the major department or by the Dean of the College of Arts and Sciences.

Natural Science Majors Requirement
In addition to meeting all University requirements, the College requires that each degree program in the departments of Biological Science, Chemistry, Computer Science, Mathematics, Statistics, and Physics contain courses which will introduce the student to the three major scientific disciplines of physical science, biological sciences, and mathematical and computer sciences.

To satisfy this requirement, students must successfully complete a minimum of four courses under a semester system (or six courses under a quarter system) distributed between the two scientific disciplines outside that of their major, with a minimum of one course under a semester system (or two courses under a quarter system) in each discipline. At least one course in each discipline must contain a laboratory component. Some departments have identified a specific group of courses from which its majors may select in order to satisfy this requirement. In addition, some departments may have imposed additional criteria which must be met in order for their majors to satisfy this requirement. It is the student's responsibility to insure that both Departmental and College criteria have been met.

With proper justification students may be permitted to utilize courses offered outside the College of Arts and Sciences and to mix courses taken under both quarter and semester systems to satisfy this requirement. Any requests for such waivers must be accompanied by a departmental recommendation and should be submitted to the Office of the Dean, College of Arts and Sciences.

FOREIGN STUDY CENTERS—Undergraduate Interinstitutional Transient Program
The State University System operates study centers in London, England and Florence, Italy during the fall and spring semesters. Students with 27 or more semester hours of credit and a GPA of 2.5 or above in all State Universities are eligible to apply for one or both semesters as interinstitutional transient students. Faculty at the centers are drawn from the nine State Universities. While credits are earned through Florida State University, which administers the program on behalf of the State University System, credits are fully transferable within the System. Students at the Centers are considered to be resident in their home institutions for attendance and degree purposes.

Classes at the Florence Center emphasize art history, Italian, social sciences, and the humanities; at the London Center, theatre, business, English, history and the social sciences. Field trips and museum visits are common to both. For further information consult Dr. Thomas Greenhaw in the Department of History (London Program), (407) 275-2224 or Dr. Robert Flick in the Department of Philosophy and Humanities (Florence Program), (407) 275-2273.

AFRO-AMERICAN STUDIES PROGRAM
The College of Arts and Sciences offers a minor but not a major in Afro-American Studies consisting of a minimum of 16 semester hours. Required courses: AMH 3570, LIN 4612,
LIT 4354, SYD 3720. For further information, contact Dr. K. Seidel, Dean's Office, FA 511, (407) 275-2551.

**AMERICAN STUDIES PROGRAM**

The minor in American Studies requires at least 21 hours of approved upper-division courses. The courses include at least three hours of restricted electives from each of three fields: literature and humanities, social sciences, and history. Other courses may be chosen from the list of approved courses available from the American Studies advisor. For further information, contact Dr. K. Seidel, FA 511, (407) 275-2251.

**DEPARTMENT OF ART**

Chair: TBA, FA 523, Phone (407) 275-2676  
Faculty: Chavda, Congdon, Eyfells, Gaudnek, Lotz, Rivers, Skoglund, String, Wahlman, Wellman

The Department of Art has 10 full-time and 8 part-time faculty members teaching traditional studio arts, graphic design, and art history. In 1986, the William S. and Alice M. Jenkins Eminent Scholar Chair in Community Arts was endowed through a gift from the Jenkins Family Foundations, Inc. The Chair was established under the Florida Endowment Trust Fund for Eminent Scholars Act. Chairholders serve as a resource for developing and teaching courses in Community Arts (see *Community Arts*).

The curriculum in Art provides professional preparation in art history, visual arts administration, and in the studio areas of ceramics, community arts, computer graphics, drawing, fibers-fabrics, graphic design, painting, photography, printmaking, and sculpture, as well as combination specializations. Both the Bachelor of Arts and the Bachelor of Fine Arts degrees are offered. Competitive scholarships and awards are available to currently enrolled full-time UCF art majors through portfolio reviews by Faculty. These awards are sponsored by UCF, the Altrusa Club of Winter Park, and the Albin Polasek Foundation.

**Portfolio Requirements For Studio Majors:** A selective portfolio of work representing the student's studio accomplishments in design and drawing is required for faculty review at the end of the sophomore year or at the completion of 12 semester hours of studio art courses. Faculty evaluation of this portfolio will determine if the student should advance further in the B.A. program. The University reserves the right to hold, for exhibition purposes, work done in classes.
MINOR

The Department of Art offers a minor consisting of a minimum of 21 semester hours. Required courses are: ARH 2050, 2051, ART 2201, 2202, and 9 semester hours of Art Specialization at the 3000-4000 level. To be eligible for a minor in Art, a student must have a GPA of at least 2.0 in all Art courses subject to the following constraints: No D grades in Art courses from other institutions are transferable. The Art Departmental Residency Requirement consists of 6 semester hours of regularly scheduled 2000-4000 level courses which must be taken from the UCF Department of Art. These 6 hours must be in an area of specialization.

Bachelor of Arts: Art

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
   A student must achieve at least a "C" grade point average (2.0) in the courses of his or her major.

   No D grades in Art courses from other institutions are transferable.

   Departmental Residency Requirement consists of at least 18 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF Department of Art. Nine of these must be in an area of specialization.
3. Required courses
   Varies with Specialization
4. Restricted Electives
   Varies with Specialization
5. Electives
   To be selected primarily from upper level courses outside the Department, with the approval of the student's advisor.

Total Semester Hours Required 120

AREAS OF SPECIALIZATION

I. Art History

A. Required Courses
   ARH 2050, 2051  History of Art I, II  6 hours
   ART 2201C, 2202C  Design Fundamentals I, II  6 hours
   or ART 2300C, 2301C  Drawing Fundamentals I, II  6 hours
   ARH 4906  Senior Research  3-6 hours

B. Specialization
   3000 and 4000 level Art History Courses from the following:
   ARH 3060, 3456, 3520, 3530, 3683, 3710, 4170, 4311, 4312, 4350, 4430, 4450, 4655, or others, as approved by advisor
   15 hours

C. Restricted Electives
   Any two:
   ARH 4800 Theory and Criticism of the Visual Arts  (3)
   ARH 3820 Visual Arts Administration  (3)
   PHI 3800 Aesthetics  (3)
   ENC 3310 Magazine Writing  (3)
   EUH 3000-4000 level  (3)
   ARE and ARH Community Arts courses, with approval of advisor
   6 hours

D. Foreign Language
   2 years of college level courses (proficiency).  (12 hours)

E. Comprehensive Art History Examination
   Total Semester hours in Art and Art History Courses  36-39
   Total Semester Hours Required  120 hours

II. Art (Studio)

A. Required Courses
   ART 2201C, 2202C  Design Fundamentals I, II  6 hours
   ART 2300C, 2301C  Drawing Fundamentals I, II  6 hours
   ARH 2050, 2051  History of Art I, II  6 hours
   ARH 3000-4000  Art History Courses  6 hours
B. Specialization 12 hours
3000-4000 level courses from:
Ceramics, Drawing, Fibers-Fabrics, Graphic Design, Painting,
Printmaking, Photography, and Sculpture, or combinations

C. Restricted Electives 9 hours
3000-4000 level courses from at least 3 areas
outside the area of specialization: Art History,
Ceramics, Drawing, Fiber-Fabrics, Film, Graphic Design,
Painting, Printmaking, Photography, Sculpture, and
Special Topics Courses.
ARE and ARH Community Arts courses are acceptable, with consent of advisor.

D. Portfolio Requirement
Seniors are required to submit a portfolio of representative work in the
student's area of specialization, for review by Faculty.

Bachelor of Fine Arts: Art

The B.F.A. degree is recommended for studio art majors who plan to attend graduate
school. Admission to the B.F.A. degree program requires the student to submit a formal
application and a portfolio to the Faculty no earlier than the first semester of the student's
senior year (upon completion of 90 semester hours). Once admitted to the B.F.A. program,
the student must complete an additional 30 semester hours at UCF, with 12 hours in Art
courses. A senior exhibition is required for graduation.

Degree Requirements
1. See University Degree Requirements.
   Students must achieve at least a “B” grade point average (3.0) in the courses of their
   major.
2. See Special college and/or department requirements: Students must achieve at least a
   3.0 average in courses in the major. No “D” grades in transfer Art courses; Department
   Residency Requirement consists of at least 18 semester hours of regularly scheduled
   upper-level courses must be taken from the UCF Department of Art. Nine of these must
   be in the area of specialization.
3. Required Courses
   ART 2201C, 2202C  Design Fundamentals I, II  6 hours
   ART 2300C, 2301C  Drawing Fundamentals I, II  6 hours
   ARH 2050, 2051  History of Art I, II  6 hours
   ARH 3000-4000  3 Art History Courses  9 hours
   or PGY 3001
4. Area Specialization 3000-4000 level courses from: Ceramics, Drawing,
Graphic Design, Painting, Printmaking, Photography, and Sculpture or
combinations. Combination specializations in any two media require 9 or
12 hours of upper-division courses in each half of the combination for a
total of 21 hours.
5. Restricted Electives 15-21 hours
3000-4000 level courses from at least three areas outside the student's
specialization: Art History, Ceramics, Drawing, Fiber and Fabrics, Film,
Graphic Design, Painting, Printmaking, Photography, Sculpture, and Spe-
cial Topics Courses.
ARE and ARH Community Arts courses are acceptable, with consent of
advisor.
6. Electives
   Total Semester Hours in Art Courses 54-60
   Total Semester Hours Required 120
The Department of Biological Sciences offers Bachelor of Science degree programs in biology, botany, limnology, microbiology, and zoology; a minor in biology; and the Master of Science in Biological Science and in Microbiology. The core curriculum required of all undergraduate degree programs provides a background in the chemical, mathematical, and physical sciences, as well as broad preparation in the biological sciences. This diverse background opens career opportunities for graduates in areas outside of their particular degree program. In addition, graduates are well prepared to further their education in professional or graduate schools. Selection of electives, in consultation with a faculty advisor, permits emphasis on a specific subspecialty within a degree program. Research experience and exposure to specialized topics not taught through formal courses may be gained through independent study contracts.

MINOR IN BIOLOGY
The Department of Biological Sciences offers a minor in Biology, consisting of a minimum of 30 hours.

Required courses (20 hours): BOT 2010C, BSC 2010C, MCB 3013C, PCB 3063, PCB 3063L, and ZOO 2010C.

Restricted Electives (10 hours minimum): At least one course must be selected from each group:

Group I - Ecology: MCB 4603C or PCB 3043 and PCB 3043L.
Group II - Physiology: BOT 4503C, MCB 4404C, PCB 3023 or PCB 4723.
Group III - Electives: Any 3000 level or above biology course(s) accepted for degree programs in Biological Sciences, exclusive of those listed in Groups I and II.

To be eligible for a minor in biology, a student must have a GPA of at least 2.0 in all biological science courses subject to the following constraints:

A. No CLEP or TSD credits may be used.
B. No D grades from other institutions will be accepted.
C. To receive credit for a biological science course, students must pass both the lecture and laboratory components.

Bachelor of Science: All Biological Sciences Majors

Degree Requirements

1. To be eligible for a major in any of the biological science degree programs, a student must have a GPA of at least 2.0 in all biological science courses subject to the following constraints: A. No CLEP or TSD credits may be used; B. No D grades from other institutions will be accepted. In addition, a student may apply no more than 4 hours of independent study, directed research, or similar types of credit toward requirements in the major. To receive credit for a biological sciences course, students must pass both the lecture and laboratory components. Students seeking a double major within the Department of Biological Sciences must satisfy the requirements of both majors and must take no fewer than 40 semester hours of coursework appropriate to the combined areas of specialization of the two majors.

2. The core curriculum is required of all undergraduate degree programs in the Department of Biological Sciences.

- BOT 2010C General Botany 3 hours
- BSC 2010C General Biology 4 hours
- CHM 2045, 2046, 2046L Chemistry Fundamentals I, II, lab 8 hours
- CHM 3210, 3211, 3211L Organic Chemistry I, II, lab 8 hours
- MCB 3013C General Microbiology 5 hours
- MCB 4404C Microbial Metabolism 4 hours
- PCB 3023 Cell Physiology 3 hours
- PCB 3043, 3043L Principles of Ecology with lab 4 hours
- PCB 3063, 3063L Genetics with lab 4 hours
- PHY 2053C, 2054C College Physics I and II 8 hours
- STA 3023 Statistical Methods 3 hours
- ZOO 2010C General Zoology 4 hours
- MAC 1104 or higher* Mathematics 6 hours

*A minimum of 6 semester hours in mathematics selected in consultation with the student's advisor or the successful completion of a course in college

92
level calculus. Courses of a difficulty level less than college algebra (MAC 1104) may not be used to satisfy this requirement.

Bachelor of Science: Biology
Degree Requirements:
1. See Undergraduate Degree Requirements
2. See special college and/or departmental requirements
3. Required Courses
   Core Curriculum
4. Restricted Electives
   Biology, Botany, Microbiology, or Zoology to be selected in consultation with advisor from courses numbered 3000 or above. Up to 6 hours of formal course work in Chemistry, 3000-level or above, may also be applied.
5. Elective
   (Varies with degree program; student should consult advisor).

Bachelor of Science: Botany
Degree Requirements:
1. See Undergraduate Degree Requirements
2. See special college and/or departmental requirements
3. Required Courses
   Core Curriculum
4. Restricted Electives
   Biology, Botany, Chemistry, Microbiology, or Zoology. To be selected in consultation with advisor from courses numbered 3000 or above. Must include at least 4 hours of Botany.
5. Electives
   (Varies with degree program; student should consult advisor).

Bachelor of Science: Limnology
Degree Requirements:
1. See Undergraduate Degree Requirements
2. See special college and/or departmental requirements
3. Required Courses
   Core Curriculum
4. Restricted Electives
   Biology, Botany, Chemistry, Computer Science, Microbiology, Physics, Statistics, or Zoology courses numbered 3000 or above. To be selected in consultation with advisor.
5. Electives
   (Varies with degree program; student should consult advisor).

Bachelor of Science: Microbiology
Degree requirements:
1. See Undergraduate Degree Requirements
2. See special college and/or departmental requirements
3. Required courses
   Core Curriculum
Bachelor of Science: Zoology

Degree Requirements:
1. See Undergraduate Degree Requirements
2. See special college and/or departmental requirements
3. Required Courses
   Core Curriculum
   - PCB 4723 Animal Physiology 4 hours
   - ZOO 3303C Vertebrate Zoology 4 hours
   - ZOO 3713C Comparative Vertebrate Zoology 5 hours
   - ZOO 4203C Invertebrate Zoology 4 hours
4. Restricted Electives
   ZOO courses numbered 3000-level or above. To be selected in consultation with advisor.
5. Electives
   (Varies with degree program; student should consult advisor).

Total Semester Hours Required: 128

Canadian Studies Program

Canadian Studies offers both a certificate and a minor but not a major. This program is interdisciplinary and includes courses from the departments of English, History, Political Science, Public Service Administration, Foreign Languages, Anthropology, and the College of Engineering. In addition, UCF is the site of the Florida-Canada Institute, a state program which offers other activities relating to Canada. For information consult Dr. Henry Kennedy, Director of Canadian Studies, at the Florida Canada Institute Center, FA 209, (407) 275-2079.

Department of Chemistry

Chair: H. Miles, CH 117, Phone (407) 275-2246
Faculty: Baker, Clausen, Cunningham, Elsheimer, Gupton, Hampton, Hertel, Juge, Kujawa (Geology), Madsen, Mattson, McGee (Forensic Science), Trefonas

The Department of Chemistry offers courses and programs which lead to a Bachelor of Science in Chemistry, a Bachelor of Science in Forensic Science, a minor in Chemistry and a Master of Science in Industrial Chemistry.

The undergraduate degree program in chemistry is accredited by the American Chemical Society Committee on Professional Training. It prepares the graduate for career opportunities in the chemical or related industries or in government laboratories. The program may also lead to further study at the graduate level in chemistry or in a related area such as pharmacology or toxicology. With an appropriate choice of electives it also constitutes excellent preparation for the professional schools of dentistry, medicine, and veterinary medicine.

Minor

The Department of Chemistry offers a minor consisting of a minimum of 28 semester hours.

Required courses (21 semester hours): CHM 2045, 2046, 2046L, 3210, 3211, 3211L, and 3120C.

Restricted electives (7 semester hours minimum): At least one course must be selected from group I and the remaining from group I and/or II:
- Group I: CHM 3212L, 4130C; BCH 4103L, CHS 3531
- Group II: BCH 4053, 4054, CHM 3410, 3411, 4220, 4221, CHS 4110C, 4200
Bachelor of Science: Chemistry

Degree Requirements

1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 2045, 2046</td>
<td>Chemistry Fundamentals I, II</td>
<td>7</td>
</tr>
<tr>
<td>CHM 2046L</td>
<td>Chemistry Fundamentals Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHM 3210, 3211</td>
<td>Organic Chemistry I, II</td>
<td>6</td>
</tr>
<tr>
<td>CHM 3211L, 3212L</td>
<td>Organic Laboratory Techniques I, II</td>
<td>4</td>
</tr>
<tr>
<td>CHM 3212C</td>
<td>Analytical Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHM 3410, 3411</td>
<td>Physical Chemistry I, II</td>
<td>7</td>
</tr>
<tr>
<td>CHM 3410L, 3411L</td>
<td>Physical Chemistry Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>CHM 4610</td>
<td>Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHM 4130C</td>
<td>Advanced Analytical Laboratory Technique</td>
<td>4</td>
</tr>
<tr>
<td>CHM 4912</td>
<td>Undergraduate Research</td>
<td>4</td>
</tr>
<tr>
<td>CHM 4932</td>
<td>Chemistry Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENC 3241</td>
<td>Technical Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>MAC 3311, 3312, 3313</td>
<td>Calculus with Analytic Geometry I,II,III</td>
<td>12</td>
</tr>
<tr>
<td>PHY 3048, 3048L, 3049, 3049L</td>
<td>Physics for Engineers &amp; Scientists</td>
<td>8</td>
</tr>
<tr>
<td>STA 3023</td>
<td>Statistical Methods I</td>
<td>3</td>
</tr>
</tbody>
</table>

4. Restricted Electives

a. Biological Sciences (minimum of 7 hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 2010C</td>
<td>General Biology</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Approved electives restricted to those biological science courses not listed as designed for non-majors.</td>
<td>3</td>
</tr>
</tbody>
</table>

b. Minimum of 3 hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COP 1200</td>
<td>Computer Programming</td>
<td>3</td>
</tr>
<tr>
<td>COP 2000</td>
<td>Programming I</td>
<td>3</td>
</tr>
<tr>
<td>CGS 3422</td>
<td>Programming and Numerical Methods</td>
<td>3</td>
</tr>
</tbody>
</table>
c. Minimum of 3 hours
   PHY 3752C  Physics of Scientific Instruments  4 hours
   CDA 4012  Computer Interfacing for Scientists  3 hours
   CET 3123C  Microprocessor Electronics  3 hours
   EEL 3341C  Introduction to Digital Circuits  3 hours
   EEL 3342C  Intro to Digital Circuits and Systems  4 hours

   d. Minimum of 6 hours
   BCH 4053  Biochemistry I  3 hours
   BCH 4054  Biochemistry II  3 hours
   CHM 4220  Advanced Organic Chemistry I  3 hours
   CHM 5235  Applied Molecular Spectroscopy  3 hours
   CHM 4221  Advanced Organic Chemistry II  3 hours
   CHM 5580  Advanced Physical Chemistry  3 hours
   CHM 5450  Polymer Chemistry  3 hours
   CHM 5710  Chemical Structure I  2 hours
   CHS 3531  Forensic Analysis  3 hours
   CHS 4110C  Nuclear and Radio Chemistry  3 hours
   CHS 4200  Concepts in Industrial Chemistry  3 hours
   CHS 5250  Chemical Synthesis I  2 hours

5. Electives
   Two years of German is recommended for those students intending to pursue graduate studies.

Total Semester Hours Required  128

Forensic Science Program
Director: W.W. McGee, CH 221, Phone (407) 275-2788

Forensic Science is the profession which serves the scientific needs of the justice system. The program at UCF has been designed to provide the student with an educational background in the professional specialty of criminalistics.

The principal job of the forensic scientist is to scientifically examine physical evidence gathered at the scene of a suspect criminal action. The criminalist may work on physical evidence such as blood, hairs, fibers, or pharmaceutical and clandestine drug preparations. Upon completion of an investigation the forensic scientist presents his findings in court. The goal of the Forensic Science program is to prepare students for this demanding profession.

Bachelor of Science: Forensic Science

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses
   BSC 2010C  General Biology  4 hours
   CHM 2045, 2046  Chemistry Fundamentals I, II  7 hours
   CHM 2046L  Chemistry Fundamentals Laboratory  1 hour
   CHM 3210, 3211  Organic Chemistry I, II  6 hours
   CHM 3210L  Organic Laboratory Techniques I  2 hours
   CHM 3120C  Analytical Chemistry  5 hours
   CHS 3501  Introduction to Forensic Science  3 hours
   CHS 3505  Forensic Microscopy  3 hours
   CHS 3531  Forensic Analysis of Controlled Substances  3 hours
   CHS 4591  Forensic Science Internship  6 hours
   COP 1200  Computer Programming  3 hours
   ENC 3241  Technical Report Writing  3 hours
   CHM 3410  Physical Chemistry I  4 hours
   CHM 4130C  Advanced Analytical Chemistry  4 hours
   MAC 3253, 3254  Applied Calculus I, II  6 hours
   PHY 3053C, 3054C  College Physics I, II  8 hours
   STA 3023  Statistical Methods I  3 hours

4. Restricted Electives
   The intent of the restricted electives is to provide the major with an opportunity to select in consultation with his/her advisor, a minimum of 13
hours of coursework which will complement the student’s specialized program of study in the major field. These courses will include BOT 2010C, General Botany or MCB 3013C, General Microbiology, with the remainder normally selected from upper division courses of science or forensic science. Exceptions to these stipulations must be approved by the student’s advisor.

5. Electives

<table>
<thead>
<tr>
<th>Total Semester Hours Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 hours</td>
</tr>
</tbody>
</table>

**SCHOOL OF COMMUNICATION**

**Director:** J. Welke, FA 534, Phone (407) 275-2681

**Faculty:** Andersen, Arnold, J. Butler, Davis, Fedler, Fowles, Grasty, Hall, Hoglin, Harpole, Jeffery, Johnson, Lester, Maunez-Cuadra, McCann, Meeske, Morgan, O’Keefe, Pryor, R. Smith, Sullivan, Tanzi, Taylor, Wycoff

The School of Communication offers Bachelor Degree programs in five specific areas. Students have the option of selecting a specialized track for the Journalism degree:

1. Bachelor of Arts: Interpersonal Communication
2. Bachelor of Arts: Journalism
   A. News/Editorial Track
   B. Advertising/Public Relations Track
3. Bachelor of Arts: Organizational Communication
4. Bachelor of Arts: Radio-Television
5. Bachelor of Arts: Motion Picture Technology: [FILM]

Any student contemplating graduate study should be aware of special requirements in some graduate schools, such as foreign languages, statistics, and computer sciences.

**Limited Access**

All degree programs in the School of Communication have been designated as limited access beginning in the Fall, 1989. Limited access means there are additional admissions requirements over and above those set for general admission to the University. Students meeting the minimum requirements for admission will be admitted on a space available basis. Students will be assigned the category of Communication—pending prior to acceptance into the School. A minimum of 30 credit hours of college work is required before application for admission to a program. The Bachelor of Arts in Motion Picture Technology [Film] degree is a separate limited access program with other requirements.

**Limited Access Requirements**

The requirements for admission consideration and continuation as a major in the School for all programs, except Film [see special additional requirements for Radio-Television and both Journalism Tracks] are listed below.

1. An overall 2.25/4.00 grade point average based on a minimum of 30 credit hours of college work.
2. Demonstrated written proficiency in grammar, punctuation, and word usage. Testing is conducted prior to the start of each semester and remedial options are provided.
3. A maximum of three courses completed in the School prior to acceptance into the program may be counted toward the major including transfer courses in the major from another institution [total accepted: three courses]. NOTE: Some courses have a prerequisite requiring successful completion of the Grammar Proficiency Examination or Typing Proficiency Test.

**Graduation Requirements**

1. A final 2.25/4.00 grade point average in all required courses for a major must be completed in order to graduate with a major in the School. NOTE: This grade point average does not include Restricted Electives in the major or other electives.
2. A maximum of 40 credit hours in School courses may be counted toward the 120 hours required for graduation.
3. Students electing both a major and minor in the School must take the minor courses in excess of the 120 hours required for graduation.
4. The Department requires that students initiate a request for a review of graduation
requirements at the beginning of the anticipated term of graduation. Failure to file the request may delay graduation.

Transfer Limitation
Generally, students may not substitute lower division courses taken at community colleges for upper division courses in the School of Communication (except Florida common numbered coursework). Students wishing to transfer courses from other colleges must apply for equivalency credit. College catalog, course syllabus, textbook used, or other supporting information must be provided by the student. The Divisions of the School of Communication will evaluate applications for equivalency. A maximum of three transfer courses or courses taken prior to School admission may be accepted in a School of Communication major [total accepted: three courses].

MINORS
The School of Communication offers the following minors:

1. Interpersonal Communication
   COM 3011 (3), COM 3311 (3), SPC 3301 (3), SPC 4330 (3), SPC 4350 (3), SPC 4540 (3).

2. Journalism: News/Editorial Track
   JOU 3004 or JOU 4602 (3), JOU 31001,2 (3), MMC 4200 (3); plus TWO JOU elective (writing and/or editing) courses1,2 (6).

3. Journalism: Advertising/Public Relations Track
   ADV 4000 (3), ADV 4003 (3), ADV 4101 (3), ADV/PUR 4941 or PUR 4800 (3), PUR 4000 (3).

4. Organizational Communication
   COM 3110 (3), COM 3120 (3), COM 3311 (3), SPC 3425 (3), SPC 3445 (3), SPC 4440 (3).

5. Radio-Television
   RTV 3000 (3), RTV 3200 (4), RTV 33001,2 or RTV 35011,2 (4), RTV 4700 or RTV 4403 (3).
   1Prerequisite Grammar Proficiency Examination required.
   2Prerequisite Typing Proficiency Test required.

Bachelor of Arts: Interpersonal Communication

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or School requirements.
3. Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 3011</td>
<td>Communication and Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>COM 3311</td>
<td>Communication as a Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>SPC 3301</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPC 3425</td>
<td>Group Interaction and Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>SPC 3601</td>
<td>Advanced Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>SPC 3511</td>
<td>Argumentation and Debate</td>
<td>3</td>
</tr>
<tr>
<td>SPC 4330</td>
<td>Nonverbal Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPC 4350</td>
<td>Studies in Listening</td>
<td>3</td>
</tr>
<tr>
<td>SPC 4540</td>
<td>Attitudes and Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPC 4440</td>
<td>Group Dynamics</td>
<td>3</td>
</tr>
</tbody>
</table>

4. Restricted Electives
   Six credit hours in the School of Communication

5. Electives
   A minimum of 9 upper division credit hours in one of the following departments must be elected: English, History, Political Science, Psychology or Sociology.  

   Total Semester Hours Required 120
   
   A maximum of 3 credit hours of internship may be earned in one semester. A total of 6 may be earned within the 120 credit hours required for graduation. Students should check with their advisor for prerequisites and other requirements.
Bachelor of Arts: Journalism

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or School requirements. In addition, all students planning a major in both journalism tracks must pass the Typing Proficiency Test (20 wpm) prior to admission to the major. Students should see their advisor for details.
3. Required Courses
   Students must select and complete one of the areas of specialization listed below.
4. Restricted Electives (See Area of Specialization)
5. Electives (See Area of Specialization)

AREAS OF SPECIALIZATION
1. Required Courses: News-Editorial Track
   JOU 3004 History of American Journalism 3 hours
   JOU 31001 News Reporting 3 hours
   JOU 31011 Advanced News Reporting 3 hours
   JOU 32001 Editing I 3 hours
   JOU 32011 Editing II 3 hours
   JOU 41041 Public Affairs Reporting 3 hours
   JOU 43001 Feature Writing 3 hours
   MMC 4200 Mass Communication Law 3 hours
   MMC 4602 Contemporary Media Issues 3 hours
   PGY 3610 Photojournalism I 3 hours

   Restricted Electives
   JOU/PGY Elective 3 hours

1Prerequisite Grammar Proficiency Examination and Typing Proficiency Test required. Some courses may also require a minimum grade of "C" in prerequisite courses.

The Journalism faculty strongly recommends that News-Editorial majors work for the student newspaper, The Central Florida Future. In addition, News-Editorial majors may obtain off-campus internship, with a commercial weekly or daily newspaper, or with a magazine. To enroll for credit, students must have a 2.5 GPA in their required major courses. Students with less than a 2.5 GPA will not be given academic internship credit. A maximum of 3 credit hours may be earned in one semester, with a total of 3 within the 120 required for graduation. Students should consult with their adviser for prerequisites and other requirements.

Required Minor: News-Editorial majors must complete a minor in an academic area outside of the School of Communication or complete a 15-credit hour area of concentration approved by the Faculty.

2. Required Courses: Advertising/Public Relations Track
   ADV 4000 Principles of Advertising 3 hours
   ADV 4003 Advertising Layout and Copywriting 3 hours
   ADV 4101 Advertising Copy and Campaigns 3 hours
   ADV 4103 Radio-TV Advertising 3 hours
   COM 3110 Business and Professional Speaking 3 hours
   COM 3311 Communication as a Behavioral Science 3 hours
   MMC 4200 Mass Communication Law 3 hours
   PGY 3610 Photojournalism I 3 hours
   PUR 31001 Writing for Public Relations 3 hours
   PUR 4000 Public Relations 3 hours
   PUR 4941 Internship 3 hours
   or
   ADV 4941 Internship 3 hours
   or
   PUR 4800 Public Relations Campaigns 3 hours

1Prerequisite Grammar Proficiency Examination and Typing Test required.

A maximum of 6 credit hours of internship may be earned in one semester. A total of 9 credit hours of internship may be earned within the 120 credit hours required for graduation. Students should consult with their adviser for prerequisites and other requirements.
Bachelor of Arts: Organizational Communication

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or school requirements.
3. Required Courses (27 credit hours)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 3011</td>
<td>Communication and Human Relations</td>
<td>3 hours</td>
</tr>
<tr>
<td>COM 3110</td>
<td>Business and Professional Speaking</td>
<td>3 hours</td>
</tr>
<tr>
<td>COM 3120</td>
<td>Organizational Communication</td>
<td>3 hours</td>
</tr>
<tr>
<td>COM 3311</td>
<td>Communication as a Behavioral Science</td>
<td>3 hours</td>
</tr>
<tr>
<td>COM 4941</td>
<td>Internship</td>
<td>3-6 hours</td>
</tr>
<tr>
<td>PUR 4000</td>
<td>Principles of Public Relations</td>
<td>3 hours</td>
</tr>
<tr>
<td>ADV 4000</td>
<td>Principles of Advertising</td>
<td></td>
</tr>
<tr>
<td>SPC 3425</td>
<td>Group Interaction and Decision Making</td>
<td>3 hours</td>
</tr>
<tr>
<td>SPC 3445</td>
<td>Leadership</td>
<td>3 hours</td>
</tr>
<tr>
<td>SPC 4440</td>
<td>Group Dynamics</td>
<td>3 hours</td>
</tr>
</tbody>
</table>
4. Restricted Electives
   Six (6) to Nine (9) credit hours in the School of Communication
5. Electives
   A minimum of 9 upper-division credit hours must be selected from courses in Computer Science or one academic area in the College of Business Administration, College of Education, or College of Health.
   Total Semester Hours Required 120

Bachelor of Arts: Radio-Television

Degree Requirements
1. See Undergraduate Degree Requirements
2. See Special college and/or School requirements. In addition, all students planning a major in radio-television must pass the Typing Proficiency Test (20 wpm) prior to admission to the major. Students should see their advisor for details.
3. Required Courses
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTV 3000</td>
<td>Foundations of Broadcasting</td>
<td>3 hours</td>
</tr>
<tr>
<td>RTV 3200</td>
<td>Broadcast Techniques</td>
<td>4 hours</td>
</tr>
<tr>
<td>RTV 3210</td>
<td>Radio Production</td>
<td>4 hours</td>
</tr>
<tr>
<td>RTV 3260</td>
<td>Electronic Field Production</td>
<td></td>
</tr>
<tr>
<td>RTV 3300</td>
<td>Broadcast Newswriting</td>
<td>4 hours</td>
</tr>
<tr>
<td>RTV 3501</td>
<td>Broadcast Copywriting</td>
<td>4 hours</td>
</tr>
<tr>
<td>RTV 4403</td>
<td>Radio/Television and Society</td>
<td>3 hours</td>
</tr>
<tr>
<td>RTV 4700</td>
<td>Broadcast Regulations</td>
<td>3 hours</td>
</tr>
<tr>
<td>RTV 4800</td>
<td>Broadcast Management</td>
<td>3 hours</td>
</tr>
</tbody>
</table>
4. Restricted Electives
   Six credit hours in the School of Communication
5. Electives
   Total Semester Hours Required 120

Students are encouraged to work with WUCF radio to gain practical experience. In addition, students should arrange for an internship off campus in a professional broadcast, production, or corporate operation. A maximum of 3 credit hours of internship may be earned in one semester. A total of 6 credit hours of internship may be earned within the 120 credit hours required for graduation. A maximum of 3 credit hours of internship may be counted as a Restricted Elective. Summer internships are available during “C” term only. Students should consult with their advisor for prerequisites and other requirements.

1Prerequisite Grammar Proficiency Examination and Typing Proficiency Test required.
Limited Access
Access to this program is based on a selective set of requirements which differ from other School of Communication majors. Students meeting the minimum requirements for admission will be admitted on a space available basis. The basic requirements for admission consideration to the Film program are:
1. An overall 3.0 grade point average based on a minimum of 45 credit hours of college work
2. Submission of a written essay
3. Students are required to demonstrate written proficiency in grammar, punctuation and word usage before admission. Testing is conducted prior to the start of each semester.
4. A portfolio or additional information may be submitted
5. A maximum of three courses in film completed prior to acceptance into the program may be counted toward the major.

Graduation Requirements
Students will be required to continue to meet the following minimum standards after acceptance into the Film program.
1. An overall 3.0 grade point average.
2. Juried retention by a faculty committee will be considered when the student has completed ninety (90) credit hours of coursework.

Degree Requirements
1. University graduation requirements
2. Special College and/or School requirements
3. Required Courses: General Production/Screenwriting (27 credit hours)
   - FIL 3100 Writing for the Screen or CRW 3410 Writing Scripts 3 hours
   - FIL 3200 Beginning Film Production 3 hours
   - FIL 3300 Documentary Film 3 hours
   - FIL 3400 History of the Motion Picture or THE 3251 History of the Motion Picture 3 hours
   - FIL 3503 Film Theory 3 hours
   - FIL 4201 Advanced Film Production 3 hours
   - FIL 4600 The Film Producer 3 hours
   - FIL 4601 Production Management 3 hours
   - FIL 4209 Art Direction 3 hours
4. Restricted Sequence Electives: Six (6) credit hours FIL courses.
5. Electives
   Total Semester Hours Required 120

A maximum of three (3) credit hours of internship may be earned in one semester. A total of six (6) may be earned within the 120 credit hours required for graduation. Check with your adviser for prerequisites and other requirements.

1Prerequisite Grammar Proficiency Examination required.
COMMUNITY ARTS PROGRAM

The William S. and Alice M. Jenkins Endowed Chair, 
Director: K. Congdon, CEBAl1 410 Phone (407) 275-2195.

Minor in Community Arts
A minor, but not a major, in Community Arts is offered for the student who is majoring in Art, Music, Theatre, or English (with a Creative Writing focus), and is interested in helping make the arts more democratic and accessible to everyone. Students minoring in Community Arts conduct studies in culture-based aesthetics, multi-cultural education; art and politics; art and economics; art and mental health; issues regarding ethnicity, class, age and occupation; program development; and the functions and purposes of art establishments in our society.

Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARE 3662</td>
<td>Community Arts I</td>
<td>3</td>
</tr>
<tr>
<td>ARE 3944</td>
<td>Community Arts Practicum</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Take two of the following:</td>
<td>6</td>
</tr>
<tr>
<td>1. ARE 3663</td>
<td>Community Arts II</td>
<td></td>
</tr>
<tr>
<td>2. ARE 3550</td>
<td>Introduction to Art Therapy</td>
<td></td>
</tr>
<tr>
<td>3. ARE 3554</td>
<td>Art Therapy Methods</td>
<td></td>
</tr>
<tr>
<td>4. ARH 3820</td>
<td>Visual Arts Administration</td>
<td></td>
</tr>
<tr>
<td>5. ARH 4821</td>
<td>Methods in Arts Administration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*6. Approved courses in Anthropology, Education, Social Work, Sociology, or Psychology.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Other Community Arts Classes</td>
<td></td>
</tr>
<tr>
<td>ARE 4945</td>
<td>Community Arts Internship</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Hours 18

*A complete list of approved courses may be requested from the Community Arts Program office.

Certificate in Community Arts
The Community Arts Program also offers a certificate in Community Arts for undergraduate and post-baccalaureate students for majors in: Art, English, Music and Theatre and majors in: Education, Health Sciences, Liberal Studies, Psychology, Social Work and Sociology (who have at least 12 hours in one of these areas: Art, Creative Writing, Music or Theatre).

Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARE 3662</td>
<td>Community Arts I</td>
<td>3</td>
</tr>
<tr>
<td>ARE 3944</td>
<td>Community Arts Practicum</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Take two of the following:</td>
<td>6</td>
</tr>
<tr>
<td>1. ARE 3663</td>
<td>Community Arts II</td>
<td></td>
</tr>
<tr>
<td>2. ARE 3550</td>
<td>Intro. to Art Therapy</td>
<td></td>
</tr>
<tr>
<td>3. ARE 3554</td>
<td>Art Therapy Methods</td>
<td></td>
</tr>
<tr>
<td>4. ARH 3820</td>
<td>Visual Arts Administration</td>
<td></td>
</tr>
<tr>
<td>5. ARH 4821</td>
<td>Methods in Arts Administration</td>
<td></td>
</tr>
<tr>
<td>6. Women and Art in Twentieth Century America</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. 1 to 2 approved courses in education or a related field</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Other Community Art Classes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARE 4945</td>
<td>Community Arts Internship</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Hours 18

For undergraduate students, the certificate is granted at the time of graduation. Some courses may be taken on the graduate level for the post-baccalaureate student.
DEPARTMENT OF COMPUTER SCIENCE
Chair: T. Frederick, CCII 218, Phone (407) 275-2341
Faculty: Bassiouni, Brigham, Chandreseharan, Chen, Cottrell, Deo, Driscoll, Dutton, Frederick, Gerber, Gomez, Guha, Hughes, Lang, Leeson, Lindholm, Malik, Mosher, Mukherjee, Orooji, Riggs, Segami, Shah, Workman.

The Department of Computer Science offers courses and programs leading to Bachelor of Science, Master of Science (see Graduate Catalog), and Doctor of Philosophy (see Graduate Catalog) degrees in Computer Science. In addition, the Department offers a Computer Science minor for Business Majors, and a general minor in Computer Science.

Computer Science strives to meet the computer personnel needs of the scientific, business, and industrial community by producing graduates with a broad base of formal courses as well as a concentration in selected areas. In addition, the Department conducts research in programming systems/languages, information systems, computer architecture, computational methods, and other areas.

The Department requires that students initiate a request for a review of graduation requirements at the beginning of the anticipated term of graduation. Failure to file the request may delay graduation.

Research Equipment

A wide variety of computing equipment for support of faculty and student research is located in the department, the Computer Center, and with the Florida Information Resources Network (FIRN). General purpose equipment operated by the department includes a Harris HCX-9 with 16 Megabytes of memory and 1.5 Gigabytes of disk storage running HCX/UX (a combination of AT&T System V and Berkeley 4.3 Unix) and a Vax 11/780 with 16 Megabytes of memory and over one Gigabyte of disk storage running Berkeley 4.3 UNIX. Several Sun Microsystems color 3/60, 3/160, and SparcStation workstations, a NeXT computer, and AED 512 high-resolution monitors are available for research in graphics, image processing, and VLSI design. Berkeley Magic and Octtools software supports VLSI design research. High-resolution monochrome VaxStations are also available. In addition, there are three Apple Macintoshes and several IBM PC's, XT's, and AT's for research and text processing. High quality output of troff, TeX, and MacWrite documents is provided by laser printers.

Parallel processing research is supported by a BBN Butterfly GP1000 parallel processing computer with 16 processors and a total of 64 Megabytes of memory. In addition, we are anticipating the purchase of at least one Silicon Graphics Iris workstation for film animation research and two Symbolics workstations for studies in artificial intelligence.

The department's equipment is interconnected with over eighty terminals and fourteen dialup modems via a Micom InstaNet 6000 port selector. Host-to-host communication is supported by Ethernet, TCP/IP, and NFS; for information interchange researchers may access USENET, CSNET, or BITNET. A connection to NSFnet via the Southeast Universities' regional network (SURAnet) is in process. A campus-wide network will link all computer resources on campus with the Internet via that link.

Computer Center

The Computer Center maintains and operates equipment used for both instruction and research, including an IBM 4381 Group 2 with 32 Megabytes of memory and 10 Gigabytes of disk storage, running the VM/CMS operating system. Over 150 IBM 3178, 3278, and 3279 terminals are used to access the mainframe. Additionally, over 400 IBM PS/2's, PC's, XT's, and AT's interconnected by a Novell network are available for student and faculty use. Separate faculty facilities exist. A Macintosh lab with 12 Macintosh IIX's and assorted peripherals has recently been added.

The Florida Information Resource Network

The Florida Information Resource Network (FIRN) provides additional mainframe resources including the ETA-10 supercomputer—the first of its kind in the world—for scientific research. Thirty-five percent of the supercomputer's time is open to any Florida university researcher whose project is approved by the Supercomputer Computations Research Institute. Other FIRN resources include Amdahl, IBM, and UNIVAC mainframes.
MINORS
The Department of Computer Science offers the following minors consisting of a minimum of 18 semester hours in each minor. A minimum GPA of 2.00 is required in all courses used to satisfy the requirements for the minor in computer science, and at least three courses must be taken from the UCF Department of Computer Science.
1. Computer Science Minor for Business Majors
   Required courses (15 hours): CGS 3000, 3100, 3262, 3300, COP 3120.
   Restricted electives (3 hours minimum): ACG 3401, ACG 5346, CIS 4321, COP 1200, 2500, 2501, 3400, 4710, ECO 4412, FIN 3453, MAC 3233, 3311, 3312, 3313, MAN 4722, 4724, MAR 3613, MAS 3113, STA 4102, 4163.
2. General Computer Science Minor
   Required courses (12 hours): COP 2500, 2501, 3400, 3530.
   Restricted electives (6 hours minimum): COP 3402, 4020, 4124, 4600, 4710, COT 3100, 4500.

Bachelor of Science: Computer Science
Degree Requirements
1. A four-semester-hour Biology course with a laboratory is required, and this requirement is to be satisfied by BSC 1020C, BSC 1030C or BSC 2010C.
2. GPA Requirements
   a. A minimum GPA of 2.0 in all course work;
   b. A minimum GPA of 2.0 in all non-computer science courses used to satisfy the requirements for the major in computer science;
   c. A minimum GPA of 2.5 in computer science courses used to satisfy the requirements for the major in computer science.
3. Departmental Residency Requirement: At least eighteen semester hours of regularly scheduled 4000- and 5000-level courses must be taken from the UCF Computer Science Department.
4. Required courses:
   I. COMPUTER SCIENCE CORE: 42 hours
      Computer Science Courses
      COP 2500 Computer Science I 3 hours
      COP 2501 Computer Science II 3 hours
      COP 3400 Assembly Language 3 hours
      COP 3402 Computer Systems Concepts/Programming 3 hours
      COT 3100 Introduction to Discrete Structures 3 hours
      COP 3530 Computer Science III 3 hours
      Support Courses
      MAC 3311 Calculus with Analytic Geometry I 4 hours
      MAC 3312 Calculus with Analytic Geometry II 4 hours
      STA 3023 Statistical Methods I 3 hours
      PHY 3048 Physics for Engineers & Scientists I 3 hours
      PHY 3049 Physics for Engineers & Scientists II 3 hours
      PHY 3049L Physics for Engineers & Scientists Lab. II 1 hour
      EEL 3341C Introduction to Digital Circuits 3 hours
      ENC 3241 Technical Report Writing 3 hours
   II. UPPER DIVISION REQUIRED COURSES: 12 hours
      CDA 4105 Introduction to Computer Architecture 3 hours
      COT 4210 Discrete Computational Structures 3 hours
      COP 4020 Programming Languages I 3 hours
      COP 4600 Programming Systems 3 hours
   III. RESTRICTED ELECTIVES 16 hours
      a. At least ten hours of computer science courses, of which at most four hours can be independent study.
      b. At least four hours of mathematics and/or statistics for majors of the respective departments exclusive of independent study.
      Course work must be selected from 4000- and 5000-level courses in computer science, mathematics and/or statistics and the following courses: MAC 3313, MHF 3104,
Bachelor of Arts: Economics

Contact Person: J. Boyte, FA 208, Phone (407) 275-2492

The Bachelor of Arts Program is designed to permit flexibility in course selection to the Economics major not planning a career in business. Although all economics courses are offered and administered by the College of Business Administration, they are available to students majoring in economics in the College of Arts and Sciences. Successful completion of this program leads to the Bachelor of Arts degree with a major in Economics.

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required courses
   ECO 2013 Principles of Economics I 3 hours
   ECO 2023 Principles of Economics II 3 hours
   ECO 3101 Intermediate Price Theory 3 hours
   ECO 3203 Aggregate Economic Conditions Analysis 3 hours
   ECO 3411 Quantitative Methods and Business 3 hours
4. Restricted Electives
   a. Select Six Courses:
      ECO 3703 International Economics 3 hours
      ECO 3930 Independent Study 3 hours
      ECO 4224 Money: Issues and Analysis 3 hours
      ECO 4303 History of Economic Thought 3 hours
      ECO 4412 Economic Statistics and Econometrics 3 hours
      ECO 4504 Economics of the Public Sector 3 hours
      ECP 3203 Contemporary Labor Economics 3 hours
      ECP 3424 The Economics of the Public Sector 3 hours
      ECP 3433 Transportation Economics 3 hours
      ECP 4403 Business, Government & Industrial Organization 3 hours
      ECP 4603 Urban and Regional Economic Problems 3 hours
      ECP 4703 Managerial Economics 3 hours
      ECS 4003 Comparative Economic Systems 3 hours
      ECS 4013 Economic Development 3 hours
   b. Twenty-seven hours of additional courses, including the completion of a minor from one of the following areas: Computer Science, Mathematics, Statistics, or the Social and Behavioral Sciences.
5. Electives
   Total Semester Hours Required 120

DEPARTMENT OF ENGLISH

Chair: J. Schell, FA 452, Phone (407) 275-2212
Faculty: Adicks, Astro, Barnes, Becker, Brain, Deane, Donnelly, George, Haile, Hemschemeyer, Higgins-Young, Jaffe, Jones, Keller, Murray, Omans, Price, Rushin, Schiffhorst, Seidel, Sommer, Stap, Strasshofer, Umphrey, Wyatt

The Department of English is responsible for the effective teaching of language and literature in English, including World Literature, and creative, expository, and technical writing. Students may concentrate in creative writing, technical writing, literature or linguistics. The Department serves the broad needs of the University with course offerings in writing and literature for students from other departments. The department has a Technical Documentation Writing Lab and also publishes The Florida Review.

Only courses with a grade of "C" or better may be applied to the English Major and Minor.
MINOR

The Department of English offers the following minors:

Creative Writing Minor: 21 semester hours. Required courses: CRW 3000, CRW 2100 or CRW 2300, CRW 3010, CRW 3011. 9 remaining hours to be chosen from CRW 3410, CRW 4940, CRW 4041, CRW 3310, CRW 3410.

Literature Minor: 21 semester hours with no fewer than 12 completed at UCF. Requirements: 12 semester hours selected from ENL 3031, ENL 3051, AML 3031, AML 3051, LIT 3110, 3120. 9 additional semester hours of English courses chosen by the student and advisor.

Linguistics Minor: 18 semester hours. Required courses: LIN 3010, LIN 4100, LIN 4341. 9 remaining hours to be chosen from LIN 4202, LIN 4612, LIN 4801, LIN 4660, LIN 5137, ANT 3610, PHI 4220, or any course approved by the Linguistics Committee.

Technical Writing and Editing Minor: 22 semester hours, as follows: ENC 2290, 3210 or 3241, 3310, 3311 or 3341, 3311, 4215, 4293, 4294, 4295. Students completing the minor may intern with a Central Florida corporation.

Bachelor of Arts: English

Degree Requirements

1. See Undergraduate Degree Requirements
2. See special College and/or department requirements
3. Required courses
   Foundation (for all concentrations)
   Choose three of the following four:
   - LIT 3000 Introduction to Literary Analysis 3 hours
   - CRW 3000 Introduction to Creative Writing 3 hours
   - ENC 3211 Introduction to Technical Writing 3 hours
   - LIN 3010 Introduction to Linguistics 3 hours

   Choose three of the following four:
   - ENL 3031 English Literature I 3 hours
   - ENL 3051 English Literature II 3 hours
   - AML 3031 American Literature I 3 hours
   - AML 3051 American Literature II 3 hours

4. Restricted Electives
   (See Literature, Creative Writing, Technical Writing, and Linguistic concentrations below.)

5. Electives
   To be selected primarily from upper level courses with advisor’s approval.

Total Semester Hours Required 120

CONCENTRATIONS

1. Literature
   Required (9 hours)
   - ENL 4311 Chaucer 3 hours
   or
   - ENL 4341 Milton
   - ENL 4330 Shakespeare 3 hours
   - LIN 4100 History of the English Language 3 hours
   or
   - LIN 4341 Modern English Grammar

   Choose 12 hours from the 3000 or 4000 level courses offered under AML, ENL, and LIT prefixes.

2. Creative Writing
   Required (12 hours)
   - CRW 3010 Creative Writing Workshop I
   - CRW 3011 Creative Writing Workshop II
   - CRW 4940 Advanced Writing Workshop I
   - CRW 4941 Advanced Writing Workshop II

   Choose Two (6 hours)
   - ENL 4330 Shakespeare
   - ENL 4311 Chaucer
### ENL 4341
Milton

### LIN 4100
History of the English Language

### LIN 4341
Modern English Grammar

**Choose Two (6 hours)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRW 3008</td>
<td>Literary Magazines</td>
</tr>
<tr>
<td>CRW 3310</td>
<td>Structure of Verse</td>
</tr>
<tr>
<td>CRW 3410</td>
<td>Script Writing</td>
</tr>
<tr>
<td>CRW 5932</td>
<td>Teaching Creative Writing</td>
</tr>
<tr>
<td>ENC 3310</td>
<td>Magazine Writing I</td>
</tr>
<tr>
<td>ENC 3311</td>
<td>Advanced Expository Writing</td>
</tr>
<tr>
<td>ENC 3341</td>
<td>Magazine Writing II</td>
</tr>
</tbody>
</table>

#### 3. Technical Writing

**Required (Basic) (4 hours)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 2290</td>
<td>Careers in Writing</td>
</tr>
<tr>
<td>ENC 3311</td>
<td>Advanced Expository Writing</td>
</tr>
</tbody>
</table>

**Required (Advanced) (21 hours)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 4293</td>
<td>Technical Documentation I</td>
</tr>
<tr>
<td>ENC 4294</td>
<td>Technical Documentation II</td>
</tr>
<tr>
<td>ENC 4295</td>
<td>Technical Documentation III</td>
</tr>
<tr>
<td>ENC 4215</td>
<td>Techniques of Technical Publication</td>
</tr>
<tr>
<td>LIT 4433</td>
<td>Survey of Technical and Scientific Literature</td>
</tr>
<tr>
<td>ENC 4218</td>
<td>Graphics Capabilities</td>
</tr>
<tr>
<td>ENC 4280</td>
<td>Technical Vocabulary</td>
</tr>
</tbody>
</table>

**Choose One (3 hours)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 3330</td>
<td>Rhetoric and Organization</td>
</tr>
<tr>
<td>ENC 3283</td>
<td>Science and the Lay Reader</td>
</tr>
<tr>
<td>ENC 4254</td>
<td>Technical Writing and the Uses</td>
</tr>
<tr>
<td>of Imagination</td>
<td></td>
</tr>
</tbody>
</table>

**Optional**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 4941</td>
<td>Technical Writing and Editing Internship</td>
</tr>
</tbody>
</table>

#### 4. Linguistics:

**Choose Three (9 hours)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIN 4100</td>
<td>History of the English Language</td>
</tr>
<tr>
<td>LIN 4202</td>
<td>Phonetics</td>
</tr>
<tr>
<td>LIN 4341</td>
<td>Modern English Grammar</td>
</tr>
<tr>
<td>LIN 4440</td>
<td>Sounds and Forms of Language</td>
</tr>
<tr>
<td>LIN 4801</td>
<td>Language and Meaning</td>
</tr>
</tbody>
</table>

**Choose Four, including at least two additional from the above list or from List A (12 hours)**

**List A**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIN 4612</td>
<td>Black English</td>
</tr>
<tr>
<td>LIN 4660</td>
<td>Linguistics and Literature</td>
</tr>
<tr>
<td>LIN 5137</td>
<td>Linguistics</td>
</tr>
<tr>
<td>LIN 3610</td>
<td>Language and Culture</td>
</tr>
</tbody>
</table>

**List B**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIN 4712</td>
<td>Normal Language Development</td>
</tr>
<tr>
<td>LIN 5705</td>
<td>Psycholinguistics</td>
</tr>
<tr>
<td>PHI 4220</td>
<td>Philosophy of Language</td>
</tr>
<tr>
<td>SPC 4330</td>
<td>Non-Verbal Communication</td>
</tr>
</tbody>
</table>

### DEPARTMENT OF FOREIGN LANGUAGES

**Chair:** TBA, FA 443, Phone (407) 275-2466  
**Faculty:** Barsch, Cervone, Crant, Decker, DiPierro, Fernandez, Micarelli, Patrone, Payas, Redmon, Taylor

Language studies in the College of Arts and Sciences provide instruction in Chinese, French, German, Hebrew, Italian, Japanese, Latin, Russian, and Spanish, with majors in French and Spanish. These programs are designed to meet the needs of students who desire competency in a language and expanded understanding of a foreign culture and literature. Students enrolled in 1000, 2000, and certain 3000-level courses are required to attend the language laboratory for at least one hour a week.
Students wishing to major in a foreign language must meet all the requirements for graduation as set forth by the University, the College of Arts and Sciences, and by the Department of Foreign Languages. They must complete 30 semester hours in the chosen language at the 3000 level or above. Among these 30 semester hours they must take courses numbered 3241 (SPN), 3244 (FRE), 3420, 3100, and 3101. Non-native French majors must also take FRE 4780 (French Phonetics and Diction) or the overseas summer course FRE 3955 (Corrective Phonetics and Vocabulary Building). Students interested in a combined major must take courses numbered 3241 (SPN), 3244 (FRE), 3420, 3100, and 3101 in both languages, plus an additional 15 hours in the primary language and an additional 6 hours in the secondary language for a total of 45 semester hours. This total must include FRE 4780 (French Phonetics and Diction) or FRE 3955 (Corrective Phonetics and Vocabulary Building).

Normal placement is as follows: Four years of one high school language would place the student in the first semester of the third year; three years, in the second semester of the second year; two years in the first semester of the second year; one year in the second semester of the first year.

A native or near-native speaker must substitute an alternate upper-division Spanish and French course for the conversation course (3241 (SPN) - 3244 (FRE)). Also, a native or near-native French speaker must substitute an alternate upper-division French course for FRE 4780 (French Phonetics and Diction) or FRE 3955 (Corrective Phonetics and Vocabulary Building). In cases where native speakers have received advanced education abroad, they will not be permitted to take the composition course (3420) for the fulfillment of their major requirements but must substitute another literature course chosen in consultation with advisors in the department.

Language Credit by Examination will not be given in courses lower in level than that in which students are presently enrolled. Native speakers will be allowed Credit by Examination only in literature courses.

Foreign Language State Teacher Certification may be obtained through the Department of Foreign Languages. The Certificate qualifies students to teach foreign languages at the elementary or high school levels.

MINORS
The Department of Foreign Languages offers a minor consisting of 18 semester hours in French, German, or Spanish.
Required courses: 18 semester hours at the 3000 level or above in one language including the courses numbered 3241 (SPN), 3244 (FRE), 3240 (GER), and 3420.

Bachelor of Arts: French or Spanish
Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required courses for French or Spanish Major
   3244 (FRE),
   3241 (SPN)
   3420
   3100
   3101
   or
   3130
   3131
   French Majors
   FRE 4780
   or
   FRE 3955
   Conversation
   Composition
   Survey of Literature I
   Survey of Literature II
   Survey of Latin-American Lit. I
   Survey of Latin-American Lit. II
   French Phonetics and Diction
   Corrective Phonetics & Vocabulary Building
4. Restricted Electives
   Students are also required to choose two of the following:
   LIN 4100
   LIN 4341
   LIN 3010
   History of the English Language
   Modern English Grammar
   Principles of Linguistics
5. Electives
   Total Semester Hours Required
   120
Bachelor of Arts: Foreign Language Combination

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses for Combined Major in Foreign Languages
   3244 (FRE), 3241 (SPN)
   3420
   3100 Survey of Literature I
   3101 Survey of Literature II
   FRE 4780
   or FRE 3955
   French Phonetics and Diction
   Corrective Phonetics & Vocabulary Building
4. Restricted Electives
   15 credits in first language
   6 credits in second language
   Students are required to choose two of the following:
   LIN 4100 History of the English Language
   LIN 4341 Modern English Grammar
   LIN 3010 Principles of Linguistics
5. Electives
Total Semester Hours Required 120

SUMMER STUDY ABROAD PROGRAMS
The Department of Foreign Languages has been offering a Summer Study program in Spain since 1972, in Italy since 1975, and one in France since 1981. These programs are approved by the Board of Regents and are expected to be offered annually. Credit bearing courses are available in these programs in language (all levels), art, and civilization of France, Italy, or Spain. These programs are open to all students of the State University System of Florida.

Oviedo-Seville, Spain
The program is divided between Oviedo and Seville, four weeks each, in order to give participants a better understanding of the country's culture. The program is administered with the cooperation of the universities of Oviedo and Seville. Week-end excursions to points of historical and artistic interest are part of the program's activities.

Urbino, Italy
The city of Urbino, on the slopes of the Eastern Appennines, is one of the major centers for the study of Renaissance art and architecture. The modern university sponsors a number of conventions of learned societies and cultural events in the summer. Courses in Renaissance art and modern Italian history are given in English; language courses are conducted in Italian.

Lisieux, France
Lisieux is in the heart of Normandy and very close to the beaches, but only 90 minutes by train from Paris. The area abounds with old and modern history from the time of Joan of Arc to the time of World War II. The program provides an intensive “total immersion” course in French designed to bring participants very quickly to a high level of oral proficiency.

AREA OF SPECIALIZATION
1. Latin American Studies. The minor in Latin American Area Studies offers a broad interdisciplinary approach to the understanding of Latin America and its peoples. The minor requires the completion of 18 semester hours selected from courses listed in the General Latin American Foundation Areas. In addition, students must complete the introductory language sequence (or its equivalent) in French or Spanish. For information, consult Professor Jose B. Fernandez, FA 551, (407) 275-2224.
2. Soviet Area Studies. The College of Arts and Sciences offers an academic minor in Soviet Area Studies. Five UCF departments, Foreign Languages, History, Political Science, Sociology, and Philosophy and Humanities, have pooled their resources in
order to offer students a multidisciplinary approach so as to understand linguistic, cultural, historical, political, and socio-economic interrelationships. Interested students should register for the minor with Dr. Stuart Lilie, (407) 275-2608.

DEPARTMENT OF HISTORY
Chair: J. Shofner, FA 551-B, Phone (407) 275-2224
Faculty: Colbourn, Crepeau, Evans, Fernandez, Fetscher, Greenhaw, Kallina, Leckie, Pauley, Wehr

Students majoring in history must complete a minimum of 36 hours in history courses. At least 6 hours must be selected from each of three different geographical areas, such as: United States, Europe, Asia, or Latin America. Grades of "D" or below may not be counted toward the major.

History majors who are interested in a pre-law program should work closely with their advisors in selecting major courses and electives which will best prepare them for law school. These students should use their electives for additional courses in history as well as English, speech, and philosophy. Such a course of study will prepare them for success in law school and will concomitantly provide a broad liberal education.

Latin American Studies: The History Department participates in the Latin American Studies program. Consult Dr. Jose B. Fernandez for information.

MINOR
The Department of History offers a minor consisting of a minimum of 18 semester hours.
Required courses: 18 semester hours of history, twelve of which must be at the 3000-4000 level. Specific courses must be selected in conference with a departmental advisor.

Bachelor of Arts: History
Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses
   None
4. Restricted Electives
   None
5. Electives
   To be selected with approval of the student's advisor

Total Semester Hours Required 120

AREA OF SPECIALIZATION
1. Soviet Area Studies. The History Department participates in the Soviet Area Program. For information consult with Dr. John Evans.

JUDAIC STUDIES PROGRAM
Director: Moshe Pelli; FA 550, Phone (407) 281-5039 or 275-2251
The Interdisciplinary Program in Judaic Studies offers both a Minor and a Certificate (but not a major). Housed within the College of Arts and Sciences Dean's Office, the Program cooperates with the departments of English, Foreign Languages, History, Philosophy and Humanities, Political Sciences, and Sociology/Anthropology.

The program offers instruction, conducts research, and disseminates knowledge in the civilization of the Jewish people from Biblical times to the present day in the major dimensions of its creativity: literature, language, religion, philosophy, law, and social, political and economic organization. Because the roots of western culture and civilization and major world religions lie in ancient Jewish thought and practice as manifested in the Hebrew Bible and subsequent writings, Jewish Studies form an essential component of the university curricula.

The program is designed to serve students pursuing careers in general or Jewish education, in the ministry or rabbinate, in international and Middle-Eastern affairs, in languages or liberal arts, and the community at large.

The minor requires the completion of 18-upper-division credit hours in Jewish History
(JST 3401, 3402, 3550), literature, such as HBR 3930 (Literature of the National Renaissance), HBT 3800 (Israeli Short Story), JST 3100 (Survey of Jewish Literature), JST 3751 (Literature of the Holocaust), LIT 4373 (Literature of the Bible), the Hebrew Bible (JST 3200 Introduction to Hebrew Scriptures), and culture, such as JST 3820 (Modern Hebrew Culture) JST 3810 (the Jewish National Movement), and JST 3550 (Introduction to Modern Judaism). In addition, students must complete the lower-division one year of Introductory Hebrew (HBR 1120, 1121).

See listings and courses under HBR, HBT, HMW, JST, and REL, and cross-listed courses in the Departments of Foreign Languages and Philosophy and Humanities.

**Latin American Area Studies**

The minor in Latin American Area Studies offers a broad interdisciplinary approach to the understanding of Latin America and its peoples. The minor requires the completion of 18 semester hours selected from courses listed in the General Latin American Foundation Areas. In addition, students must complete the introductory language sequence (or its equivalent) in French or Spanish. For information contact Professor Jose B. Fernandez, FA 551, (407) 275-2224.

**DEPARTMENT OF MATHEMATICS**

Chair: L. Debnath, CC II 221, Phone (407) 275-2585

Faculty: Andrews, Anthony, Armstrong, Brigham, Caron, Debnath, Eves, Heinzer, Hurst, Jones, Mikusinski, Mohapatra, Norman, Pettofrezzo, Phillips, Rautenstrauch, Richardson, Rodriguez, Rollins, Salzmann, Sinkala, Sherwood, Shivamoggi, Taylor, Vajravelu, Verma

The Department of Mathematics offers courses and programs which lead to a Bachelor of Science in Mathematics, a minor in mathematics and a Master of Science in Mathematical Science. (See the Graduate Studies catalog for a description of the M.S. in Mathematical Science.)

The programs in mathematics are designed to serve (1) students who wish to pursue careers in mathematics after having completed a baccalaureate degree; (2) students who wish to continue their education in graduate and professional schools; and (3) students who need to use mathematics as a tool in their specialty areas.

In order to serve such a wide variety of students, the courses and programs in the Department of Mathematics have developed along several lines. There are the usual service courses in precalculus and calculus along with strong programs in the upper division in the traditional areas of algebra and analysis and applied mathematics.

A limited number of student assistantships are available for qualified graduate and undergraduate students.

**HONORS COURSES**

Currently, the Department of Mathematics offers a special sequence of Calculus courses for students in the Honors Program. These are listed as MAC 3311H, MAC 3312H, and MAC 3313H. The topics are the same as the regular calculus sequence, but students will be expected to place more emphasis on the development and structure of the mathematics.

**MINOR**

The Department of Mathematics offers the following minor consisting of a minimum of 21 hours.

- **Required Courses:** MAC 3311, 3312, 3313, MAP 3302.
  
  (MAC 3311 and 3312 may be waived by the Department Standards Committee for a student with adequate high school preparation in calculus.)

- **Restricted Electives:** A minimum of two courses selected from MHF 2300, MAA courses, MAP courses, MAS courses, or MTG courses. (Either MAS 3103 or MAS 3113 may be used but not both. Courses may be selected from MAA 4226, 4227, or MAA 5211 but not both.) These two courses must be taken from the Department of Mathematics at UCF.

**Bachelor of Science: Mathematics**

**Degree Requirements**

1. See Undergraduate Degree Requirements
2. See special college and/or department requirements

All mathematics courses except for MAC 3311, 3312, 3313, and MAP 3302 must either
be taken from the Department of Mathematics at UCF or must be approved by the Mathematics Department Standards Committee. The Department suggests that students consider taking MAS 3113 (Matrices) before taking MAS 3103 (Linear Algebra). The Matrices course will then be used as an elective.

3. One course selected from

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 3241</td>
<td>Technical Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENC 3310</td>
<td>Magazine Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENC 3311</td>
<td>Advanced Expository Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

4. AREA OF SPECIALIZATION
   a. Mathematics Option
      Required Courses
      
      **1st Year Sequence**
      - MAC 3311: Calculus I (F) 4 hours
      - STA 3023: Statistical Methods I (F) 3 hours
      - MAC 3312: Calculus II (Sp) 4 hours
      - MHF 2300: Logic and Proof (Sp) 3 hours
      - BSC 2010: General Biology (Sp) 4 hours

      **2nd Year Sequence**
      - MAC 3313: Calculus III (F) 4 hours
      - MAS 3105: Matrices (Mathematics Elective) (F) 4 hours
      - PHY 3048: Physics for Engineers & Scientists I (F) 3 hours
      - PHY 3048L: Physics Lab I (F) 1 hour
      - MAP 3302: Differential Equations (Sp) 3 hours
      - MAS 3106: Linear Algebra (Sp) 4 hours
      - PHY 3049: Physics for Engineers & Scientists II (Sp) 3 hours
      - PHY 3049L: Physics Lab II (Sp) 4 hours

      **3rd Year Sequence**
      - MAD 4203: Combinatorics and Graph Theory (F) 3 hours
      - MAP 4363: Applied Boundary Values I (F) 3 hours
      - STA 4321: Statistical Theory I (F) 3 hours
      - COP 2500: Computer Science I (F) 3 hours
      - MAS 4301: Algebraic Structures (Sp) 4 hours
      - STA 4322: Statistical Theory II (Sp) 3 hours
      - COP 2001: Programming II (Sp) 3 hours

      **4th Year Sequence**
      - MAA 4226: Advanced Calculus I (F) 4 hours
      - MAA 4227: Advanced Calculus II (Sp) 4 hours
      - MTG 4302: Introduction to Topology (Sp) 3 hours

      A minimum of 8 hours selected from upper-division or graduate mathematics or statistics courses from COT 4500, COT 5510, COT 4210 or ENG 4634. (MAC 3233, 3253, 3254, MAE 3817 and MAA 5211 may not be used.) One additional course in either the biological or physical sciences must be taken. This course must be approved by the Department Standards Committee.

   b. Applied Mathematics Option
      
      **1st Year Sequence**
      - MAC 3311: Calculus I (F) 4 hours
      - STA 3023: Statistical Methods I (F) 3 hours
      - MAC 3312: Calculus II (Sp) 4 hours
      - MHF 2300: Logic and Proof (Sp) 4 hours
      - BSC 2010: General Biology (Sp) 4 hours

      **2nd Year Sequence**
      - MAC 3313: Calculus III (F) 4 hours
      - MAS 3105: Matrices (Mathematics Elective) (F) 4 hours
      - PHY 3048: Physics for Engineers & Scientists I (F) 3 hours
      - PHY 3048L: Physics Lab I (F) 1 hour
      - MAP 3302: Differential Equations (Sp) 3 hours
      - MAS 3106: Linear Algebra (Sp) 4 hours
      - PHY 3049: Physics for Engineers & Scientists II (Sp) 3 hours
      - PHY 3049L: Physics Lab II (Sp) 1 hour
3rd Year Sequence
MAD 4203 or MAP 4153 or MAP 4363
COP 2500
STA 4321 or MAP 4364 or COP 2501 or STA 4322

4th Year Sequence
MAA 4226 or COP 4500
**Applied Elective
Math Elective
**Applied Elective
MAP 4103
*Math-Stat Elective

*One course selected from upper division or graduate mathematics or statistics courses or from COT 5510 or COT 4210. (MAC 3233, 3253, 3254, MAE 3817 and MHF 4404 may not be used.)

**From an approved list

5. Electives
The number of hours depends on the courses chosen to satisfy university requirements and the area of specialization. The courses used as electives must be approved by the Department Standards Committee.

Total Semester Hours Required 120

DEPARTMENT OF MUSIC
Chair: E. Hotaling, FA 105A, Phone (407) 275-2869
Part-time Faculty: Ault, Bijella, Groves, Leung, A. Mascaro, J. Mascaro, McQuinn, Micarelli, Patton, Pecht, Radock, Schwab, Threette.

The Department of Music offers a Bachelor of Arts degree with options in Applied Music, Liberal Arts, Piano Pedagogy, Instrumental Music Education, Choral Music Education, and Elementary School Music Education.

The Music Department is fully accredited by the National Association of Schools of Music.

Music organizations on campus include Phi Mu Alpha, Sigma Alpha Iota, Tau Beta Sigma, Kappa Kappa Psi, University Vocal Society, Gospel Choir, and a Student Chapter of Music Educators National Conference.

SPECIAL MUSIC MAJOR ENTRANCE REQUIREMENTS
In order to be accepted as a music or music education major, the student must perform an audition. Each student must demonstrate an advanced level of proficiency by performing compositions representing a variety of musical periods. Memorization is required for pianists and vocalists. Accompanists will be furnished only upon request prior to the audition. Each candidate must bring music for the compositions he or she intends to perform. The College will provide large instruments such as the tuba, string bass, or tympani for these auditions. All smaller instruments must be brought to the University. The audition will serve as a placement examination for accepted candidates.

K-12 Certification
The Music Education programs are approved by the Florida State Department of Education. Students who wish to be certified to teach in elementary and secondary schools should consider a major in Music Education. Courses leading to teacher certification are offered cooperatively with the College of Education. A reciprocal certification arrangement is in effect with approximately 30 other states, with reciprocal certification pending in other
states. In addition, a Master of Education degree in Music Education is offered by the College of Education.

As a prerequisite to formal admission to the State Approved Program of Teacher Education students must:
1. score at or above the 40th percentile of all college-bound persons tested on the American College Testing Program (ACT, score 17) or the Scholastic Aptitude Test (SAT, score 835) and have this score reported as part of their official academic record
2. have an overall G.P.A. of 2.5
3. have satisfactorily completed EDG 4321 (Teaching Strategies)
4. have passed the College Level Academic Skills Test (CLAST)
5. submit a formal junior student teaching application to the College of Education Student Interships Office. Must meet the College of Education’s requirements for admission to Junior and Senior Year Student Teaching.

Since July 1, 1980, all applicants for a teaching certificate in Florida must pass a written competency examination administered by the Florida State Department of Education.

Since July 1, 1982, all applicants for their First Regular Florida Teaching Certificate must satisfy requirements of the Florida Beginning Teacher Program.

COMPREHENSIVE EXAMINATIONS

Comprehensive examinations in Music Theory and Music History should be taken by students during their junior year. Ear-training, sight-singing, part-writing, and visual analysis examinations will be offered during the fall semester; the music history examination will be offered during the spring.

POLICY REGARDING MAJOR ENSEMBLE PARTICIPATION
1. In order to graduate, music majors with a performance specialization must spread their required 8 semester hours of major ensemble credit over at least 8 separate semesters; music majors with a liberal arts specialization must spread their required 6 semester hours of major and/or minor ensemble credit over at least 6 separate semesters; music education majors must spread their required 7 semester hours of minor ensemble credit over at least 7 separate semesters.
2. The following ensembles are defined as major ensembles: chorus, symphony orchestra, concert band, marching band, and wind ensemble.

3. Vocal music education majors may elect to substitute 1 hour of band or orchestra or 1 hour of the minor ensemble requirement, provided they have sufficient facility on an appropriate instrument.

4. Assignment to major ensembles will be made by the ensemble directors.

5. Undergraduate students taking a course in Performance must take concurrently a major ensemble appropriate to their principal instrument.

POLICY REGARDING MINOR ENSEMBLE PARTICIPATION

1. In order to graduate, music majors with a performance specialization must spread their required 4 semester hours of minor ensemble credit over at least 3 separate semesters; music majors with a liberal arts specialization must spread their required 6 semester hours of major and/or minor ensemble credit over at least 6 separate semesters; music education majors must spread their required 4 semester hours of minor ensemble credit over at least 3 separate semesters.

2. The following ensembles are defined as minor ensembles: Brass Ensembles, Percussion Ensembles, Piano Ensembles, String Ensembles, Vocal Ensembles (except Opera Workshop), Woodwind Ensembles, Jazz Lab.

POLICY REGARDING RECITALS AND STUDENT TEACHING

Music and Music Education students must complete all but one of the following proficiency examinations before they will be permitted to audition for their senior recital and/or do their senior student teaching: music history, piano, sight-singing, ear training, and music theory. Music Education students may not give their required recital during the semester of their senior student teaching.

MINOR

The Department of Music offers a Minor in Music. The requirements are as follows:

1. A successful audition on the student’s principal instrument or voice.

2. A minimum of 21 semester hours credit to include the following or their equivalent: MUT 1111, MUT 1112 (4 hours); MUT 1241, MUT 1242 (2 hours); MUL 2010 (3 hours); major ensemble credit spread over at least 4 separate semesters (4 hours); 2 semesters of performance level I (4 hours) and 2 semesters of performance level II (4 hours) on the same instrument.

3. A minimum of 11 semester hours of these required courses, including two semesters of a major performing organization and two semesters of Performance Level II, must be completed at UCF.

4. Successful completion of 4 semesters of Music Forum (Mus 1010).

5. A GPA of 2.0 is required for all music courses attempted, whether used to fulfill these requirements or not.

Bachelor of Arts: Music

Degree Requirements

1. See Undergraduate Degree Requirements

2. See special college and/or department requirements

3. Required Courses [both specializations]

   MUS 1010     Music Forum (6 semesters)     0 hours
   MUT 1111, 1112, 2116, 2117, 3561    Music Theory    10 hours
   MUT 1241, 1242, 2246, 2247, 3248    Ear Training and Sight Singing    5 hours
   MVK/MVS/MVW/MVB
   MVP/MVV    Performance (4 semesters)    8 hours
   MUH 4211, 4212    *Music History    6 hours

Special Non-Course Requirements

1. Students are required to take piano until they meet the Piano Proficiency requirement.

2. Students must take music history and music theory comprehensive examinations.
Program A—Performance Specialization

Music 1010  Music Forum (2 semesters)  0 hours
MVK/MVS/MVW/MVB  Performance (4 semesters, including 2 semesters of Level IV)  8 hours
MVP/MVV  Major Ensemble (8 semesters)  8 hours
MUN  Minor Ensemble (4 semesters)  4 hours
MVK  Class Piano I-IV  4 hours
MUG 3101  Basic Conducting  2 hours
PHY 3464  Physical Basis of Music  3 hours
Music Electives  22 hours

Any secondary performance course not in area of major instrument or any MUC, MUE, MUG, MUH, MUL, MUN, MUS, MUT courses numbered 3000 or higher except the following: MUH 4218, MUT 4031, 4249.

In partial fulfillment of their elective requirements, piano students must take Piano Literature (MUL 3400, 3401 - 2 hours each) for a combined total of 4 hours; voice students take Foreign Diction (FRE 1005, GER 1005, ITA 1005 - 1 hour each), Voice Pedagogy (MVV 4640, 4641 - 1 hour each), and Song Literature (MUL 3600, 3601 - 1 hour each) for a combined total of 7 hours; piano pedagogy students take Piano Literature (MUL 3400, 3401 - 2 hours each), Piano Pedagogy (MVK 4640, 4641 - 1 hour each), and Studio Teaching (MUS 4401) for 2 hours, for a combined total of 8 hours.

4. Restricted Electives
   See above paragraph

5. Electives
   3 hours

Special Non-Course Requirements

1. Two faculty-approved public recitals: a junior recital of 30 minutes length and a senior recital of 45 minutes length. Students who select the Piano Pedagogy option will perform two faculty-approved thirty-minute recitals.

2. Residency requirements: 2 semesters of Performance Level IV; senior recital; history and theory proficiency examinations.

3. At least 77 hours of credit must be earned in music courses.

Program B—Liberal Arts Specialization

MVK/MVS/MVW/MVB  Performance (2 semesters, including 2 semesters of Level III)  4 hours
MVP/MVV  Major and Minor Ensembles (6 semesters)  6 hours
MUN  Class Piano I-IV  4 hours
MVK  Music Electives/Special Requirements  5 hours

Any MUC, MUE, MUG, MUH, MUL, MUS, MUT courses numbered 3000 or higher except the following: MUH 4218, MUT 4031 and 4249.

In partial fulfillment of their elective requirements, piano students take Piano Literature (MUL 3400, 3401 - 2 hours each) for a combined total of 4 hours; voice students take Foreign Diction (FRE 1005, GER 1005, ITA 1005 - 1 hour each) and Song Literature (MUL 3600, 3601 - 1 hour each) for a combined total of 5 hours.

4. Restricted Electives
   See above paragraph

5. Electives
   35 hours

Special Non-Course Requirements

1. One faculty-approved thirty-minute recital.

2. Residency requirements: 2 semesters of Performance Level III; 2 ensembles, [each in a different semester]; MUT 3561; MUT 3248; 2 semesters of MUS 1010; history and theory proficiency examinations, recital.

Total Semester Hours Required 120

*Three semester hours of coursework in the General Education Program are satisfied by the Music History sequence.
Bachelor of Arts: Music Education

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 1010</td>
<td>Music Forum (6 semesters)</td>
<td>0</td>
</tr>
<tr>
<td>MUT 1111, 1112, 2116, 2117, 3561</td>
<td>Music Theory</td>
<td>10</td>
</tr>
<tr>
<td>MUT 1241, 1242, 2246,2247,3248</td>
<td>Ear Training and Sight Singing</td>
<td>5</td>
</tr>
<tr>
<td>MV/B/MV/MVP/MVW</td>
<td>Performance (6 semesters including 2 semesters of level III)</td>
<td>12</td>
</tr>
<tr>
<td>MUN</td>
<td>Major Ensemble (7 semesters)</td>
<td>7</td>
</tr>
<tr>
<td>MUN</td>
<td>Minor Ensemble</td>
<td>4</td>
</tr>
<tr>
<td>MUH 4211, 4212</td>
<td>*Music History</td>
<td>6</td>
</tr>
<tr>
<td>MUG 3101</td>
<td>Basic Conducting</td>
<td>2</td>
</tr>
<tr>
<td>MUE 3460</td>
<td>Brass Techniques</td>
<td>1</td>
</tr>
<tr>
<td>MUE 3470</td>
<td>Percussion Techniques</td>
<td>1</td>
</tr>
<tr>
<td>MUE 3440</td>
<td>String Techniques</td>
<td>1</td>
</tr>
<tr>
<td>MUE 3450</td>
<td>Woodwind Techniques</td>
<td>1</td>
</tr>
<tr>
<td>EDF 3603</td>
<td>Analysis of Educational Foundations</td>
<td>3</td>
</tr>
<tr>
<td>EDF 4214</td>
<td>Classroom Learning Principles</td>
<td>3</td>
</tr>
<tr>
<td>EDF 4285</td>
<td>Application of Technology in Education</td>
<td>3</td>
</tr>
<tr>
<td>EDG 4324</td>
<td>Teaching in the Schools</td>
<td>3</td>
</tr>
<tr>
<td>EDG 4321</td>
<td>Teaching Strategies</td>
<td>4</td>
</tr>
<tr>
<td>EDE 3943</td>
<td>Junior Year Student Teaching</td>
<td>6</td>
</tr>
<tr>
<td>EDE or ESE 4943</td>
<td>Senior Year Student Teaching</td>
<td>12</td>
</tr>
<tr>
<td>MUE 4311</td>
<td>Elementary School Music Instructional Analysis</td>
<td>2</td>
</tr>
<tr>
<td>MUE 4360</td>
<td>Secondary School Music Instructional Analysis</td>
<td>2</td>
</tr>
</tbody>
</table>

Program A - Instrumental Music Education Specialization

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MVV 1111</td>
<td>Class Voice</td>
<td>1</td>
</tr>
<tr>
<td>MVK</td>
<td>Class Piano I-IV</td>
<td>4</td>
</tr>
<tr>
<td>MV/B/MV/MVP/MVW</td>
<td>Performance IV</td>
<td>2</td>
</tr>
<tr>
<td>MUE 1460</td>
<td>Brass Techniques</td>
<td>1</td>
</tr>
<tr>
<td>MUE 1450</td>
<td>Woodwind Techniques</td>
<td>1</td>
</tr>
<tr>
<td>MUG 3302</td>
<td>Instrumental Conducting</td>
<td>2</td>
</tr>
<tr>
<td>MUT 4344</td>
<td>Seminar in Music Arranging</td>
<td>1</td>
</tr>
<tr>
<td>MUE 4480</td>
<td>Marching Band Techniques</td>
<td>1</td>
</tr>
</tbody>
</table>

Program B - Choral Music Education Specialization

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MVK 1111-1141</td>
<td>Class Piano I-IV</td>
<td>4</td>
</tr>
<tr>
<td>MVV 1111</td>
<td>Class Voice</td>
<td>2</td>
</tr>
<tr>
<td>MVS 1216</td>
<td>Secondary Guitar</td>
<td>1</td>
</tr>
<tr>
<td>MUG 3202</td>
<td>Choral Conducting</td>
<td>2</td>
</tr>
<tr>
<td>MV/B/MV/MVP/MVW</td>
<td>Performance IV</td>
<td>2</td>
</tr>
<tr>
<td>ITA 1005, FRE 1005</td>
<td>Diction</td>
<td>3</td>
</tr>
<tr>
<td>GER 1005</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Program C -Elementary School Music Education Specialization

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MVK 1111-1141</td>
<td>Class Piano I-IV</td>
<td>4</td>
</tr>
<tr>
<td>MVV 1111</td>
<td>Class Voice</td>
<td>3</td>
</tr>
<tr>
<td>MVS 1216</td>
<td>Secondary Guitar</td>
<td>1</td>
</tr>
<tr>
<td>MVO 3124</td>
<td>Recorder II</td>
<td>1</td>
</tr>
</tbody>
</table>

117
4. Restricted Electives
None.
5. Electives
None.

Minimum Total Semester Hours Required 134-139

Special Non-course requirements
1. Students are required to take piano until they meet the Piano Proficiency requirement.
2. A faculty-approved public recital of 30 minutes length. (A recital is optional for the Elementary School Music Specialization).
4. Students graduating from UCF with a major in music education must complete their last two semesters of required performance; their recital, if required; and, their senior year student teaching while attending UCF.
5. A GPA of 2.0 is required for all music courses attempted.
*Three semester hours of course work in the General Education Program are satisfied by the Music History sequence.

DEPARTMENT OF PHILOSOPHY AND HUMANITIES
Chair: TBA, FA 463, Phone (407) 275-2273
Faculty: Flick, Jones, Kassim, Levensohn, Riley, Riser, White

The Department of Philosophy and Humanities offers a philosophy major and an interdepartmental humanities major, as well as minors in philosophy, humanities, religion, and Asian studies. Various courses may be used to fulfill requirements in the General Studies Program, and others may be taken as electives by students who do not seek a major or minor.

MINORS
The Department of Philosophy and Humanities offers the following minors:
1. Philosophy
Twenty-four semester hours.
Required courses: PHI 1100, PHI 2010, PHI 3130, PHI 3600, plus 12 additional semester hours of philosophy courses selected in conference with a departmental advisor.
2. Humanities
Twenty-four semester hours.
Required courses: 12 semester hours of humanities, plus courses in art, music, literature, and electives in philosophy or religion. Specific courses must be selected in conference with a departmental advisor.
3. Religion
Twenty-one semester hours.
Required courses: REL 2300 and REL 3203, plus a minimum of 15 semester hours of upper level religion courses. For specific requirements, students should see a departmental advisor.
4. Asian Studies
Twenty-one semester hours.
An interdisciplinary minor in which seven UCF departments—Anthropology, Art, Economics, Foreign Languages, History, Philosophy and Humanities, and Political Science—participate in order to offer students a basic and well-rounded background in the field. For information consult Dr. Husain Kassim.

Bachelor of Arts: Philosophy
A. Regular Major (30 hours required)

Required Courses (21 hours required)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHI 3000</td>
<td>Philosophical Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>PHI 3130</td>
<td>Formal Logic I</td>
<td>3</td>
</tr>
<tr>
<td>PHH 3100</td>
<td>Ancient Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHH 3200, or</td>
<td>Modern Continental Philosophy, or</td>
<td>3</td>
</tr>
<tr>
<td>PHH 3300</td>
<td>Modern British Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHH 3350, or</td>
<td>Contemporary Continental Philosophy, or</td>
<td>3</td>
</tr>
</tbody>
</table>
PHH 3500  Contemporary Analytic Philosophy  3 hours  
PHI 3600  Ethics  3 hours  
PHI 4360, or  Epistemology, or  3 hours  
PHI 4500  Metaphysics  3 hours  

*Elective Courses* Nine upper-division hours in philosophy or related areas, with approval of advisor.

**B. Honors in Philosophy**

*Requirements*

1. Admission to and continuing acceptance in University Honors Program.
2. Satisfaction of all University requirements for Honors in the major.
3. Grade of “B” or better in Honors Directed Readings (3 hours).
5. Thirty hours of courses to be selected with guidance and approval of Honors Advisor and Department Chair.

*Electives*

Students are encouraged to select courses from other disciplines that supplement training in philosophy.

**Bachelor of Arts: Humanities**

*Degree Requirements*

1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses (24 semester hours)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 3431</td>
<td>Ancient World: Greece</td>
</tr>
<tr>
<td>HUM 3432</td>
<td>Ancient World: Rome</td>
</tr>
<tr>
<td>HUM 3410</td>
<td>Asian Humanities or</td>
</tr>
<tr>
<td>HUM 3250</td>
<td>Contemp. Humanities</td>
</tr>
<tr>
<td>HUM 3510</td>
<td>Critical Evaluation/Arts or</td>
</tr>
<tr>
<td>PHI 3800</td>
<td>Aesthetics</td>
</tr>
<tr>
<td>CLA 3850</td>
<td>Classical Myth or</td>
</tr>
<tr>
<td>CLA 3900</td>
<td>Comparative Myth</td>
</tr>
<tr>
<td>HUM 4301</td>
<td>The Classical Ideal</td>
</tr>
<tr>
<td>HUM 4302</td>
<td>The Romantic Ideal</td>
</tr>
<tr>
<td>HUM 4303</td>
<td>The Spiritual Ideal</td>
</tr>
</tbody>
</table>

4. Restricted Electives (24 semester hours, to be chosen with the help of an advisor and to include at least one course each in art, literature, music, and philosophy)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARH 4311 or 4312</td>
<td>Ital. Ren. Art or ARH 3060 Hist. Arch.</td>
</tr>
<tr>
<td>ARH 4350 or ARH 4430 or ARH 4450</td>
<td>History of Art</td>
</tr>
<tr>
<td>ENL 3031 or 3051</td>
<td>English Lit. or LIT 2110 or 2120 Wrld. Lit.</td>
</tr>
<tr>
<td>ENL 4330</td>
<td>Shakespeare or AML 3051 American Lit. II</td>
</tr>
<tr>
<td>EUH 3122</td>
<td>Medieval Soc. &amp; Civ. or EUH 3142 Ren. &amp; Reform.</td>
</tr>
<tr>
<td>MUL 2010</td>
<td>Enjoyment of Music</td>
</tr>
<tr>
<td>PHH 3100</td>
<td>Ancient Phil. or PHH 3200 Mod. Continental Phil.</td>
</tr>
<tr>
<td>PHM 3350</td>
<td>Fund. Marxism or PHP 3786 Existentialism</td>
</tr>
<tr>
<td>REL 3203 or REL 3506 or REL 3600</td>
<td>Judaism, Christianity</td>
</tr>
<tr>
<td>REL 3333 or REL 3350 or REL 3363</td>
<td>Eastern Religions</td>
</tr>
<tr>
<td>THE 3112 or 3113</td>
<td>Theatre History</td>
</tr>
<tr>
<td>THE 3370 Modern Drama</td>
<td>or LIT 4094 Mod. Drama as Lit.</td>
</tr>
</tbody>
</table>

5. Electives

May be used to obtain a second major or to complete requirements for teacher certification in Humanities in the College of Education.

**DEPARTMENT OF PHYSICS**

*Chair: S. K. Bose, HPB 310, Phone (407) 275-2325*

*Faculty: Bass, Boileon, Bolte, Brennan, Caldwell, Chai, Chow, Chowdhury, Elias, Hagan, Heinonen, Kim, Lin, Littlewood, Llewellyn, Miller, Neighbor, Saha, Soileau*

The Department of Physics offers the Bachelor of Science, Master of Science, and Doctor of Philosophy degrees in Physics. Students planning graduate study should consult faculty advisors about increased course content in physics (some electives are offered in
alternate years) and mathematics, such as applied boundary problems, vector and tensor analysis, matrices; double majors are encouraged where appropriate.

Physics is the basic science fundamental to many different fields of endeavor. Physics majors are therefore encouraged to prepare for interdisciplinary careers by using electives to study other areas in depth, planning with an advisor by the sophomore year (or after arrival, for transfer students).

Independent investigation and use of scientific instrumentation (such as lasers, computer interfacing, lock-in amplifiers, multi-channel analyzers, oscilloscopes) are emphasized at the upper division. Computer programming requiring numerical analysis and familiarity with microcomputers is required.

Research of the faculty covers condensed matter physics, environmental physics, free electron lasers, solid state and gas lasers, mathematical modeling, Mossbauer spectroscopy, molecular and atomic spectroscopy, nuclear physics, nonlinear optics, and physics education. Physics faculty conduct interdisciplinary research at the UCF Center for Research in Electro-optics and Lasers (CREOL).

Service courses in physics are provided for students in other departments and colleges. A special laboratory-oriented course is available for science education majors. A physical science course satisfying General Education requirements (section E) is offered regularly.

MINOR
The Department of Physics offers a minor consisting of a minimum of 20 semester hours. Required courses: PHY 3048, 3048L, 3049, 3049L, 3101. The remaining 9 semester hours must be selected from appropriate upper-level lecture or laboratory courses.

HONORS
Honors sections of the introductory physics sequence are available to students with appropriate academic standing.

Bachelor of Science: Physics

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
In addition to the degree requirements listed below for a B.S. in Physics, the following standards are required by the department for graduation. Approval as a special case by the Department Undergraduate Affairs Committee must be requested for any waiver.
   a. A minimum GPA of 2.0 for all courses used for a major in physics.
   b. No credit toward graduation for a "D" grade in any physics or mathematics course required for a major in physics; a higher grade on repeating is acceptable.
3. Required Courses
The courses listed, or departmentally approved equivalents, are required in the physics curriculum.
   BSC 2010C General Biology 4 hours
   CHM 2045, 2046, 2046L Chemistry Fundamentals 8 hours
   MAC 3311, 3312, 3313 Calculus with Analytic Geometry 12 hours
   PHY 3048, 3048L Physics For Engineers I & II 8 hours
   3049, 3049L
   MAP 3302 Differential Equations 3 hours
   PHY 3101 Modern Physics 3 hours
   PHY 3220, 4220 Mechanics I, II 6 hours
   PHY 3503 Thermodynamics 3 hours
   PHY 3320, 4320 Electricity and Magnetism I, II 6 hours
   PHZ 3151 Computer Methods in Physics 4 hours
   PHY 3752C Physics of Scientific Instruments 4 hours
   PHY 4604 Wave Mechanics 3 hours
   STA 3032 Probability and Statistics for Engineers 3 hours
   PHY 3802L Intermediate Physics Laboratory 3 hours
   PHY 4803L Advanced Physics Laboratory 3 hours
4. Restricted Electives
Upper division PHY or PHZ courses or those to be used in partial fulfillment of the requirements of a double major. 6 hours
5. Electives for Career Enrichment
Each physics major must complete a plan of study, no later than the junior year, indicating choice of electives, and submit it to the department undergraduate advisor for approval by the UAC. No more than 6 hours may be research credit.

Total Semester Hours Required

12 hours

DEPARTMENT OF POLITICAL SCIENCE
Chair: TBA, FA 426, Phone (407) 275-2608
Faculty: Bledsoe, Fine, Handberg, Johnson-Freese, Kennedy, J. Lilie, S. Lilie, Morales, Pollock, Shryock, Stern, Vittes

The Department of Political Science seeks to (1) provide a broad background for careers in foreign and domestic public service and in the private sector where a knowledge of government and politics is necessary; (2) provide a broad background for and facilitate admission to law school through the prelaw emphasis; (3) prepare students for teaching, research, and graduate study in Political Science; (4) provide a broad background for careers in politics; and (5) educate citizens and promote their active interest in public affairs. Students should plan their major or minor in consultation with their departmental advisor according to their interests and career objectives.

Political Science courses are divided into three areas of specialization: American Politics and Policy; International Relations and Comparative Politics; and Political Theory.

It is strongly recommended that majors planning to continue their education at the graduate level or to pursue a career in international fields acquire a working knowledge of a foreign language.

Canadian Studies: The Department of Political Science is the main contributor to the Canadian Studies Program. Interested students should contact Dr. Henry Kennedy.

Latin American Studies: The Political Science Department participates in the Latin American Studies Program. Contact Dr. Waltraud Q. Morales.

Soviet Area Studies: The Political Science Department participates in the Soviet Area Studies program. Consult Dr. Stuart Lilie.

MINOR
The Department of Political Science offers minors consisting of a minimum of 18 semester hours in each minor.

1. Political Science
Required courses: POS 2041. In the event a student has taken the varying credit POS 4941, only 3 semester hours from this course can be used in the minor. Only two courses (6 semester hours) from a two-year institution will be accepted as part of the minor. Except for these requirements, students may select any other Political Science courses with the aid of an advisor.

2. Political Science/Prelaw
Required courses: POS 2041, 4284; at least one from INR 4401, 4402, POS 4603, or POS 4604. In the event a student has taken the varying credit POS 4941, only 3 semester hours from this course can be used in the minor. Only two courses (6 semester hours) from a two-year institution will be accepted as part of the minor. Except for these requirements, students may select any other Political Science courses with the aid of an advisor.

Bachelor of Arts: Political Science
Degree Requirements
1. See Undergraduate Degree Requirements

Only two courses (6 semester hours) from a two-year institution will be accepted toward completion of major requirements.

2. See special college and/or department requirements

3. Required Courses
POS 2041 American National Government 3 hours
*POS 3703 Scope and Methods of Political Science 3 hours

*This course should be completed by the second semester of the junior year.
4. Restricted Electives
Majors must choose from one of the following emphases for a minimum of 30 additional hours.

Emphasis 1: American Politics and Policy
- Five courses from area A: 15 hours
- Two courses from area B: 6 hours
- Two courses from area C: 6 hours
- One additional course from any area: 3 hours

Emphasis 2: International Relations-Comparative Politics
*Five courses from area B: 15 hours
- Two courses from area A: 6 hours
- Two courses from area C: 6 hours
- One additional course from any area: 3 hours
*No more than two of the following courses may be considered part of area B credit: INR 4401, INR 4402, INR 4403.

Emphasis 3: Prelaw
- POS 4284: Judicial Process and Politics: 3 hours
- One of the following:
  *POS 4603: American Constitutional Law I
  POS 4604: American Constitutional Law II
  INR 4401: International Law I
  INR 4402: International Law II
*POS 4603 should ordinarily be taken before POS 4604.
- Five courses from either area A or area B: 15 hours
- Two courses from area A if area B is chosen above; or
- Two courses from area B if area A is chosen above: 6 hours
- One course from area C: 3 hours
- Total Hours in Major: 36 hours

5. Electives
- Total Semester Hours Required: 120

AREAS OF SPECIALIZATION
The Department courses are divided into three areas of specialization.

A. American Politics and Policy
- POS 3122: State Government
- POS 3443: Political Parties and Processes
- POS 3413: The American Presidency
- POS 3424: Congress and the Legislative Process
- PUP 3314: Minorities in American Politics
- POS 3235: Mass Media and Politics
- POS 3233: Public Opinion
- POS 3273: Voting and Elections
- POS 3173: Southern Politics
- POS 4246: Political Socialization
- POS 4603: American Constitutional Law I
- POS 4604: American Constitutional Law II
- POS 4284: Judicial Process & Politics
- POS 4412: Presidential Campaigning
- PUP 4323: Women and Politics
- POS 4142: Metropolitan Politics
- URP 4026: Community Planning
- PUP 3204: Environmental Politics
- PUP 4003: American Public Policy
- POS 4622: Politics and Civil Rights
- POS 4445: Comparative Political Parties
- PUP 4503: Government and Science
- PUP 4602: Politics of Health
- POS 4265: Power and Policy in the United States
- PUP 4009: Topics in Public Policy

B. International Relations and Comparative Government
- INR 3002: International Relations
While no specific major is prescribed for admission to law school, many prelaw students elect to major in political science. These individuals usually choose the prelaw emphasis within the political science major.

Prelaw students are encouraged to work closely with a prelaw advisor in planning their programs. By judicious use of electives, the student builds a firm foundation for law school entry and acquires a broad training which can result in career options upon graduation. For further information, consult one of the Department's prelaw advisors.

1. Some suggested electives include:

ACG 2001 Principles of Accounting I
ACG 2011 Principles of Accounting II
BUL 3111 Legal Environment of Business
ENC 3210 Business Report Writing
PLA 3015 Legal Research
PLA 3155 Legal Writing
PHI 3130 Formal Logic I
PHI 3131 Formal Logic II
MHF 2300 Logic and Proof in Mathematics
LIN 4341 Modern English Grammar
LIN 4801 Language and Meaning

Internship Program: Political Science

For students who excel, a limited number of internships may be available each semester for 3 to 6 hours of credit. Under the Internship Director, the student is typically placed in an office of local, state, or national government, a law office, or campaign headquarters.
DEPARTMENT OF PSYCHOLOGY
Chair: R. Tucker, PH 317, Phone (407) 275-2216

The undergraduate program provides a general preparation in Psychology with the option to select an emphasis area from a variety of subfields. Suggested emphasis area course listings are available in the department. Successful completion of the specified program of at least 41 hours leads to the Bachelor of Arts degree with a major in Psychology. The Bachelor of Science option is also available.

MINOR
The Psychology Department offers minors in several emphasis areas, including Clinical Psychology, Human Factors Psychology, and Industrial/Organizational Psychology. The guiding principle in design of a minor is to select those Psychology courses which will strengthen the graduate school preparation and/or the marketability of the student’s major program. Therefore, a minimum of 22-25 credit hours are required, 3 in Statistics, and 19-22 in Psychology, including PSY 2013 (3 hours) and PSY 3214 (4 hours). The additional 12 (or more) hours are to be taken with the approval of the Psychology Department’s Undergraduate Program Coordinator. The additional hours will generally follow suggested course lists which are available in the Department.

Bachelor of Arts: Psychology

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses
   - PSY 2013 General Psychology 3 hours
   - PSY 2023 Careers in Psychology 1 hour
   - PSY 3214 Research Methods 4 hours
   - PSY 3204 Statistical Methods in Psychology 4 hours
   - EXP 3404 Basic Learning Processes 4 hours
   - PSB 3002 Physiological Psychology 4 hours
4. Restricted Electives
   a. Psychology Department (any two)
      - CLP 3143 Abnormal Psychology 3 hours
      - DEP 3004 Developmental Psychology 3 hours
      - PPE 3003 Personality Theory 3 hours
      - SOP 3004 Social Psychology 3 hours
   b. Statistics Department (one of the two)
      - STA 2014 Principles of Statistics 3 hours
      - STA 3023 Statistical Methods I 3 hours
   c. B.S. Option (9 hrs. from the following courses):
      - COP 2500 Computer Science I 3 hours
      - COP 2501 Computer Science II 3 hours
      - CGS 3061 Personal Computing 3 hours
      - MAC 3233 Concepts of Calculus 3 hours
      - MAC 3253 Applied Calculus I 3 hours
      - PCB 3063, 3063L Genetics with Lab 4 hours
      - PCB 3703C Human Physiology with Lab 4 hours
      - STA 4102 Computer Programming of Statistical Data 3 hours
      - ZOO 3733C Human Anatomy with Lab 4 hours
5. Electives
   A total of 12 semester hours in other courses offered by the Psychology Department taken in accordance with the student’s interests and career goals and with the consent of the advisor.

| Total Hours Required Outside Major | 3 |
| Total Hours Required in Major | 38 |
| Total Semester Hours Required | 120 |
Bachelor of Science: Social Sciences

Contact Person: J. Boyte, FA 208, Phone (407) 275-2492

The Social Sciences program offers students an opportunity to become acquainted with the various fields of the Social Sciences and to better understand the relationships between those fields. Satisfactory completion of the program leads to the degree Bachelor of Science with a major in Social Sciences.

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses
   None
4. Restricted Electives
   a. Choose one
      POS 3703 Scope and Methods of Political Science 3 hours
      PSY 3214 Research Methods (Psychology) 3 hours
      SYA 3300 Research Methods (Sociology) 3 hours
   b. A minimum of 15 semester hours in each of four Social Science disciplines. The following are the required courses for each discipline selected.
      Communication
      RTV 4403 Radio, Television and Society 3 hours
      or
      JOU 3003 History of American Journalism 3 hours
      COM 3311 Communication as a Behavioral Science 3 hours
      Economics
      ECO 2013 Principles of Economics I 3 hours
      ECO 2023 Principles of Economics II 3 hours
      Political Science
      POS 2041 American National Government 3 hours
      Psychology
      PSY 2013 General Psychology 3 hours
      PPE 3003 Personality Theory 3 hours
      Public Service Administration
      PAD 3003 Introduction to Public Administration 4 hours
      or
      CCJ 3020 Criminal Justice System 4 hours
      or
      PLA 3013 Law and the Legal System 4 hours
      Sociology
      SYG 2000 General Sociology 3 hours
      ANT 2003 General Anthropology 3 hours
5. Electives

DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY

Chair: D. Fabianic, FA 402, Phone (407) 275-2227
Faculty: Allen, W. Brown, A. Chase, D. Chase, Cook, Dees, Gay, D. Jones, Lynxwiler, Stearman, Unkovic, Wallace

The Department of Sociology and Anthropology offers a Bachelor of Arts in Sociology and Anthropology. Students should consult with their advisor early in their academic careers to select an area of specialization within the Department or if they plan to pursue graduate work.

MINORS
The Department offers the following minors:
1. Anthropology
   Required Courses: ANT 3211, 3410, 3422, ANT 3511, 12 additional hours to be taken in consultation with the student's advisor. No more than two courses can be transferred
from other Sociology/Anthropology Departments. The minimum number of semester hours required - 21.

2. Sociology
Required Courses: SYG 2000, SYO 3000, and SYA 3110 or SYA 3120; and a minimum of 9 semester hours of Sociology courses. No more than 2 sociology courses may be transferred from another Sociology Department and no more than 8 semester hours of 1000 or 2000 level sociology courses can be applied. The minimum number of semester hours required - 18.

**Bachelor of Arts: Sociology**

**Degree Requirements**
The Sociology curriculum is designed to provide students a basic curriculum which emphasizes critical examination of various components of society. The purpose of the curriculum is to increase students' social awareness and ability to employ a sociological perspective to interpret social institutions and behavior. A minimum of 44 semester hours is required for a major. In addition, one course in statistics is also required.

1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses (23 semester hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYG 2000</td>
<td>General Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SYO 3000</td>
<td>Modern Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SYA 3110</td>
<td>Development of Social Thought</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>SYA 3120</td>
<td>Modern Sociological Thought</td>
</tr>
<tr>
<td>SYA 3300</td>
<td>Research Methods</td>
<td>4</td>
</tr>
<tr>
<td>SYO 3380</td>
<td>Social Organization &amp; Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>SYP 4000</td>
<td>Sociological Social Psychology</td>
</tr>
<tr>
<td>SYA 4450</td>
<td>Data Analysis (PR: Course in Statistics)</td>
<td>4</td>
</tr>
<tr>
<td>SYA 4650</td>
<td>Applied Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

One course in Statistics

(After the required courses are completed, remaining courses listed in the required course category may be taken and will be credited in the Social Processes and Institutions category.)

4. Restricted Electives
Majors must choose from one of the following emphases for a minimum of 21 semester hours.

A. General Sociology Emphasis. Students are required to take 6 semester hours from the Deviant Behavior and Social Problems category, and 15 semester hours from the Social Processes and Institutions category; or, students may take 15 semester hours from the Social Processes and Institutions category, and a minimum of 6 semester hours of Sociology Internship.

B. Deviant Behavior and Social Problems Emphasis. Students are required to take 15 semester hours from the Deviant Behavior and Social Problems category and 6 semester hours from the Social Processes and Institutions category; or, students may take 15 semester hours from the Deviant Behavior and Social Problems category and a minimum of 6 semester hours of Sociology Internship.

**Areas of Emphasis**
Social Processes and Institutions

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYD 3410</td>
<td>Urban Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SYD 3700</td>
<td>Race and Ethnic Minorities in the U.S.</td>
<td>3</td>
</tr>
<tr>
<td>SYD 3800</td>
<td>Sex Roles in Modern Society</td>
<td>3</td>
</tr>
<tr>
<td>SYP 3650</td>
<td>Sociology and Sport</td>
<td>3</td>
</tr>
<tr>
<td>SYD 4020</td>
<td>Population</td>
<td>3</td>
</tr>
<tr>
<td>SYD 4680</td>
<td>Soviet Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SYO 3530</td>
<td>Social Stratification</td>
<td>3</td>
</tr>
<tr>
<td>SYO 4100</td>
<td>The Family</td>
<td>3</td>
</tr>
<tr>
<td>SYO 4250</td>
<td>Sociology of Education</td>
<td>3</td>
</tr>
<tr>
<td>SYO 4300</td>
<td>Political Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>
Bachelor of Arts: Anthropology

Degree Requirements
Anthropology offers the Bachelor of Arts degree. In keeping with the holistic nature of the discipline, students are required to pursue a course of study which leads to a comprehension of all subfields of Anthropology. The recognized subfields of Anthropology are Cultural Anthropology, Archaeology, Physical Anthropology, and Linguistics. Area studies concerned with North American Indians, Mesoamerican Civilization, and Latin American Culture are available. Students majoring or minoring in Anthropology with sufficient course background are provided an opportunity to participate in ongoing archaeological excavations associated with the Maya culture in the Central American country of Belize.

A minimum of 45 semester hours is required for a degree. All Anthropology courses are 3 semester hours with the exception of ANT 4124, which is 9 semester hours.

Degree Requirements
1. See Undergraduate Degree Requirements
2. Special college and/or department requirements
3. Required Courses (21 hours)
   - ANT 3211 Human Origins (Anthropology I)
   - ANT 3410 Cultural Anthropology (Anthropology II)
   - ANT 3511 The Human Species (Anthropology III)
   - ANT 3145 Archaeology of Complex Societies
   - ANT 3422 Peoples of the World
   - ANT 3610 Language and Culture
   - ANT 4084 History of Anthropological Thought
4. Restricted Electives (24 hours)
   Area Studies (Select 3)
   - ANT 3153 Archaeology of North America
   - ANT 3162 Archaeology of Middle and South America
   - ANT 3163 Mesoamerican Archaeology
   - ANT 3311 Indians of the Southeastern United States
   - ANT 3312 Ethnology of North American Indians
   - ANT 3313 Indians of the North American High Plains
   - ANT 3328 Maya Archaeology
   - ANT 3332 Peoples and Cultures of Latin America
   - ANT 3360 Peoples of the Far East
   - ANT 3363 Anthropology of Japan
   Specialized Studies (Select 5)
   - Cultural
     - ANT 3302 Sex, Gender, and Culture
     - ANT 3241 Magic, Ritual, and Belief

Total Semester Hours Required 120
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 3432</td>
<td>Culture and the Individual</td>
</tr>
<tr>
<td>ANT 3418</td>
<td>Aging and Death</td>
</tr>
<tr>
<td>ANT 3262</td>
<td>Rural Society</td>
</tr>
<tr>
<td>ANT 3271</td>
<td>Law and Culture</td>
</tr>
<tr>
<td>ANT 3705</td>
<td>Action Anthropology</td>
</tr>
<tr>
<td>ANT 3122</td>
<td>Archaeological Method and Theory</td>
</tr>
<tr>
<td>ANT 3141</td>
<td>The Emergence of Civilizations</td>
</tr>
<tr>
<td>ANT 3142</td>
<td>Old World Prehistory</td>
</tr>
<tr>
<td>ANT 3144</td>
<td>Prehistory of the American Indians</td>
</tr>
<tr>
<td>ANT 4124</td>
<td>Advanced Archaeological Fieldwork</td>
</tr>
<tr>
<td>ANT 4180</td>
<td>Seminar in Laboratory Analyses</td>
</tr>
<tr>
<td>ANT 4930</td>
<td>Selected Topics in Archaeology</td>
</tr>
<tr>
<td>ANT 3462</td>
<td>Medical Anthropology</td>
</tr>
<tr>
<td>ANT 3464</td>
<td>Human Microevolution</td>
</tr>
<tr>
<td>ANT 3512</td>
<td>Biobehavioral Anthropology</td>
</tr>
<tr>
<td>ANT 3552</td>
<td>Primatology</td>
</tr>
<tr>
<td>ANT 2003</td>
<td>General Anthropology (recommended for non-majors)</td>
</tr>
<tr>
<td>ANT 5479</td>
<td>Comparative Cultural Analysis</td>
</tr>
<tr>
<td>ANT 5937</td>
<td>Proseminar in Anthropology</td>
</tr>
</tbody>
</table>
|             | Total Semester Hours Required                    | 120

### SOVIET AREA STUDIES

Five UCF departments, Foreign Languages, History, Political Sciences, Sociology, and, Philosophy and Humanities, have pooled their resources to offer a minor to students interested in Soviet Area Studies a basic and well-rounded background in the field. The philosophy of the program is to offer students a multidisciplinary approach to the subject, so as to allow them to grasp the subject in its complexity and to understand linguistic, cultural, historical, political, and socio-economic interrelationships.

Interested students should register for the minor with Dr. Karl-Heinrich Barsch, Department of Foreign Languages, FA 439 (407) 275-2466. For further information consult any of the above mentioned departments.

### DEPARTMENT OF STATISTICS

**Chair:** TBA, CCII 221, Phone (407) 275-2289  
**Faculty:** Cutchin, A. Dutton, Hoffman, Kazempour, Kheoh, Malone, Richardson, J. Schott, S. Schott, P. Somerville, Wildman-Pope

The Department of Statistics offers courses and programs which lead to a Bachelor of Science in Statistics, a minor in statistics, and a Master of Science in Statistical Computing. (See the Graduate Studies catalog for a description of the M.S. in Statistical Computing.)

The undergraduate programs in statistics are designed to serve (1) students who wish to pursue careers in statistics after having completed a baccalaureate degree; (2) students who wish to continue their education in graduate or professional schools; and (3) students who need to use statistics as tools in their specialty areas.

In order to serve such a wide variety of students, the courses and programs in the Department of Statistics have developed along several lines. There are the usual service courses in elementary statistics along with strong programs in the upper division in statistical methods, statistical theory, and statistical computing.

A limited number of assistantships are available for qualified graduate and undergraduate students.

### MINOR

The Department of Statistics offers a minor (with a minimum of 18 hours). Required Courses: STA 3023 or STA 3032 or equivalent; STA 4163, STA 4164, and one of the following: STA 4222 or STA 4502. A grade of C or higher is required in each course counting toward a minor.

Restricted Electives: Six or more hours from STA courses numbered 3000 or higher.
(Credit from STA 3023 or STA 3032 or the equivalent may not be used as a restricted elective.) All courses except STA 3023 or STA 3032 must be taken from the Department of Statistics at UCF unless substitutes are approved by the Department Standards Committee.

Bachelor of Science: Statistics

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
   (a) All statistics courses except STA 3023, STA 3032, and those protected by the Florida Common Course Numbering system must be taken from the Department of Statistics at UCF. Substitution of other transfer work must be approved by the Department Standards Committee.
   (b) To meet the College of Arts and Sciences requirement for Natural Science majors, a Statistics major must take one course from one group (A or B) and two courses from the other group, with at least one laboratory in each group. Any additional science course in the College of Arts and Sciences of any level or any course in the College of Health numbered 3000 or higher will count as the fourth required course.

   **Group A**
   - BOT 2010C
   - BSC 2010C
   - ZOO 2010C

   **Group B**
   - CHM 2045
   - CHM 2046 and CHM 2046L
   - PHY 3053C
   - PHY 3054C

   (NOTE: If both CHM 2046 and CHM 2046L are taken, they will only count as one course in satisfying the above requirement. CHM 2046L by itself will not count as a course.)
   (c) A grade of "C" or higher is required in all STA courses counting towards a statistics major.
   (d) A 2.0 average or higher is required in all computer science and mathematics courses that count toward a statistics major.

3. Required Courses
   - STA 3023 Statistical Methods I 3 hours
   - STA 4664 Statistical Quality Control 3 hours
   - STA 4102 Computer Processing of Statistical Data 3 hours
   - STA 4163 Statistical Methods II 3 hours
   - STA 4164 Statistical Methods III 3 hours
   - STA 4222 Sample Survey Methods 3 hours
   - STA 4321 Statistical Theory I 3 hours
   - STA 4322 Statistical Theory II 3 hours
   - STA 4502 Nonparametric Statistical Methods 3 hours
   - COT 4500 Numerical Calculus 3 hours
   - COP 2500 Computer Science I 3 hours
   - COP 2501 Computer Science II 3 hours
   - MAC 3311 Calculus with Analytic Geometry I 4 hours
   - MAC 3312 Calculus with Analytic Geometry II 4 hours
   - MAC 3313 Calculus with Analytic Geometry III 4 hours
   - MAS 3103 Linear Algebra 4 hours
   - MAS 3105 Matrices 4 hours
   - COT 3100 Introduction to Discrete Structure 3 hours
   - MHF 2300 Logic and Proof in Mathematics 3 hours
   - ENC 3241 Technical Report Writing 3 hours

4. Restricted Electives
   A minimum of 6 hours selected from upper-division or graduate statistics, mathematics, or computer science courses. (COC 3024; MAC 3233, 3253, 3254; all MAE courses; and MHF 4404 may not be used.)
   Selected courses in engineering may be used but must first be approved by the Statistics Department Standards Committee.

5. Electives
   The number of hours depends on the courses chosen to satisfy university requirements.
   Total Semester Hours Required 120
The Department of Theatre offers the student an opportunity to concentrate in the area of theatre either as preparation for graduate or professional study or as a course of study in the liberal arts.

The major in Theatre offers two separate areas of concentration. Successful completion of the theatre degree is contingent upon the student’s continuing participation in Department productions.

MINOR

The Department of Theatre offers a minor consisting of a minimum of 29 hours, as follows: THE 1020, THE 2071, THE 2925, THE 3370 or THE 3112 or THE 3113, TPA 2210, TPA 3060, or TPP 3310, TPP 2110, DAA 2200 and 6 hours of 3000/4000 level theatre electives.

Bachelor of Arts: Theatre

Degree Requirements

1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses (31 semester hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAA 2200</td>
<td>Dance I</td>
<td>3</td>
</tr>
<tr>
<td>THE 1020</td>
<td>Theatre Survey</td>
<td>3</td>
</tr>
<tr>
<td>THE 2071</td>
<td>Cinema Survey</td>
<td>3</td>
</tr>
<tr>
<td>THE 2925</td>
<td>Theatre Practicum I</td>
<td>2.2</td>
</tr>
<tr>
<td>THE 3112</td>
<td>Theatre History I</td>
<td>3</td>
</tr>
<tr>
<td>THE 3113</td>
<td>Theatre History II</td>
<td>3</td>
</tr>
<tr>
<td>TPA 2210</td>
<td>Technical Theatre Production I</td>
<td>3</td>
</tr>
<tr>
<td>TPA 2204</td>
<td>Technical Theatre Production II</td>
<td>3</td>
</tr>
<tr>
<td>TPP 2110</td>
<td>Acting I</td>
<td>3</td>
</tr>
<tr>
<td>TPP 3310</td>
<td>Directing I</td>
<td>3</td>
</tr>
</tbody>
</table>

AREAS OF CONCENTRATION

Program ‘A’ Performance

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THE 3305</td>
<td>Drama Analysis</td>
<td>3</td>
</tr>
<tr>
<td>THE 3925</td>
<td>Theatre Practicum II</td>
<td>2</td>
</tr>
<tr>
<td>TPP 3111</td>
<td>Acting II</td>
<td>3</td>
</tr>
<tr>
<td>TPP 4150</td>
<td>Scene Study and Character Development</td>
<td>3</td>
</tr>
<tr>
<td>TPP 4260</td>
<td>Acting III</td>
<td>3</td>
</tr>
<tr>
<td>TPP 4311</td>
<td>Directing II</td>
<td>3</td>
</tr>
</tbody>
</table>

Suggested Electives: Theatre and Related Courses: 12 hours

Program ‘B’ Technical Theatre & Design

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THE 3260</td>
<td>Theatrical Costume History and Design</td>
<td>3</td>
</tr>
<tr>
<td>THE 3925</td>
<td>Theatre Practicum II</td>
<td>2</td>
</tr>
<tr>
<td>TPA 3060</td>
<td>Scene Design</td>
<td>3</td>
</tr>
<tr>
<td>TPA 3081</td>
<td>Scene Painting</td>
<td>3</td>
</tr>
<tr>
<td>TPA 3220</td>
<td>Stage Lighting</td>
<td>3</td>
</tr>
<tr>
<td>TPA 3221</td>
<td>Lighting Design</td>
<td>3</td>
</tr>
<tr>
<td>TPA 4061</td>
<td>Advanced Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Suggested Electives: Theatre and Related Courses: 9 hours

4. Restricted Electives
5. Electives—see each program for suggested electives

Total Semester Hours Required: 120
WOMEN'S STUDIES PROGRAM

The Women's Studies program offers an interdisciplinary minor, but not a major. Several departments cooperate in offering the minor, which emphasizes the history and cultural contributions of women and their role in society today. For further information contact Dr. Kathryn Seidel, FA 511, (407) 275-2251.

Required Courses—15 hours chosen from:

- AMH 3560 Women in American History
- ANT 3302 Sex, Gender and Culture
- ARH 4xxx Women and Art in 20th Century America
- LIT 3383 Women in Literature
- PUP 4323 Women and Politics
- SOP 3742 Psychology of Women

Elective Courses (choose one) — 3 hours:

- SYD 3800 Sex Roles in Modern Society
- SYD 4100 The Family

Other courses as approved by the Women's Studies advisor.

PRE-HEALTH PROFESSIONS ADVISEMENT OFFICE

Preprofessional Coordinator: O.M. Berringer, BL 103, Phone (407) 275-2968

The Office of Pre-Health Professions Advisement has been created to operate as a service to all students preparing for and seeking admission to professional schools of dentistry, medicine, osteopathic medicine, optometry, pharmacy, podiatry, and veterinary medicine. The services afforded students through this office are numerous and range from basic advising and counseling in preprofessional matters to providing a Composite Evaluation of students (upon their request) to each professional school to which they desire to apply. However, in order to be considered for a Composite Evaluation, students must have a minimum overall GPA of 2.8 and at least 30 semester hours of typical undergraduate preprofessional courses taken at UCF by the end of the spring semester preceding application to the professional schools, usually between the junior and senior year. Additionally, all preprofessional students are strongly encouraged to affiliate with and participate in the activities of the Preprofessional Medical Society.

PREPROFESSIONAL PLANNING

Preprofessional students should bear in mind that admission to a health professional school is competitive and the best applicants have credentials that significantly exceed stated admission requirements. For this reason, preprofessional students should pay close attention to the characteristics of successful applicants. For example, while many dental and medical schools require only two and three years respectively of college preparation, approximately 91 percent of all pre dental and 95 percent of all pre medical students accepted throughout the nation each year have completed four years of college. Consequently, since pathways such as "premed" do not lead to a degree, each professional student is urged to pursue a degree-granting program not only to become more competitive for admission, but also to prepare for an alternate career in the event admission to a professional school is denied. Any degree-granting program offered by the University may be selected as a major; however, those programs within the sciences will generally lend themselves most adequately to preprofessional preparation due to the nature and content of their curricula. While satisfying degree requirements, students will find in their curricula many courses required for admission to most professional schools. Additionally, prudent use of elective hours in the curricula will permit other appropriate preprofessional courses to be obtained. Most professional schools expect applicants to present at least a B average and to carry a minimum of 15 credit hours each term, with the exception of summer terms.

CURRICULA GUIDELINES

All preprofessional students are strongly encouraged to enroll in SLS 2311, OVERVIEW OF SELECT MEDICAL CAREERS, the first fall semester they are enrolled. This course provides a broad exposure to guest speakers representing the various four-year health professions. In addition, the entire preprofessional process (academic preparation, applica-
tions, prescreening, interviews, admission exams, admissions, scholarships etc.) is explained in depth. Following this awareness, students are prepared to make informed decisions relative to planning their preprofessional studies.

All preprofessional students are required to complete the General Education Program (GEP) plus the following courses (many of which are applicable to the GEP):

- General Biological Sciences, BSC 2010C, ZOO 2010C
- Genetics, PCB 3063 and 3063L
- General Chemistry, CHM 2045, 2046, 2046L
- Organic Chemistry, CHM 3210, 3211, 3211L
- Microbiology, MCB 3013C
- English Composition, ENC 1101, 1102
- Calculus, MAC 3233 (although MAC 3233 is acceptable, the MAC 3311, 3312, sequence is preferable)
- Physics, PHY 3053C, 3054C (although the preceding courses are acceptable, the sequence PHY 3048, 3048L, 3049L, is preferable)
- Statistics, STA 3023

Additional required/strongly recommended courses not common to all preprofessional students are the following:

**Premedical and pre­dental students should take:**
- Cell Physiology, PCB 3023
- Comparative Anatomy, ZOO 3713C
- Embryology, ZOO 4603C
- Histology, ZOO 4753C
- Microbiology, MCB 3203C, and PCB 3233
- Analytical Chemistry, CHM 3121C plus either (or both) Biochemistry, BCH 4053, 4054, or Physical Chemistry, CHM 3410.
- Physics of Scientific Instruments, PHY 3752C.

**Preoptometry students must take**
- General Botany, BOT 2010C
- Microbiology, MCB 3203C and it is strongly recommended they take Human Anatomy and/or Human Physiology, ZOO 3733C, PCB 3703C and Physics of Scientific Instruments, PHY 3752C

**Prepharmacy students must take**
- General Botany, BOT 2010C
- Microbiology, MCB 3203C and it is strongly recommended they take Physics of Scientific Instruments, PHY 3752C; Histology, ZOO 4753C; and Biochemistry, BCH 4053

**Pre­veterinary students must take**
- General Botany, BOT 2010C
- Analytical Chemistry, CHM 3121C
- Microbiology, MCB 3203C

*Animal Science, ASG 3003, and ASG 3402. *These courses to be taken as a transient student at the University of Florida, preferably during the summer following the sophomore year.

Additionally, the UCF courses Histology (ZOO 4753C), Embryology (ZOO 4603C) and Physics of Scientific Instruments (PHY 3752C) are strongly recommended. Biochemistry (BCH 4053) would also be very helpful.

**Electives:**

All preprofessional students are strongly encouraged to make prudent selections of elective courses complementary to their preprofessional preparation. Listed below are a number of appropriate courses from which elective selections can be made.

- Accountancy: (ACG 2001 and 2011) or ACG 3023.
- Biochemistry: BCH 4053.
- Communication: SPC 3301 or 4330.
- Health Sciences: APB 3600; HSC 3122; 3110; 4411; SPA 3001.
- Human Anatomy: ZOO 3733C.
- Literature: LIT 2110 and 2120.
- Management: GEB 3004.
- Philosophy: PHI 3600; 3630.
- Political Science: PUP 4602.
ADMISSIONS EXAMINATIONS

Various standardized examinations are required of applicants as a part of the admissions process to the professional schools [dentistry-DAT; medicine-MCAT; optometry-OCAT; pharmacy-PCAT; podiatry-MCAT; veterinary medicine-GRE or VAT]. These examinations are generally offered twice each year: in the spring and fall. Preprofessional students are advised to take the appropriate examination in the spring preceding application to the professional school rather than waiting for the fall examination.

There are numerous support systems available for review. All applicants are encouraged to thoroughly prepare before registering to take the exam the first time.

RELATED REFERENCES

Publications of special interest and usefulness to preprofessional students include the following:

1. *Admission Requirements of U.S. and Canadian Dental Schools*, published by the American Association of Dental Schools, 1625 Massachusetts Avenue, N.W., Washington, D.C. 20036;
2. *Medical School Admission Requirements, United States and Canada*, published by the Association of American Medical Colleges; One Dupont Circle, N.W., Washington, D.C. 20036;
4. *Information for Applicants to Schools and Colleges of Optometry*, published by the Association of Schools and Colleges of Optometry; 213 East Ohio Street, Chicago, Illinois 60611;
5. *Pharmacy School Admission Requirements*, published by the American Association of Colleges of Pharmacy; 1730 "M" Street, N.W., Washington, D.C. 20036;
7. *Veterinary Medicine, A Career Of Choices: A Handbook for advisors*, prepared by the Office of Student Affairs and Admissions, New York State College of Veterinary Medicine, Cornell University, Ithaca, New York 14853.

Preprofessional students are encouraged to obtain a copy of the admissions publication appropriate to their preprofessional area. Several of these publications are available in the University bookstore. Examination copies are available in the Pre-Health Professions Advisement Office, BL 103.

Other Health Professions

For Nursing and other Allied Health Services, see College of Health.
COLLEGE OF BUSINESS ADMINISTRATION

UNDERGRADUATE PROGRAMS
Accounting (BSBA)
Economics (BSBA)
Finance (BSBA)
General Business Administration (BSBA)
Management (BSBA)
Marketing (BSBA)

GRADUATE PROGRAMS*
Accounting (MS)
Applied Economics (MA)
Business Administration (MBA, Ph.D.)
Concentrations in Accounting and Finance (Ph.D.)
Taxation (MS)

*See the Graduate catalog for information.
The goal of the College of Business Administration is to prepare students for entry into professional positions in business and government. The various programs of study offered by the College are designed to assist students in obtaining a sound academic preparation for the career of their choice and to become a valuable member of society. All undergraduate and graduate programs are accredited by the American Assembly of Collegiate Schools of Business (AACSB).

Admission to the University of Central Florida does not imply admission to the College of Business Administration. Students will only be allowed to enroll in the 3000/4000 level courses taught by the College of Business Administration after they have been admitted to the College.

Admission to the College will be granted when the following are complete:

a. Completion of the University General Education program.

b. Completion of the basic ACG 2001, ACG 2011, or ACG 2023, ECO 2013, ECO 2023, ENC 1101, ENC 1102, MAC 1104, STA 3023, CGS 3000, with a minimum grade of "C".

c. Achieved a minimum grade point average of 2.5 overall at the completion of at least sixty hours of course work.

Students who otherwise meet the University admission requirements, such as entering freshmen and transfer students, will be placed in a Business Administration pending category until they meet the requirements set forth above. Grades of "D" will not transfer into the program. Each student should attend orientation for academic advising and should meet with an academic advisor in the College to outline a program of study.

The degree Bachelor of Science in Business Administration with the following majors is offered by the College of Business Administration:

- Accounting
- Economics
- Finance
- General Business Administration
- Management
- Marketing

Common Body of Knowledge

The following common course work, required of all majors, provides a foundation in the major areas of business administration.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2001</td>
<td>Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2XXX</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACG 2023</td>
<td>Principles of Accounting I &amp; II</td>
<td>6</td>
</tr>
<tr>
<td>ECO 2013</td>
<td>Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>ECO 2023</td>
<td>Principles of Economics II</td>
<td>3</td>
</tr>
<tr>
<td>BUL 3111</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>ENC 3210</td>
<td>Business Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>MAC 3233</td>
<td>Concepts of Calculus</td>
<td>3</td>
</tr>
<tr>
<td>STA 3023</td>
<td>Statistical Methods I</td>
<td>3</td>
</tr>
<tr>
<td>ECO 3411</td>
<td>Quant. Methods &amp; Bus. Decisional Anal.</td>
<td>3</td>
</tr>
<tr>
<td>CGS 3000</td>
<td>Comp. Fund. for Business App.</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3403</td>
<td>Business Finance</td>
<td>3</td>
</tr>
<tr>
<td>MAN 3025</td>
<td>Management of Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MAR 3023</td>
<td>Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MAN 3504</td>
<td>Production/Operations Management</td>
<td>3</td>
</tr>
</tbody>
</table>
GEB 4351 Business in the International Environment 3 hours
MAN 4720 Business Policies 3 hours

Students in the College of Business Administration cannot receive credit for the following courses: GEB 3004, and FIN 3100.

Grade Point Average Requirements
For graduation the student must have maintained a minimum 2.0 GPA in coursework taken in the College of Business Administration and a minimum 2.0 GPA in the course work required in the major, except in accounting and finance where a “C” or better is required in each course.

Student Load
A student who is enrolled in 15 semester hours of course work is considered to be carrying a normal academic load. Students desiring to take more than 15 hours of course work in the College of Business Administration must obtain permission from the college.

Community/Junior College Transfers
Community/Junior College students who plan to transfer to the College of Business Administration are advised to:
1. Complete the entire university-parallel program at the Community/Junior College (the Associate of Arts Degree) including:
   A. the general education requirements prescribed by the Community/Junior College.
   B. the one-year accounting and economics sequences (sophomore years).
   C. a course in College Algebra
2. Professional courses should not be taken at a community/junior college in the areas of Management, Marketing, Real Estate, or Finance. These professional areas are third and fourth year course areas in the College of Business Administration and cannot be satisfied with community/junior college courses.

Minor (Restricted to Business Majors)
The College of Business Administration offers a minor consisting of 24 semester hours. (Nine semester hours of upper division business courses must be completed at UCF.)
Required Courses: GEB 4351, ECO 3702, FIN 4624, MAN 4600, MAR 4243; Electives: 6 hours of the following courses - ACG 5255, ANT 3410, ECS 4003, ECS 4013, GEO 3470, INR 4035, INR 4401, INR 4224, INR 4243, INR 4274; Special Topics Seminars in International Business; 3000/4000 level foreign language course.

Minor (Restricted to Non-Business Majors)
The College of Business Administration offers a minor consisting of 24 semester hours. (Nine semester hours of upper division business courses must be completed at UCF.) Students are required to earn a “C” or better in each course.
Required courses: ACG 2001, 2011, or ACG 2023; ECO 2023, 2013; FIN 3403; MAN 3025; MAR 3023; one 3000/4000 level business course elective. A GPA of 2.0 is required for these courses. GEB 3004 may not be used as the business course elective. Nine (9) semester hours may be taken at UCF.

SCHOOL OF ACCOUNTING
Director: H. Anderson, CBA 437, Phone (407) 275-2871
Assistant to the Director: L. Mahoney, CBA 438, Phone (407) 281-5089

OBJECTIVES OF ACCOUNTING PROGRAMS
The objective of the baccalaureate program with a concentration in accounting is to provide basic conceptual accounting and business knowledge as a foundation for accounting career development.
Special qualifications for satisfying this program’s requirements are:
   a. A minimum grade of “C” must be earned in each accounting and tax course completed. Principles of Accounting and Principles of Managerial Accounting are included under this rule.
b. A transfer student to this program must:

(1) take a minimum of twelve (12) semester hours in accounting at UCF as approved by the director of the School of Accounting.

(2) have credit for a course in each of the following areas:
   a. English communication arts including written composition
   b. Oral expression
   c. Behavioral sciences such as psychology, anthropology, and sociology
   d. Humanities
   e. Political and legal environment of business and society such as political science, public administration, and ethics.

Bachelor of Science in Business Administration: Accounting

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses
   a. Business College Common Body of Knowledge*
   b. ACG 3103 Financial Accounting I 3 hours
      ACG 3113 Financial Accounting II 3 hours
      ACG 3361 Cost Accounting I 3 hours
      ACG 3501 Financial Accounting for Governmental and Nonprofit Organizations 3 hours
      ACG 4401 Accounting Information Systems I 3 hours
      TAX 4001 Federal Income Tax I 3 hours
      ACG 4123 Financial Accounting III 3 hours
      ACG 4203 Financial Accounting IV 3 hours
      ACG 4651 Auditing 3 hours
      BUL 3112 Business Law I 3 hours
      BUL 3121 Business Law II** 3 hours

4. Electives: As necessary to result in 120 total credit hours.
   Total Semester Hours Required 120

*Except BUL 3111, Legal Environment of Business, which is satisfied by taking BUL I & II.

**Transferable only from senior academic institutions.

CPA EXAMINATION REQUIREMENTS
Effective August 31, 1983, Florida Law states that to qualify to sit for the CPA exam, one must possess thirty (30) additional semester hours of credit beyond the requirements for the baccalaureate degree. In addition to this overall educational requirement, the following specific criteria also apply:
   36 hours in accounting beyond elementary, including at least:
   12 hours in financial and cost accounting
   6 hours in auditing and internal auditing
   6 hours in tax

AND

39 hours in general business, including at least six hours of business law. Because of these increased educational requirements, no experience or additional course work is needed for certification.

To satisfy the necessary coursework required by the law, the School of Accounting offers the Master of Science in Accounting (MSA) and the Master of Science in Taxation (MST) degree programs. Please see the graduate catalog for program requirements.

DEPARTMENT OF ECONOMICS

Chair: W. McHone, CBA 318, Phone (407) 275-5549
Faculty: Braun, Day, Fritz, Gibbs, Hofler, D. Hosni, Joseph, Kilbride, Martin, McHone, Pennington, Raffa, Rungeling, White, Xander

The Department of Economics participates in two undergraduate degree programs: a B.S.B.A. degree in the College of Business Administration and a B.A. degree in the College of Arts and Sciences. The purpose of the College of Business Administration economics
major is to provide students with a professional business background that prepares them for careers in private business and government. The purpose of the economics major in the College of Arts and Sciences is to provide a broad-based liberal arts background that can serve as a strong foundation for future graduate studies in law, social sciences, and other fields or as training for careers in politics, teaching, research, social service, and other areas. The goal of both programs is to enable students to better understand the economic and non-economic issues that are confronted in their jobs and their private lives and to provide the analytical skills that will allow them to resolve these issues. Students interested in a B.A. in Economics should refer to the Economics Major in the College of Arts and Sciences.

MINOR (In Economics for Non-Business Administration majors)
Required Courses: ECO 3101, 3203, 3411. These requirements are in addition to the prerequisites ECO 2013 and 2023.
Elective Courses: Three courses from the following: ECO 3703, 4224, 4303, 4412, 4504; ECP 3203, 3424, 3433, 4403, 4603, 4703; ECS 4003, 4013.

Bachelor of Science in Business Administration: Economics
Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses
   a. Business College Common Body of Knowledge
   b. ECO 3101 Intermediate Price Theory 3 hours
      ECO 3203 Aggregate Economic Conditions Analysis 3 hours
4. Restricted Electives
   All economics majors will be required to take five (5) electives from the following for a total of twenty-one (21) hours beyond the Common Body of Knowledge.
   ECO 3XXX Money and Banking 3 hours
   ECO 3703 International Economics 3 hours
   ECO 4224 Money: Issues and Analysis 3 hours
   ECO 4303 History of Economic Thought 3 hours
   ECO 4412 Economic Statistics and Econometrics 3 hours
   ECO 4504 Economics of the Public Sector 3 hours
   ECP 3203 Contemporary Labor Economics 3 hours
   ECP 3424 The Economics of Regulated Industries 3 hours
   ECP 3433 Transportation Economics 3 hours
   ECP 4403 Business, Government & Industrial Organization 3 hours
   ECP 4603 Urban and Regional Economic Problems 3 hours
   ECP 4703 Managerial Economics 3 hours
   ECS 4003 Comparative Economic Systems 3 hours
   ECS 4013 Economic Development 3 hours
5. Electives
   Total Semester Hours Required 120

DEPARTMENT OF FINANCE
Chair: R. J. Clayton, CBA 420, Phone (407) 281-5567
Faculty: Atkinson, Cheney, Graham, Hsueh, Klock, H. Lewis, Liu, McQuillen, Modani, Neustel, Park, Reiff, Scott, Spudeck, Weaver

The Finance Major Curriculum consists of a total of 27 semester hours. Students are required to earn a grade of "C" or better in FIN 3403 and all other classes taken toward the major.

The program in finance is designed to provide the student with broad knowledge in finance, including business finance, investments, financial institutions, risk management and insurance, and real estate. The program provides the student with the theoretical background and tools of analysis required for making effective financial decisions.
The study of finance prepares the student for careers in business financial management. Students that major in finance are sought by both financial and non-financial firms.

**Bachelor of Science in Business Administration: Finance**

**Special Requirements**

Students majoring in finance must earn a grade of "C" or better in all classes in their major. FIN 3403 is included in this requirement. FIN 3403 Business Finance, is prerequisite to all finance courses. FIN 3XXX Financial Markets, FIN 3XXX Intermediate Corporate Finance, FIN 3453 Financial Models, and FIN 3502 Investment Analysis are prerequisites to all other finance, risk management and insurance, and real estate courses.

**Degree Requirements:**

1. See Undergraduate Degree Requirements.
2. See special college and/or department requirements.
3. Required Courses.
   b. FIN 3XXX Financial Markets 3 hours
      FIN 3XXX Intermediate Corporate Finance 3 hours
      FIN 3453 Financial Models 3 hours
      FIN 3502 Investments 3 hours
   c. Select two of the following:
      FIN 4324 Management of Financial Institutions 3 hours
      FIN 4520 Portfolio Analysis and Management 3 hours
      FIN 4XXX Speculative Financial Markets 3 hours
      FIN 4624 International Financial Management 3 hours
      FIN 4XXX Advanced Topics in Financial Management 3 hours
      REE 4303 Real Estate Investment Analysis 3 hours
4. Restricted Electives
   a. Select three of the following:
      ACG 3103 Financial Accounting I 3 hours
      ACG 3113 Financial Accounting II 3 hours
      ACG 3361 Cost Accounting 3 hours
      ACG 3401 Accounting Information Systems 3 hours
      ACG 4123 Financial Accounting III 3 hours
      BUL 3301 Property Law 3 hours
      CGS 3100 Business Applications Programming 3 hours
      COP 3120 Programming in COBOL 3 hours
      ECO 4412 Economic Statistics and Econometrics 3 hours
      ECP 4403 Business, Government, and Industrial Organizations 3 hours
      ECP 4603 Urban and Regional Economic Problems 3 hours
      ECP 4703 Managerial Economics 3 hours
      EGN 4634 Operations Research 3 hours
      FIN 4127 Employee Benefits and Retirement Planning 3 hours
      FIN 4324 Management of Financial Institutions 3 hours
      FIN 4520 Portfolio Analysis and Management 3 hours
      FIN 4XXX Speculative Financial Markets 3 hours
      FIN 4624 International Financial Management 3 hours
      FIN 4XXX Advanced Topics in Financial Management 3 hours
      LEA 3201 Property and Real Estate Law 3 hours
      LEA 4204 Land Use and Environmental Law 3 hours
      LEA 4207 Landlord and Tenant Law 3 hours
      LEA 4211 Estates and Trusts 3 hours
      MAC 3311 Calculus with Analytic Geometry I 3 hours
      MAC 3312 Calculus with Analytic Geometry II 3 hours
      MAC 3313 Calculus with Analytic Geometry III 3 hours
      REE 4303 Real Estate Investment Analysis 3 hours
      REE 4103 Real Estate Appraisal 3 hours
GENERAL BUSINESS ADMINISTRATION

This option allows students to develop a general program of study which will satisfy career objectives not provided for by the specialized areas of concentration. To pursue this option, students must make application through the office of the Assistant Dean of the College of Business Administration. An academic advisor will be assigned to assist each student in developing a meaningful program of study.

Bachelor of Science in Business Administration: General Business Administration

Degree Requirements
1. Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses
   a. Business College Common Body of Knowledge
   b. One (1) additional course beyond the Common Body of Knowledge in Finance (FIN prefix) and Marketing (MAR prefix) (one course from each discipline).
4. Restricted Electives
   A minimum of six (6) additional courses from at least three (3) different departments (Accounting, Economics, Finance, Management, Marketing) taught in the College of Business Administration.
5. Electives

Total Semester Hours Required 120

DEPARTMENT OF MANAGEMENT

Chair: H. Jones, CBA 335, Phone (407) 275-2679

Faculty: Altman, Berry, Bogumil, Burnette, Callarman, Eubanks, Fandt, Fernald, Goodman, Huseman, Leigh, P. Lewis, Martin, McCartney, Ragusa, Rosenkrantz, Stevens

The study of management includes an investigation into the processes and techniques of leadership, planning, staffing, and controlling of both small and complex organizations.

Course offerings are designed to show how technological factors, the framework for decision-making, and the human contributions have impact on productivity, satisfaction of job-related needs, and effectiveness of actual organization.

A student majoring in management may find a wide variety of career opportunities in business, industry, or government.

Bachelor of Science in Business Administration: Management

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses (Students are required to take the two required Management electives and five other courses from the designated Management options.)
   a. Business College Common Body of Knowledge
   b. ISM 3011 Management Information Systems 3 hours
      MAN 4240 Organization Theory and Behavior 3 hours
4. Restricted Electives (Select a minimum of five courses)
   (The major should select one of the following concentration areas and take the designated five courses.)
a. Human Resource Management

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAN 3301</td>
<td>Personnel Management</td>
<td>3</td>
</tr>
<tr>
<td>MAN 4150</td>
<td>Human Relations in Management</td>
<td>3</td>
</tr>
<tr>
<td>MAN 4310</td>
<td>Personnel Management Issues</td>
<td>3</td>
</tr>
<tr>
<td>MAN 4350</td>
<td>Training and Development</td>
<td>3</td>
</tr>
<tr>
<td>MAN 4401</td>
<td>Labor Relations Management</td>
<td>3</td>
</tr>
</tbody>
</table>

b. Management Information Systems

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHI 3130</td>
<td>Formal Logic I</td>
<td>3</td>
</tr>
<tr>
<td>ISM 4212</td>
<td>Data Base Management Systems</td>
<td>3</td>
</tr>
<tr>
<td>ISM 4113</td>
<td>Information Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>ISM 4130</td>
<td>Implementation Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ISM 4090</td>
<td>Seminar in Management Information Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

c. Production/Operational Management

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAN 4420</td>
<td>Management of Service Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MAN 4521</td>
<td>Production Planning and Control</td>
<td>3</td>
</tr>
<tr>
<td>MAN 4590</td>
<td>Procurement Management</td>
<td>3</td>
</tr>
<tr>
<td>MAN 4854</td>
<td>Management Science</td>
<td>3</td>
</tr>
<tr>
<td>MAN 4595</td>
<td>Automated Materials Planning</td>
<td>3</td>
</tr>
</tbody>
</table>

d. General Management

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAN 4120</td>
<td>Business and Society</td>
<td>3</td>
</tr>
<tr>
<td>MAN 4800</td>
<td>International Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Three additional MAN or ISM courses 9 hours

5. Electives

Total Semester Hours Required 120

DEPARTMENT OF MARKETING

Acting Chair: (D. Davis), CBA 317, Phone (407) 275-2108
Faculty: Davis, Fuller, Gillett, Jarvis, Morris, Patton, Paul, Rubin, Teeple

Marketing encompasses the total system of interacting business activities designed to plan, price, promote, and distribute products and services to customers.

The marketing curriculum concentrates on developing the student's ability to understand, interpret, and measure market demand and to understand the blending of product, pricing strategies, promotional strategies, and distribution.
Bachelor of Science in Business Administration: Marketing

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements

3. Required Courses
   a. Business College Common Body of Knowledge
   b. MAR 3503 Consumer Market Behavior 3 hours
      MAR 3613 Marketing Research 3 hours
      MAR 3823 Marketing Management 3 hours
      MAR 4803 Marketing Strategy 3 hours

4. Restricted Electives
   Minimum of 3 courses
   MAR 3323 Advertising and Promotion Management 3 hours
   MAR 3403 Sales Management 3 hours
   MAR 4823 Product Management 3 hours
   MAR 4231 Retail Management 3 hours
   MAR 4203 Marketing Channel Systems 3 hours
   MAR 4156 International Marketing 3 hours
   MAR 4453 Industrial Marketing 3 hours
   MAR 4071 Contemporary Marketing Issues 3 hours
   MAR 4848 Services Marketing 3 hours

5. Electives

Total Semester Hours Required 120

Majors who meet departmental criteria are also eligible to apply for a marketing internship (MAR 4941) or the small business consulting class (MAR 5941), each of which is assigned three hours of elective credit. However, neither of these two courses can be counted as one of the restricted electives required of marketing majors.
UNDERGRADUATE PROGRAMS
Art Education (BS)
Elementary Education (BS)
English Language Arts Education (BS)
Exceptional Child (BS)
Foreign Language Education (BS)
Mathematics Education (BS)
Physical Education (BS)
Science Education (BS)
Social Science Education (BS)
Vocational Education and Industry Training (BS)

GRADUATE PROGRAMS*

Masters Programs
Business Education (M.Ed.)
Counselor Education (MA, M.Ed)
Educational Leadership (MA, M.Ed)
Educational Media (M.Ed)
Elementary Education (MA, M.Ed)
English Language Arts Education (MA, M.Ed)
Exceptional Child (MA, M.Ed)
Instructional Systems (MA)
Instructional Technology (MA, M.Ed)
Mathematics Education (MA, M.Ed)
Music Education (M.Ed)
Physical Education (MA, M.Ed)
Reading Specialist (M.Ed)
School Psychology (Ed.S)
Science Education (MA, M.Ed)
Social Science Education (MA, M.Ed)
Vocational Education (MA, M.Ed)

Doctoral and Specialist Programs
Administration & Supervision (Ed.S, Ed.D)
Curriculum and Instruction (Ed.S, Ed.D)
Educational Leadership (Ed.S, Ed.D)
School Psychology (Ed.S)

*See the Graduate catalog for information.
The role of the College of Education at the undergraduate level is to prepare students for careers as elementary, secondary, exceptional, physical, and vocational education teachers. The program of studies includes three components: general education, a subject matter specialization(s), and a teacher education component that addresses the professional knowledge and practical experience future teachers need in order to successfully teach children and youth in public school or private school settings.

The College of Education offers Bachelor of Science degrees with the following majors:

- Art Education
- Elementary Education
- English Language Arts Education
- Exceptional Child Education
- Foreign Language Education
- Mathematics Education
- Physical Education
- Science Education
- Social Science Education
- Vocational Education and Industry Training

Admission to Teacher Education

Admission to the University as a degree-seeking student in the College of Education does not constitute admission to the professional teacher education program. Applicants who have not been granted an A.A. degree from an approved Florida community college or state university must successfully complete the University General Education sequence. In addition, all students are required to complete SPC 1014, MAC 1104, or MGF 1203, STA 2014 and PSY 2013 prior to admission (this requirement is suspended for students admitted under either the 1988-89 or 1989-90 catalog). Admission normally occurs during the junior year. Applicants must meet any special departmental requirements in addition to the following College requirements:

- Present passing scores on all parts of the College Level Academic Skills Test (CLAST).
- Present a score at or above the 40th percentile on the ACT or SAT.
- Present an overall G.P.A. of 2.5 and meet general University freshman or transfer student requirements.
- Achieve a "C" or better grade in EDG 4321, Teaching Strategies, including successful completion of the tutorial component or equivalent.
- Complete a formal application for admission to a particular teacher education program.
- Be recommended by the faculty of the department of the student's major.

The department of the applicant's major and/or the College Undergraduate Standards and Curriculum Committee may request an interview as part of the application process. The College of Education reserves the right to deny admission to or terminate an admitted student from the program if the College judges the applicant's fitness to work with children and/or youth as unacceptable, based on the standards outlined in the Code of Ethics of the Education Profession In Florida (6B-1 Florida State Board of Education Administrative Rules).

Non-Degree Program (Certification Only)

Students who have earned a Baccalaureate degree from an accredited institution may pursue completion of professional requirements for teacher certification as post-baccaulaureate students. Students must meet regular admission requirements for the teacher education program and possess a 2.50 undergraduate G.P.A. in courses applicable to their teaching
specialization. Interested students are advised to contact the Office of Records College of Education, ED 115, for information and advising.

Teacher Education Curriculum

The professional teacher education curriculum is designed to provide students the opportunity to develop the professional knowledge, understandings, and competencies required for entry into the profession of teaching. Particular attention is given in the curriculum to the following:

- knowledge and understanding of the growth and development of children and youth
- knowledge and understanding of how children and youth learn
- knowledge and skills for accurately assessing and evaluating student performance
- knowledge and understanding of the role and function of schools and teachers in a free society to design educational teaching objectives
- ability to plan and implement effective teaching strategies
- ability to utilize computers and other forms of technology in teaching
- ability to work with culturally diverse populations

Common Body of Professional Knowledge

Department of Educational Foundations, ED 243, Phone (407) 275-2427

The following course work provides the foundation of professional knowledge and understanding and is required of all majors:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDG 4321</td>
<td>Teaching Strategies</td>
<td>4</td>
</tr>
<tr>
<td>EDF 4282</td>
<td>Application of Technology in Education</td>
<td>3</td>
</tr>
<tr>
<td>EDG 4324</td>
<td>Teaching in the Schools</td>
<td>3</td>
</tr>
<tr>
<td>EDF 3603</td>
<td>Analysis of Educational Foundations</td>
<td>3</td>
</tr>
<tr>
<td>EDF 4214</td>
<td>Classroom Learning Principles</td>
<td>3</td>
</tr>
</tbody>
</table>

Student Internships

Assistant Dean: J. H. Armstrong, ED 115, Phone (407) 275-2436
Director: H. Hall, ED 158, Phone (407) 281-5788

The internship components of the professional program include early and continuous field experiences which provide students opportunities to develop skills and instructional competence. The internship program provides students a broad range of instructional experiences in various school settings which are developed through cooperative planning with local school administrators and teachers.

Field experience is an integral part of every degree program and consists of a junior and senior-year student teaching requirement. Placement of students is the responsibility of the College of Education. Students are placed in public schools that have been approved as Student Internship Centers.

Junior Student Internships

Assistant Dean: J. H. Armstrong, ED 115, Phone (407) 275-2436
Director: H. Hall, ED 158, Phone (407) 281-5788

Junior student teaching is a six semester hours credit experience. Students are assigned to work with certified supervising teachers under the direction of a College faculty coordinator. The junior student teaching program provides the student experiences at different grade levels and classroom settings for the purpose of developing specific instructional skills and knowledge and understanding of schooling. Students are enrolled in related professional courses during the junior student teaching experience.

Admission to junior student teaching is restricted to those students who are admitted to the teacher education program. Applicants must have a 2.5 G.P.A., as of the date of application. Application is made through the Office of Student Internships (ED 115, Phone (407) 275-2436).

Deadlines are as follows:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Semester</td>
<td>February 15 (preceding semester)</td>
</tr>
<tr>
<td>Spring Semester</td>
<td>September 15 (preceding semester)</td>
</tr>
</tbody>
</table>
Senior Student Teaching
Assistant Dean: J. H. Armstrong, Room 115, Phone 275-2436
Director: H. Hall, Room 158, Phone 281-5788

Senior student teaching is a twelve-hour experience normally completed during the student’s last semester. The student is placed in an approved school internship center under a supervising teacher and College coordinator. Students are expected to develop and execute instructional plans and to demonstrate the competencies required for temporary certification. The senior internship is considered a full-time experience, and students are encouraged not to register for other classes.

Admission to Senior Student Teaching requires that the student has successfully completed requirements of junior student teaching and possesses at the time of application, a 2.5 G.P.A. in the area of content specialization, a 2.5 G.P.A. in the professional education sequence, and a 2.5 G.P.A. overall. Students must also be approved for admission by the faculty in the department of the student’s major.

Application is made through the office of Student Internships. Application deadlines are as follows:
- Fall Semester: September 15 (preceding semester)
- Spring Semester: February 15 (preceding semester)

Graduation Requirements for a Two-Year Temporary Certificate

To qualify for graduation, a student must have a 2.5 G.P.A. in all course work, a 2.5 G.P.A. in the area of content specialization, and a 2.5 G.P.A. in the professional course sequence. All College of Education undergraduate curricula fulfill State of Florida academic requirements for a temporary certificate. College of Education graduates who desire to teach outside Florida must meet certification requirements of the state in which they intend to seek a teaching position and should contact the appropriate Director of Teacher Education, State Department of Education for specific requirements.

All applicants for the Professional Teaching Certificate must demonstrate satisfactory completion of the Florida Beginning Teacher Program requirements and pass the College Level Academic Skills Test (CLAST), the professional education examination, and a specialization test in their certification area.

DEPARTMENT OF EDUCATIONAL FOUNDATIONS
Chair: Alexander T. Wood, ED 243, Phone (407) 275-2428
Faculty: Professors: Cowgill, Dziuban, Eser, Kysilka, Lange, Manning
Associate Professors: Beadle, Blume, Harrow, Hiett, Hoover, McLain, Miller, Olson, Sciortino, Sullivan
Assistant Professors: Biramiah, Holt, Ikpa
Instructors: Ericson, Hutchinson.

The Department of Educational Foundations teaches the core of professional courses that address the competencies and skills needed by all teachers. Foundation courses are also available for students pursuing graduate degrees in teacher education.

DEPARTMENT OF EDUCATIONAL SERVICES
Chair: David J. Mealor, ED 318, Phone (407) 275-2596
Faculty: Professors: Bozeman, Hernandez, Johnson, Lynn, Miller, Rothberg
Associate Professors: Baumbach, Bollet, Cornell, Driscoll, Orwig, Tubbs
Assistant Professors: Balado, Barron, Daly, Reitzug

The focus of the Department of Educational Services is to provide training for specialists in school and non-school environments. Certification programs and masters level (M.A. or M.Ed.) graduate programs are available in Counselor Education, Educational Leadership, and Instructional Technology. The Educational Specialist (Ed.S) is offered in Educational Leadership and School Psychology. The Doctor of Education (Ed.D) degree is offered in Educational Leadership.
DEPARTMENT OF EXCEPTIONAL AND PHYSICAL EDUCATION

Chair: Michael W. Churton, ED 214 Phone (407) 275-2401
Faculty: Professors: Midgett, Olson, Rohter.
Associate Professors: Gergley, Higginbotham, Miller, Platt, Powell.
Assistant Professors: Bell, Clark, Martin, Renner.
Instructors: Mitchell

Undergraduate academic major programs leading to bachelor's degrees and certification are offered in Exceptional Education and Physical Education. The Exceptional Education program includes specialties in: (a) emotionally handicapped; (b) mentally retarded and (c) specific learning disabilities. The Physical Education program includes specialties in: (a) K-8 and (b) 6-12. In addition, minors, certification programs, and masters graduate programs are available. Students are responsible for completion of program requirements and are encouraged to review their program with an assigned advisor.

Bachelor of Science: Exceptional Child Education

1. Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required courses

Specialization

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED 3012</td>
<td>Foundations of Reading</td>
<td>3</td>
</tr>
<tr>
<td>RED 4519</td>
<td>Diag and Corrective Reading Strategies</td>
<td>3</td>
</tr>
<tr>
<td>EEX 3241</td>
<td>Methods for Academic Skills for Exceptional Students</td>
<td>4</td>
</tr>
<tr>
<td>MAE 3112</td>
<td>Instruction of Math in the Elementary School</td>
<td>4</td>
</tr>
<tr>
<td>PET 4601</td>
<td>Motor Development: Habilitation &amp; Remediation for Exceptional Students</td>
<td>3</td>
</tr>
<tr>
<td>EEX 3010</td>
<td>Orientation to Special Education</td>
<td>3</td>
</tr>
<tr>
<td>EEX 3102</td>
<td>Language Development and Common Disorders</td>
<td>3</td>
</tr>
</tbody>
</table>

147
EEX 3221 Assessment of Exceptional Learners 3 hours
EEX 4601 Behavioral Management 3 hours
EEX 3263 Arts and Sciences for Exceptional Students 4 hours
EEX 4243 Techniques for the Exceptional
  Adolescent-Adult 3 hours
EED 4011 Introduction to the Emotionally Disturbed 4 hours
or
EED 4212 Curriculum and Program Adaptations, E.H. 4 hours
ELD 4011 Introduction to Specific Learning Disabilities 4 hours
or
ELD 4242 Program Planning for Specific Learning Disabilities 4 hours
EMR 4011 Introduction to the Mental Retardation 4 hours
or
EMR 4372 Curriculum Method and Materials for Retarded Persons 4 hours

4. Restricted Electives
None

Minimum Total Semester Hours Required 120

Bachelor of Science: Physical Education
1. Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses
   Specialization
   I. Physical Education (K-12)
   PET 4640 Adapted Physical Education 3 hours
   PET 4401 Organization & Administration of Typical/Atypical PE Programs 3 hours
   PEO 3011 I/A Team Sports 3 hours
4. Special Methods
   PET 3461C Teaching Physical Education in the Elementary School 2 hours
   PET 3465C Physical Education in the Secondary School 2 hours
   PET 4351 Physiology & Human Performance 3 hours
   PET 4622 Human Injuries 3 hours
   PET 4312 Biomechanics 3 hours
   PET 4382 Fitness Assessment & Exercise Intervention 3 hours
   PEP 3201 Gymnastics 3 hours
   PET 4035 Motor Development & Learning 3 hours
   DAE 3370 Dance & Rhythmics 3 hours
   PET 3041 Games for the Elementary School PE Program 3 hours
   RED 3012 Basic Foundations of Reading 3 hours
   or
   LAE 4314 Language Arts in the Elementary School 3 hours
   MUE 3210 Music in the Elementary School 3 hours
   or
   ARE 4313 Art in the Elementary School 3 hours
   PET 3125 History of Sports and Physical Education 3 hours
   PET 3453 Coaching and Officiating 3 hours
   PEO 3031 Individual Sport Activities 3 hours
5. Restricted Electives
None
6. Electives
None

Minimum Total Semester Hours Required 120
Elementary Education

The career Elementary Education program is planned for students interested in the education of children, six through twelve years of age. Students who major in elementary education are qualified to teach grades one through six upon graduation and receipt of a Florida teaching certificate.

An elementary education major must have the following preparation: (1) a broad general education; (2) a specialized knowledge of content, techniques, and materials needed to teach different elementary school subjects such as art, language arts, reading, mathematics, music, physical education, science and social studies; and (3) professional study which includes planned laboratory activities with children in schools identified as Teacher Education Centers.

Early Childhood Education (nursery and kindergarten). In combination with preparation to teach grades one through six, requirements may be met for preparation/certification to teach Kindergarten.

Secondary Education

Career programs are available for prospective teachers who have an interest in working with adolescent students in a specific academic area at the middle, junior, or high school levels. Specializations are available in Biology, Business, Chemistry, English, Foreign Language, Mathematics, Physics, and Social Science.

Art/Music

Two programs are designed to prepare specialists to teach at both the elementary and secondary levels (K-12). A major in Art Education is available for students with an interest in art. The Bachelor’s degree program in Music Education is located in the Department of Music with the Department of Instructional Programs responsible for professional requirements.

Vocational Education and Training Development

The vocational education degree is for individuals in Business/Office Occupations, Industrial/Technical areas or selected Health Occupations who wish to teach their specialization in secondary or post-secondary schools. To be eligible for the degree, students must have worked full time in the occupation for at least two years and must demonstrate competence through an examination or licensure in the area in which they wish to teach. A maximum of 30 semester hours of credit by examination or credit granted through licensing may count toward the degree.

The Training Development Track is designed for individuals who are or who plan to be trainers in business, industry, or health care facilities. This option will not prepare individuals to meet Florida Teacher Certification requirements.

Bachelor of Science: Art Education

Degree Requirements
1. Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses

Specialization

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 2201C</td>
<td>Design Fundamentals I</td>
<td>3</td>
</tr>
<tr>
<td>ART 2202C</td>
<td>Design Fundamentals II</td>
<td>3</td>
</tr>
<tr>
<td>ART 2300C</td>
<td>Drawing Fundamentals I</td>
<td>3</td>
</tr>
<tr>
<td>ART 2301</td>
<td>Drawing Fundamentals II</td>
<td>3</td>
</tr>
<tr>
<td>ART 3110C</td>
<td>Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>ART 3510C</td>
<td>Painting</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Hours</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>ART 4530C</td>
<td>Advanced Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 5109C</td>
<td>Crafts Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 3280C</td>
<td>Graphic Design I</td>
<td>3</td>
</tr>
<tr>
<td>ARH 2050</td>
<td>History of Art I</td>
<td>3</td>
</tr>
<tr>
<td>ARH 2051</td>
<td>History of Art II</td>
<td>3</td>
</tr>
<tr>
<td>ARH 4800</td>
<td>Theory and Criticism of Visual Arts</td>
<td>3</td>
</tr>
<tr>
<td>ART 3600C</td>
<td>Photography</td>
<td>3</td>
</tr>
<tr>
<td>ARE 4143</td>
<td>Methodology for Teaching K-12 Art Education I</td>
<td>2</td>
</tr>
<tr>
<td>ARE 4144</td>
<td>Methodology for Teaching K-12 Art Education II</td>
<td>2</td>
</tr>
<tr>
<td>ART 3230C</td>
<td>Design in Advertising</td>
<td>3</td>
</tr>
<tr>
<td>ART 2481C</td>
<td>Computer Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>ART</td>
<td>Art Therapy</td>
<td>3</td>
</tr>
<tr>
<td>ART 3600</td>
<td>Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART 3400C</td>
<td>Printmaking</td>
<td>3</td>
</tr>
<tr>
<td>PHI 3800</td>
<td>Aesthetics</td>
<td>3</td>
</tr>
<tr>
<td>PHI 3803</td>
<td>Philosophy and Creativity</td>
<td>3</td>
</tr>
</tbody>
</table>

ARH 2050, 2051, or 4700. 3 hours

4. Restricted Electives (select two courses)—6 hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 3600</td>
<td>Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART 3400C</td>
<td>Printmaking</td>
<td>3</td>
</tr>
<tr>
<td>PHI 3800</td>
<td>Aesthetics</td>
<td>3</td>
</tr>
<tr>
<td>PHI 3803</td>
<td>Philosophy and Creativity</td>
<td>3</td>
</tr>
</tbody>
</table>

5. Electives
None

Minimum Total Semester Hours Required 120

Bachelor of Science: Elementary Education

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses
4. Restricted Electives
Ten semester hours in science are required for majors: GEO 1200, BSC 2010C, and PHY 3014C. Twelve semester hours in mathematics are required for majors: MAE 1810 and MAE 2811 are required in addition to MAC 1104 or MGF 1202 and STA 2014. The AA degree transfer student from a Florida public community college is required to select MAE 3112 in lieu of MAE 1810 and MAE 2811.
5. Electives
None

Minimum Total Semester Hours Required 121
Bachelor of Science: English Language Arts Education

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses

<table>
<thead>
<tr>
<th>Lower Division</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Composition I</td>
<td>3 hours</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>Composition II</td>
<td>3 hours</td>
</tr>
<tr>
<td>SPC 1014</td>
<td>Fundamentals of Oral Communication</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Literature</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL 2010</td>
<td>English Literature I: Beowulf to 1660</td>
<td>3 hours</td>
</tr>
<tr>
<td>ENL 3021</td>
<td>English Literature II: From 1660 to 1870</td>
<td>3 hours</td>
</tr>
<tr>
<td>AML 2011</td>
<td>American Literature I</td>
<td>3 hours</td>
</tr>
<tr>
<td>AML 3020</td>
<td>American Literature II</td>
<td>3 hours</td>
</tr>
<tr>
<td>AML 4321</td>
<td>Modern American Literature OR</td>
<td></td>
</tr>
<tr>
<td>ENL 4373</td>
<td>Modern British Literature</td>
<td>3 hours</td>
</tr>
<tr>
<td>ENL 4330</td>
<td>Shakespeare</td>
<td>3 hours</td>
</tr>
<tr>
<td>LIT 3000</td>
<td>Literary Analysis</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Composition</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 3311</td>
<td>Advanced Expository Writing</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

Select one:
- ENC 3311, CRW 3001, CRW 3002, CRW 3310 | 3 hours

<table>
<thead>
<tr>
<th>Language</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LIN 4341</td>
<td>Modern English Grammar</td>
<td>3 hours</td>
</tr>
<tr>
<td>LAE 4342</td>
<td>Teaching Language and Composition</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special Methods</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LAE 3335</td>
<td>English Instructional Analysis</td>
<td>4 hours</td>
</tr>
</tbody>
</table>

4. Restricted Electives
Recommended: LIN 4100, LIT 3120
Approved: ENL 3273, 4101, 4311, 4341,
LIT 3313, 4312, AML 4101, LIN 3010

5. Electives
None

Minimum Total Semester Hours Required: 120

Bachelor of Science: Foreign Language Education

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses

AREAS OF SPECIALIZATION (Select one)

French Language
- FLE 3063: Foreign Language as Human Behavior | 2 hours
- FRE 1120: Elementary Language and Civilization I | 4 hours
- FRE 1121: Elementary Language and Civilization II | 4 hours
- FRE 2200: Intermediate Language and Civilization I | 4 hours
- FRE 2201: Intermediate Language and Civilization II | 4 hours
- FRE 3244: French Conversation | 3 hours
- FRE 3420: French Composition | 3 hours
- FRW 3100: Survey of French Literature I | 3 hours
- FRW 3101: Survey of French Literature II | 3 hours

Spanish Language
- FLE 3063: Foreign Language as Human Behavior | 2 hours
- SPN 1120: Elementary Language and Civilization I | 4 hours
- SPN 1121: Elementary Language and Civilization II | 4 hours
- SPN 2230: Intermediate Language and Civilization I | 4 hours
- SPN 2231: Intermediate Language and Civilization II | 4 hours
- SPN 3241: Spanish Conversation | 3 hours
- SPN 3420: Spanish Composition | 3 hours
Bachelor of Science: Mathematics Education

**Degree Requirements**

1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses
   - Specialization
     - Core Requirements
       - MAC 3311 Calculus w/Analytic Geometry I 4 hours
       - MAC 3312 Calculus w/Analytic Geometry II 4 hours
       - MAC 4301 Algebra Structure 3 hours
       - MAS 3103 Linear Algebra 3 hours
       - MHF 2300 Logic/Proof Math 3 hours
       - MTG 4212 Modern Geometry 4 hours
       - STA 3023 Statistical Methods I 3 hours
       - COP 2000 Programming I 3 hours
   - Special Methods
     - MAE 3330 Teach Math HS 4 hours
     - MAE 3930 Teach Math MS/JHS 3 hours
4. Restricted Electives
   - Select four (Min. 12 hours): MAC 1104, 1114, 3313, MAD 4203, MAS 3113, 3203, MGF 1203.
5. Electives
   - Select in consultation with advisor.

**Minimum Total Semester Hours Required** 123

Bachelor of Science: Science Education

**Degree Requirements**

1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses
   - Program Prerequisites
     - MAC 1104 College Algebra 3 hours
   - Biology Specialization (50 minimum)
     - Biology Requirements (32 minimum)
       - BSC 2010C General Biology 4 hours
       - ZOO 2010C General Zoology 4 hours
       - BOT 2010C General Botany 3 hours
       - PCB 3023 Cell Physiology 3 hours
       - PCB 3063 Genetics 3 hours
       - PCB 3063L Genetics Laboratory 3 hours
       - PCB 3043 Ecology 3 hours
       - PCB 3043L Ecology Laboratory 1 hour
       - MCB 3013C Microbiology 5 hours
       - CHM 2205 Intro to Organic and Biochemistry 5 hours
       - PCB 4xxx Biological Evolution 3 hours

**Minimum Total Semester Hours Required** 120
Support Science Requirements (16 minimum)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 2045</td>
<td>Chemistry Fundamentals I</td>
<td>4</td>
</tr>
<tr>
<td>CHM 2046</td>
<td>Chemistry Fundamentals II</td>
<td>3</td>
</tr>
<tr>
<td>CHM 2046L</td>
<td>Chemistry Fundamentals Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PHY 2053C</td>
<td>College Physics I</td>
<td>4</td>
</tr>
<tr>
<td>GLY 1030</td>
<td>Geology and its Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

Select minimum of 1 course to complete minimum science requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT 3154</td>
<td>Local Flora</td>
<td>3</td>
</tr>
<tr>
<td>BOT 3800</td>
<td>Plants and Man</td>
<td>3</td>
</tr>
<tr>
<td>BOT 3820</td>
<td>Plants and Urban Environment</td>
<td>3</td>
</tr>
<tr>
<td>BOT 4223C</td>
<td>Plant Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>BOT 4303C</td>
<td>Plant Kingdom</td>
<td>5</td>
</tr>
<tr>
<td>BOT 4713C</td>
<td>Plant Taxonomy</td>
<td>5</td>
</tr>
<tr>
<td>BSC 4104</td>
<td>History of Biology</td>
<td>3</td>
</tr>
<tr>
<td>ENY 4004C</td>
<td>General Entomology</td>
<td>4</td>
</tr>
<tr>
<td>PCB 3233</td>
<td>Immunology</td>
<td>3</td>
</tr>
<tr>
<td>PCB 3301C</td>
<td>Aquatic Biology</td>
<td>4</td>
</tr>
<tr>
<td>PCB 3703C</td>
<td>Human Physiology</td>
<td>4</td>
</tr>
<tr>
<td>PCB 4302C</td>
<td>Limnology I</td>
<td>4</td>
</tr>
<tr>
<td>ZOO 3733C</td>
<td>Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>ZOO 4203C</td>
<td>Invertebrate Zoology</td>
<td>4</td>
</tr>
<tr>
<td>PHY 2054C</td>
<td>College Physics II</td>
<td>4</td>
</tr>
<tr>
<td>AST 3002</td>
<td>Astronomy</td>
<td>3</td>
</tr>
</tbody>
</table>

Special Methods

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCE 3330</td>
<td>Science Instructional Analysis</td>
<td>4</td>
</tr>
</tbody>
</table>

4. Electives

Select in consultation with advisor.

Minimum Total Semester Hours Required 120

CHEMISTRY

Program Prerequisites

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STA 2014</td>
<td>Principles of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MAC 3311</td>
<td>Calculus with Analytic Geometry I</td>
<td>4</td>
</tr>
</tbody>
</table>

Chemistry Specialization (50 minimum)

Chemistry Requirements (32 minimum)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 2045</td>
<td>Chemistry Fundamentals I</td>
<td>4</td>
</tr>
<tr>
<td>CHM 2046</td>
<td>Chemistry Fundamentals II</td>
<td>3</td>
</tr>
<tr>
<td>CHM 2046L</td>
<td>Chemistry Fundamentals Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHM 3120C</td>
<td>Analytical Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHM 3210</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHM 3211</td>
<td>Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHM 3211L</td>
<td>Organic Laboratory Techniques I</td>
<td>2</td>
</tr>
<tr>
<td>CHM 4xxxC</td>
<td>Basic Physical Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>BCH 4xxxC</td>
<td>Biochemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHS 3501</td>
<td>Introduction to Forensic Science</td>
<td>3</td>
</tr>
</tbody>
</table>

Support Science Requirements (18 minimum)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 2053C</td>
<td>College Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHY 2054C</td>
<td>College Physics II</td>
<td>4</td>
</tr>
<tr>
<td>BSC 2010C</td>
<td>General Biology</td>
<td>4</td>
</tr>
<tr>
<td>GLY 1030</td>
<td>Geology and its Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

Special Methods

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCE 3330</td>
<td>Science Instructional Analysis</td>
<td>4</td>
</tr>
</tbody>
</table>

4. Electives

Select in consultation with Advisor.

Minimum Total Semester Hours Required 120
### PHYSICS
#### Program Prerequisites

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STA 2014</td>
<td>Principles of Statistics</td>
<td>3 hours</td>
</tr>
<tr>
<td>MAC 3311</td>
<td>Calculus with Analytic Geometry I</td>
<td>4 hours</td>
</tr>
<tr>
<td>MAC 3312</td>
<td>Calculus with Analytic Geometry II</td>
<td>4 hours</td>
</tr>
<tr>
<td>MAC 3313</td>
<td>Calculus with Analytic Geometry III</td>
<td>4 hours</td>
</tr>
<tr>
<td>MAP 3302</td>
<td>Differential Equations</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

#### Physics Specialization (50 minimum)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 2053C</td>
<td>College Physics I</td>
<td>4 hours</td>
</tr>
<tr>
<td>PHY 2054C</td>
<td>College Physics II</td>
<td>4 hours</td>
</tr>
<tr>
<td>PHY 3048</td>
<td>Physics for Engineers &amp; Scientists I</td>
<td>3 hours</td>
</tr>
<tr>
<td>PHY 3048L</td>
<td>Physics Lab for Engineers &amp; Scientists I</td>
<td>1 hour</td>
</tr>
<tr>
<td>PHY 3049</td>
<td>Physics for Engineers and Scientists II</td>
<td>3 hours</td>
</tr>
<tr>
<td>PHY 3049L</td>
<td>Physics Lab for Engineers and Scientists II</td>
<td>1 hour</td>
</tr>
<tr>
<td>PHY 3101</td>
<td>Modern Physics</td>
<td>3 hours</td>
</tr>
<tr>
<td>PHY 3752C</td>
<td>Physics of Scientific Instruments</td>
<td>4 hours</td>
</tr>
</tbody>
</table>

#### Nine S.H. required from following 3 groups

Select 3 S.H. from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 3320</td>
<td>Electricity and Magnetism</td>
<td>3 hours</td>
</tr>
<tr>
<td>PHY 4220</td>
<td>Mechanics</td>
<td>3 hours</td>
</tr>
<tr>
<td>PHY 4604</td>
<td>Wave Mechanics</td>
<td>3 hours</td>
</tr>
<tr>
<td>PHY 5200C</td>
<td>Newtonian Mechanics for Teachers</td>
<td>1 hour</td>
</tr>
<tr>
<td>PHY 5302C</td>
<td>Electromagnetism for Teachers</td>
<td>1 hour</td>
</tr>
<tr>
<td>PHY 5601</td>
<td>Quantum Physics for Teachers</td>
<td>1 hour</td>
</tr>
</tbody>
</table>

Select 3 S.H. from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 3503</td>
<td>Thermodynamics</td>
<td>3 hours</td>
</tr>
<tr>
<td>PHY 4424</td>
<td>Optics</td>
<td>3 hours</td>
</tr>
<tr>
<td>PHY 5401C</td>
<td>Optics for Teachers</td>
<td>1 hour</td>
</tr>
<tr>
<td>PHY 5500C</td>
<td>Thermal Physics for Teachers</td>
<td>1 hour</td>
</tr>
<tr>
<td>PHY 5600</td>
<td>Special Relativity for Teachers</td>
<td>1 hour</td>
</tr>
<tr>
<td>PHZ 5800C</td>
<td>Wave Motion for Teachers</td>
<td>1 hour</td>
</tr>
</tbody>
</table>

Select 3 S.H. from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHZ 3151</td>
<td>Computer Methods in Physics</td>
<td>4 hours</td>
</tr>
<tr>
<td>PHY 3802L</td>
<td>Intermediate Physics Laboratory</td>
<td>3 hours</td>
</tr>
<tr>
<td>PHY 4803L</td>
<td>Advanced Physics Laboratory</td>
<td>3 hours</td>
</tr>
<tr>
<td>PHY 5300C</td>
<td>Electricity for Teachers</td>
<td>1 hour</td>
</tr>
<tr>
<td>PHZ 5301C</td>
<td>Nuclear Physics for Teachers</td>
<td>1 hour</td>
</tr>
<tr>
<td>PHZ 5150C</td>
<td>Computer Methods in Physics for Teachers</td>
<td>1 hour</td>
</tr>
</tbody>
</table>

#### Support Science Requirements (16 minimum)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 2045</td>
<td>Chemistry Fundamentals I</td>
<td>4 hours</td>
</tr>
<tr>
<td>CHM 2046</td>
<td>Chemistry Fundamentals II</td>
<td>3 hours</td>
</tr>
<tr>
<td>CHM 2046L</td>
<td>Chemistry Fundamentals Laboratory</td>
<td>1 hour</td>
</tr>
<tr>
<td>BSC 2010C</td>
<td>General Biology</td>
<td>4 hours</td>
</tr>
<tr>
<td>GLY 1030</td>
<td>Geology and its Applications</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

Special Methods

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCE 3330</td>
<td>Science Instructional Analysis</td>
<td>4 hours</td>
</tr>
</tbody>
</table>

#### 4. Electives

Select in consultation with Advisor.

**Minimum Total Semester Hours Required**: 120

### Bachelor of Science: Social Science Education

#### Degree Requirements

1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. **Required Courses**
   - Specialization (52 hours)

**Lower Division Requirements:**

---

154
Upper Division Requirements:

- Comparative Politics
- Resources Geography
- World Political Geography
- U.S. History 1914-1945
- U.S. History 1945-Present

Special Methods

- Social Science Instr. Analysis

4. Restricted Electives (9 hours)

- American Economic History
- American Revolution
- Civil War & Reconstruction
- European History (select one with approval by advisor)
- State Government & Public Policy
- Voting & Elections
- International Relations

5. Electives

None

Minimum Total Semester Hours Required: 120

**Bachelor of Science: Vocational Education and Industry Training**

**Degree Requirements**

1. See Undergraduate Degree Requirements
2. This program differs from other programs in the college as noted below in #3. See special college and/or department requirements
3. Required Courses

- Areas of Emphasis
  1. Public School Teaching
  2. Industry Training

- Areas of Occupational Specialization
  1. Business Education
  2. Health Occupation
  3. Industrial/Technical Occupations

These areas are currently being revised. See a Vocational Education advisor for program details.

**Occupational Specialization (30-36 semester hours)**

All students must complete an area of specialization through (1) occupationally specific coursework and/or (2) Credit by Examination. Occupationally specific coursework may be lower or upper division and may be transferred from another accredited educational institution offering college credit. Credit by examination may be completed through occupationally specific examinations, such as state or national registrations/licenses or occupationally specific professional associations. All requirements must be in an approved area of (1) Business, (2) Health Occupations, or (3) Industrial/Technical occupations.

Examples of coursework and credit by examination include:

1. Business Education
   A. Specified Coursework (for Business Education)
      (Areas: All areas must be completed (24 semester hours)
1. Business Communications (Secretarial) - 3 semester hours
   OST 1335
2. Typewriting - 6 semester hours OST 1110 and OST 2120
3. Word Processing - 3 semester hours OST 1701
4. Accounting - 6 semester hours ACG 2001 and ACG 2011
5. Economics - 6 semester hours ECO 2013 and ECO 2023
6. Business Law - 3 semester hours BUL 3111
B. Required Elective Coursework - 9 semester hours
   Any 9 semester hours of upper division courses from the College of Business Administration.

II. Health Occupations (30 semester hours)
   Many of the health occupations offer state or national licensure or registration examinations. Students must meet the "licensure" requirements for teacher certification as set forth in the Florida Accreditation Codes. A copy of current licensure/registration is required.

III. Industrial/Technical Occupations (30 semester hours)
   Competency examinations have been developed for many industrial related occupations. A fee is required to take the written and practical examinations. These examinations will be scheduled within the Central Florida area.

Occupationally Related Work Experience
All students must provide written documentation of occupationally related work experience. The amount of hours or years of occupationally related work experience is dependent upon the Occupational Specialization (i.e. Business, Health, Industrial). This is a requirement for graduation from the degree program.
COLLEGE OF ENGINEERING

UNDERGRADUATE PROGRAMS

ENGINEERING
Aerospace Engineering (BSAsE)
Civil Engineering (BSCE)
Computer Engineering (BSCpE)
Electrical Engineering (BSEE)
Environmental Engineering (BSEnvE)
Industrial Engineering (BSIE)
Mechanical Engineering (BSME)

ENGINEERING TECHNOLOGY
Computer Engineering Technology (BSET)
Design Engineering Technology (BSET)
Electronics Engineering Technology (BSET)
Information Systems Engineering Technology (BSET)
Operations Engineering Technology (BSET)

GRADUATE PROGRAMS*

ENGINEERING
Civil Engineering (MSCE, MCE, Ph.D.)
Computer Engineering (MSCpE, Ph.D.)
Computer Integrated Manufacturing (MS)
Electrical Engineering (MSEE, Ph.D.)
Engineering (MS)
Engineering Management (MS)
Environmental Engineering (MSEnvE, Ph.D.)
Industrial Engineering (MSIE, Ph.D.)
Industrial Engineering/Manufacturing Engineering (MSMfgE)
Mechanical Engineering (MSME, Ph.D.)
Operations Research (MS)
Product Assurance (MS)
Simulations Systems (MS)

*See the Graduate Studies Catalog for information.
COLLEGE OF ENGINEERING

Dean: G. E. Whitehouse, CB 107, Phone (407) 275-2156
Associate Dean: S. L. Rice, CB 107, Phone (407) 275-2156
Assistant Dean: R. N. Miller, CB 281, Phone (407) 275-2455
Assistant Dean: B. E. Mathews, CB 281, Phone (407) 275-2455

PROFESSIONAL COLLEGE OF ENGINEERING

Based on a broad unified core program, the College of Engineering at the University of Central Florida seeks to produce well-qualified graduates in specifically selected professional disciplines. The College also conducts research and service responsive to Florida and national needs.

ENGINEERING CURRICULUM

The Engineering curriculum is directed toward professional objectives which are best met by completing the baccalaureate degree program followed by additional professional education at the graduate level leading to the Master of Science in Engineering.

Requirements:
Students who wish to be admitted to full freshman standing in the College should present the following secondary school credits in addition to the minimum University requirements:
• a total of 3½ units in mathematics, including advanced algebra, geometry, and trigonometry (required)
• calculus (recommended)
• at least one unit in physics (required)
• at least one unit in chemistry (required)
• one unit in biology (recommended)
• one-half unit in computer programming (FORTRAN preferred).

Students who have not met the requirements listed above may be required to complete additional University credit course work which may not be applied toward an engineering degree.
Students receiving a Bachelor of Science in Engineering must:
1. Successfully complete 132 semester hours of coursework including:
   - general education courses (2.000 GPA required)
   - a pre-engineering core curriculum (2.250 GPA required)
   - an engineering core curriculum (2.250 GPA required)
   - required and elective courses in an engineering option of the student's choice (2.250 GPA required)

Transfer Credit
Subject to the general grade and residence requirements of the University, provisional credit will be granted for transferred course work equivalent to that required in UCF's engineering program. These provisional credits will become final only after the student has demonstrated the ability to do satisfactory work at the University. Transfer credits in pre-engineering from a junior college will be used to satisfy freshman and sophomore-level requirements only. Typically, students who have completed the A.A. degree (or equivalent education) with calculus, differential equations, chemistry, physics, engineering graphics, and a course in computer science (with FORTRAN) can complete the B.S.E program in two additional years. The status of a student and the specific credits acceptable toward the degree is determined by a College of Engineering petition approved by the Dean's office.

ROTC Program
The College offers a special five-year program to engineering students also enrolled in Air Force ROTC. This plan allows those students to spread their academic load over a five-year period to accommodate certain AFROTC courses which are not creditable to the engineering degree.

Engineering Technology Curriculum
Students receiving a Bachelor of Science in Engineering Technology must successfully complete 124 semester hours including:
- general education courses
- an engineering technology core curriculum
- required and elective courses in a selected engineering technology option of the student's choice.

The engineering technology program provides junior and senior-year education. Students who wish to be admitted to the engineering technology program should possess the A.A. degree (preferred) or an A.S. (or equivalent education) degree from a Florida community college or approved out-of-state institution in an appropriate engineering technology area. The status of a student and the specific credits acceptable toward the degree is determined by a College of Engineering petition approved by the Dean's office. Provisional credits accepted for transferred course work will become final only after a student has demonstrated the ability to do satisfactory work at the University.

Minor: Technology and Society
Contact Persons: Richard N. Miller, CB 281, Phone (407) 275-2455
J. Paul Hartman, CB 381, Phone (407) 275-2841

The College of Engineering offers a minor in Technology and Society to interested UCF students. The minor is intended for students not enrolled in the College of Engineering, although students in the College may also be awarded the minor. To meet the requirements, the student must complete, with a grade point average of 2.0 or higher, a minimum of 18 hours taken from the courses listed. A minimum of 12 hours must be taken from the EGN prefix courses listed below. Students should preferably complete the following general education program coursework prior to taking this minor: ECO 2013, MAC 1104, PHY 2053C; History or Humanities sequence.

The 18 hours are to be selected from:

- EGN 4033 Technology and Social Change
- EGN 4813 Science in History
- EGN 4814 Engineering and Technology in History
- EGN 4818 Engineering and Technology in North America
Prior to enrolling in courses at the professional level, students must receive approval from the office of the Dean of Engineering, and secure an approved course of study from their advisor for their remaining work.

Any student whose written or spoken English in any course is unsatisfactory may be reported by the instructor to the Dean. The Dean may assign supplementary work, including additional course work, consistent with the needs of the student. The granting of a degree may be delayed until the work is satisfactorily completed.

Bachelor of Science in Engineering
Program Coordinator: Richard N. Miller, CB 281, Phone (407) 275-2455.

The principal areas of study in the engineering curriculum are devoted to the basic sciences, mathematics, the fundamentals of engineering problem solving, and specialization in an option. These courses are not training courses for any of the mechanical or manipulative skills, but rather are planned to provide preparation for development, planning, design, research, graduate work, and with certain electives, for operation, production, testing, maintenance, and management. This program prepares the student for professional registration, industrial employment, and the pursuit of graduate work in engineering. In addition, basic engineering programs are increasingly being considered as appropriate preparation for advanced study in other professional areas, e.g., law, medicine, architecture.

ENGINEERING CORE REQUIREMENTS

The engineering core consists of pre-engineering and professional subject matter that is common to all options. Because this requirement is a substantial part of the Bachelor's degree program, it gives the student time to become adjusted and to choose a field of specialization for which he or she is best suited.

PRE-ENGINEERING CORE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 2013</td>
<td>Principles of Economics</td>
<td>3</td>
</tr>
<tr>
<td>EGS 1111C</td>
<td>Engineering Graphics</td>
<td>2</td>
</tr>
<tr>
<td>CHS 1440</td>
<td>Fundamentals of Chemistry For Engineers²</td>
<td>4</td>
</tr>
<tr>
<td>PHY 3048</td>
<td>Physics For Engineers and Scientists I</td>
<td>3</td>
</tr>
<tr>
<td>PHY 3049</td>
<td>Physics For Engineers and Scientists II</td>
<td>3</td>
</tr>
<tr>
<td>PHY 3048L or PHY 3049L or CHM 2046L</td>
<td>Laboratory Elective²</td>
<td>1</td>
</tr>
<tr>
<td>MAC 3311,3312,3313</td>
<td>Calculus and Analytic Geometry</td>
<td>12</td>
</tr>
<tr>
<td>MAP 3302</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>Biological or Earth Science Elective²</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

¹Includes portions of the General Education Program.
²Consult Department Chair for specific course required in option.
³Students without one secondary school unit of Chemistry should enroll in CHM 1034 and CHM 2046L prior to taking CHS 1440. Not for Environmental Engineering students.
⁴Students without one secondary school unit of Physics should enroll in PHY 2053C prior to taking PHY 3048.
ENGINEERING CORE

Approved Humanities and Social Sciences Elective 3 hours
EGN 3420 Engineering Analysis\textsuperscript{5} 3 hours
EGN 3310 Engineering Analysis - Statics 3 hours
EGN 3321 Engineering Analysis - Dynamics 3 hours
EGN 3613 Engineering Economic Analysis 2 hours
EGN 3704 Engineering and the Environment 2 hours
EGN 3365C Structure and Properties of Materials 3 hours
EGN 3373 Principles of Electrical Engineering 4 hours
EGN 3343 Thermodynamics\textsuperscript{2} or

EGN 3358 Thermo-Fluids Heat Transfer\textsuperscript{2} 3 hours
EGN 4624 Engineering Administration 3 hours
PHY 3101 Modern Physics\textsuperscript{5} 3 hours
STA 3032 Probability and Statistics for Engineers 3 hours

\textsuperscript{5}Requires a secondary school programming course (FORTRAN preferred).
\textsuperscript{6}Consult Department Chair for specific course required in option.
\textsuperscript{7}Or approved science course - see option

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

Acting Chair: D.C. Cooper, CB 381, Phone (407) 275-2841
Faculty: Block, W.E. Carroll, W. F. Carroll, Cooper, Dietz, Harper, Hartman, Head, Jackson, Kersten, Kuo, Leftwich, Reinhart, J. Taylor, Wanielista, Yousef

The Department of Civil and Environmental Engineering offers a major in Environmental Engineering and a major in Civil Engineering. The Environmental Engineering major is concerned primarily with the interaction of humans with their environment, and the planning, design, and control of systems for environmental quality management, with emphasis on the water environment. The Civil Engineering major is primarily concerned with funda-
mental civil engineering design and analysis in such areas as structures, geotechnical engineering, sanitary engineering, water resources, and transportation.

The undergraduate degree programs in Civil Engineering and Environmental Engineering are accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET).

**Bachelor of Science in Civil Engineering**

**Degree Requirements**

1. See Undergraduate Degree Requirements
2. Special college and/or department requirements—See Engineering Core
3. **Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CES 4102</td>
<td>Structural Engineering Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CES 4130L</td>
<td>Structures Lab</td>
<td>1</td>
</tr>
<tr>
<td>CES 4605</td>
<td>Structural Steel Design</td>
<td>3</td>
</tr>
<tr>
<td>or CES 4702</td>
<td>Structural Concrete Design</td>
<td></td>
</tr>
<tr>
<td>or CEG 4101C</td>
<td>Geotechnical Engineering I</td>
<td>4</td>
</tr>
<tr>
<td>EGN 3331</td>
<td>Mechanics of Materials</td>
<td>3</td>
</tr>
<tr>
<td>EGN 3353</td>
<td>Fluid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CGN 4300</td>
<td>C.E. Systems</td>
<td>3</td>
</tr>
<tr>
<td>CWR 4101C</td>
<td>Hydrology</td>
<td>3</td>
</tr>
<tr>
<td>CWR 4201C</td>
<td>Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>ENV 4561</td>
<td>Environmental Engineering Process Design</td>
<td>4</td>
</tr>
<tr>
<td>TTE 4004</td>
<td>Transportation Engineering</td>
<td>3</td>
</tr>
</tbody>
</table>

Civil Engineering Design Courses (2 hours each)

(Select from CES 4608, CES 4709, CEG 5805, TTE 4601, or ENV 4433).

4. **Restricted Electives**

Technical Electives are to be courses consistent with department objectives and chosen with the approval of the student's faculty advisor and department chair.

5. **Electives**

None

**Total Semester Hours Required**: 132

---

**Bachelor of Science in Environmental Engineering**

**Degree Requirements**

1. See Undergraduate Degree Requirements
2. Special college and/or department requirements—See Engineering Core
3. **Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 4202C</td>
<td>Chemical Process Control</td>
<td>3</td>
</tr>
<tr>
<td>EES 4111C</td>
<td>Biological Process Control</td>
<td>3</td>
</tr>
<tr>
<td>EGN 3331</td>
<td>Mechanics of Materials</td>
<td>3</td>
</tr>
<tr>
<td>EGN 3353</td>
<td>Fluid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>EGN 4703</td>
<td>Systems Analysis and Control</td>
<td>3</td>
</tr>
<tr>
<td>ENV 4121C</td>
<td>Air Pollution</td>
<td>3</td>
</tr>
<tr>
<td>ENV 4341</td>
<td>Solid and Hazardous Waste</td>
<td>3</td>
</tr>
<tr>
<td>CWR 4101C</td>
<td>Hydrology</td>
<td>3</td>
</tr>
<tr>
<td>CWR 4201C</td>
<td>Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>ENV 4433</td>
<td>Water Resources Design</td>
<td>2</td>
</tr>
<tr>
<td>ENV 4562</td>
<td>Environmental Engineering Systems Design</td>
<td>2</td>
</tr>
<tr>
<td>ENV 4561</td>
<td>Environmental Engineering Process Design</td>
<td>4</td>
</tr>
</tbody>
</table>

4. **Restricted Electives**

Technical Electives are to be courses consistent with department objectives and chosen with the approval of the student's faculty advisor and department chair.

5. **Electives**

None

**Total Semester Hours Required**: 132
DEPARTMENT OF COMPUTER ENGINEERING

Chair: C. Bauer, CB 207, Phone 275-2236
Faculty: Gonzalez, Khajenoori, Klee, Linton, Myler, Petrasko, Williams

The Department of Computer Engineering prepares the student for a career in professional engineering practice. Graduates will possess a high degree of training and capability in the application of mathematics and computers to the modeling, simulation, and management of complex technical problems.

The undergraduate degree program in Computer Engineering is accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET).

Bachelor of Science in Computer Engineering

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements—See Engineering Core
3. Required Courses
   - ECM 4230 Engineering Data Structures 3 hours
   - ECM 4301 Engineering Applications of Computer Methods 3 hours
   - ECM 4504C Embedded Computer Systems 3 hours
   - ECM 4708C Modeling & Design of Engineering Systems 3 hours
   - ECM 4804 Engineering Software Design 3 hours
   - EEL 3342C Introduction to Digital Circuits and Systems 4 hours
   - ECM 4508C Computer Systems Design I 3 hours
   - ECM 4509C Computer Systems Design II 3 hours
   - COT 3100 Introduction to Discrete Structures 3 hours
   - ECM 3000 Survey of Computer Engineering 1 hour
   - ECM 4451 Engineering Applications of Intelligent Systems 3 hours
   - ECM 4723C Computer Control Systems 4 hours
   - EEL 4657 Linear Control Systems 3 hours

4. Restricted Electives
   - Technical Electives are to be courses consistent with department objectives and chosen with the approval of the student's faculty advisor and department chair. 3 hours

Total Semester Hours Required: 132

DEPARTMENT OF ELECTRICAL ENGINEERING

Chair: N. S. Tzannes, CB 407, Phone (407) 275-2786

The major in Electrical Engineering is designed to present the basic electrical engineering principles. Courses are offered which present in-depth studies of specific electrical engineering sub-disciplines such as digital systems, electrical networks, electronics, electromagnetic fields and microwaves, control systems, communication systems and information theory, and solid state systems and devices.

The undergraduate degree program in Electrical Engineering is accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET).

Bachelor of Science in Electrical Engineering

Degree Requirements
1. See Undergraduate Degree Requirements
2. Special college and/or department requirements—See Engineering Core
3. Required Courses
- EEL 3122C Electrical Networks: 4 hours
- EEL 3306 Semiconductor Devices: 3 hours
- EEL 3307C Electronic Engineering: 4 hours
- EEL 3342C Introduction to Digital Circuits and Systems: 4 hours
- EEL 3470 Electromagnetic Fields: 3 hours
- EEL 3552C Signal Analysis and Communications: 4 hours
- EEL 4012C Senior Electrical Design: 4 hours
- EEL 4309C Active Circuits: 4 hours
- ECM 4508C Computer System Design I: 3 hours
- EEL 4657 Linear Control Systems: 3 hours
- EEL XXXX EEL Elective 1: 3 hours
- EEL XXXX EEL Elective 2: 3 hours

4. Electives
- None

Total Semester Hours Required 132

DEPARTMENT OF INDUSTRIAL ENGINEERING & MANAGEMENT SYSTEMS
Chair: W. Swart, CB 381, Phone (407) 275-2204
Faculty: Biegel, Elshennawy, Hosni, Lee, Morse, Rogers, Parkinson, Schrader, Sepulveda, Whitehouse

Industrial engineers design systems which translate a specific product design into a physical reality in the most productive manner and with highest quality possible. In doing so, the industrial engineer deals with decisions regarding the right mix and type of people, materials, machines, and automation (including robotics). Industrial engineers are also skilled in Engineering Economic Analysis and Information Management since they are generally considered to be the natural interface between the technical specialist and management.

Industrial engineers are sought in industrial, service, and government organizations. In the industrial sector, the industrial engineer is concerned with improving productivity and quality of the manufacturing, distribution, and management system of organizations. In the service sector, the industrial engineer is concerned with determining the most productive manner in which to deliver high-quality service to the customer. In government organizations the industrial engineer is active in assuring that tax payers receive maximum service for their tax dollars.

The Industrial Engineering approach is characterized by a systematic evaluation of alternatives using quantitative analysis and computer simulations. As such, quantification and measurement play a key role in the day to day activities of the industrial engineer.

The undergraduate degree program in Industrial Engineering is accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET).

Bachelor of Science in Industrial Engineering
Degree Requirements
1. See Undergraduate Degree Requirements
2. Special college and/or department requirements—See Engineering Core
3. Required Courses
   - APA 3471 Accounting for Engineers 3 hours
   - EIN 3314C Work Measurement and Design 3 hours
   - EIN 4116C Information Systems Analysis and Design 3 hours
   - EIN 4118C Industrial Engineering Applications of Computers 3 hours
   - EIN 4333 Industrial Control Systems 3 hours
   - EIN 4364C Industrial Facilities Planning and Design 3 hours
   - EIN 4391C Manufacturing Engineering 3 hours
   - EIN 4891C Industrial Senior Design Project 3 hours
   - ESI 4234 Quality Engineering 3 hours
4. Technical Electives

Technical Electives are to be courses consistent with department objectives and chosen with the approval of the student's faculty advisor and department chair.

5. Electives

None

Total Semester Hours Required

132

DEPARTMENT OF MECHANICAL ENGINEERING
AND AEROSPACE SCIENCES

Acting Chair: J. K. Beck, CB 307, Phone (407) 275-2416
Facility: Anderson, J. Beck, Bishop, Desai, Eno, Grogan, Gunnerson, Hagedoorn, Henry, Hosler, Kitis, Minardi, Moslehy, Nuckolls, Rice, W. Smith, Ventre

The Department of Mechanical Engineering and Aerospace Sciences offers majors in Mechanical and Aerospace Engineering. Both programs are specifically designed to give the student a broad-based undergraduate engineering program which provides sufficient knowledge to allow him/her to converse with specialists in other fields of engineering and to analyze the basic problems in these fields. The undergraduate degree programs in Mechanical Engineering and Aerospace Engineering are accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET).

Bachelor of Science in Aerospace Engineering

Degree Requirements

1. See Undergraduate Degree Requirements
2. Special college and/or department requirements—See Engineering Core
3. Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAS 4101</td>
<td>Aerodynamics I</td>
<td>3</td>
</tr>
<tr>
<td>EAS 4105</td>
<td>Aerodynamics II</td>
<td>3</td>
</tr>
<tr>
<td>EAS 4134</td>
<td>Gas Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>EAS 4200</td>
<td>Flight Structures</td>
<td>3</td>
</tr>
<tr>
<td>EAS 4300</td>
<td>Propulsion Systems</td>
<td>3</td>
</tr>
<tr>
<td>EGN 3331</td>
<td>Mechanics of Materials</td>
<td>3</td>
</tr>
<tr>
<td>EGN 3353</td>
<td>Fluid Mechanics I</td>
<td>3</td>
</tr>
<tr>
<td>EML 4142</td>
<td>Heat Transfer</td>
<td>3</td>
</tr>
<tr>
<td>EML 4220</td>
<td>Vibration Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EML 4304C</td>
<td>Measurements Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>EML 4312</td>
<td>Feedback Control Design</td>
<td>3</td>
</tr>
<tr>
<td>EML 4501C</td>
<td>Engineering Design I</td>
<td>3</td>
</tr>
<tr>
<td>EML 4502C</td>
<td>Engineering Design II</td>
<td>3</td>
</tr>
</tbody>
</table>

4. Restricted Elective

Technical electives are chosen from courses normally taught by the department with the prefixes EMA, EML, EAS, and ENU. Students who wish to enroll in a 5xxx course should have a minimum UCF GPA of 2.8 and consent of the instructor. Other choices must contain additional design content and must be approved by the faculty advisor and department chair.

5. Electives

None

Total Semester Hours Required

132
Bachelor of Science in Mechanical Engineering
Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements—See Engineering Core
3. Required Courses
   EGN 3331 Mechanics of Materials 3 hours
   EGN 3353 Fluid Mechanics I 3 hours
   EML 3101 Thermodynamics of Mechanical Systems 3 hours
   EML 3262 Kinematics of Mechanisms 3 hours
   EML 3500 Machine Design and Analysis 3 hours
   EML 4142 Heat Transfer 3 hours
   EML 4220 Vibration Analysis 3 hours
   EML 4304C Measurements Laboratory 3 hours
   EML 4312 Feedback Control Design 3 hours
   EML 4501C Engineering Design I 3 hours
   EML 4502C Engineering Design II 3 hours
   EML 4703 Fluid Mechanics II 3 hours
4. Restricted Electives
   Technical electives are chosen from courses normally taught by the department with the prefixes EMA, EML, EAS, and ENU. Students who wish to enroll in a 5xxx course should have a minimum UCF GPA of 2.8 and consent of the instructor. Other choices must contain additional design content and must be approved by the faculty advisor and department chair.
5. Electives
   None
Total Semester Hours Required 132

DEPARTMENT OF ENGINEERING TECHNOLOGY
Chair: C. Head, CB 207, Phone (407) 275-2268
Faculty: Byers, Debo, Dixon, Gregg, Osborne, Shaykhian, Strange, Uspenski, Vazquez, Worbs

The Bachelor of Science in Engineering Technology (BSET) program is designed for students who have completed an Associate of Science (AS) degree in an appropriate area of technology or who have completed an Associate of Arts (AA) degree with approximately 25 semester hours in an appropriate area of technology.

Requirements
Completion of UCF’s General Education is required before the BSET degree is granted. If a student completes the General Education Program of a Florida public community college, it will substitute for UCF’s Lower Division General Education Program without a course-by-course match. Students should consult an advisor for specific course requirements.

The upper-division Bachelor of Science in Engineering Technology (BSET) program is designed to advance the engineering technician to the engineering technologist level. The engineering technologist works with both the scientist and the engineer, helping them convert ideas into accomplishments.

The five Technology majors offered in the Engineering Technology degree program are:

   Computer Engineering Technology
   Design Engineering Technology
   Electronics Engineering Technology
   Information Systems Engineering Technology
   Operations Engineering Technology

All of the Engineering Technology options are accredited by the Technology Accreditation Commission (TAC) of the Accreditation Board for Engineering and Technology (ABET).
Bachelor of Science in Engineering Technology

Degree Requirements

1. See Undergraduate Degree Requirements
2. Special college and/or department requirements—See Engineering Technology Core below
3. Required Courses
   A. General Education (Not including Math, Science and Computer Programming) 27 hours
   B. Lower Division Technology Courses or Equivalent 24 hours
   C. Engineering Technology Core
      *MAC 1104 College Algebra 3 hours
      *MAC 1114 College Trigonometry 3 hours
      MAC 3253 or MAC 3311 Calculus I 3 hours
      MAC 3254 or MAC 3312 Calculus II 3 hours
      MAP 3401 Problem Analysis 3 hours
      *PHY 2053C College Physics I 4 hours
      *CHM 1032 General Chemistry 3 hours
      CHM 2046L Chemistry Fundamentals Lab 1 hour
      *Biology, Geology, Physical Geography 3 hours
      *COP 1200, COP 2000, CGS 3422 3 hours
      ETG 3510 Applied Mechanics 4 hours
      ETI 3651 Computer Applications 4 hours
      ETI 3671 Technical Economic Analysis 2 hours
      ETI 4110 Industrial Quality Control 3 hours
      ETM 4310 Applied Thermodynamics and Fluid Mechanics 4 hours
      *Typically taken at community college SUBTOTAL 45 hours
   D. Technical Specialty (Upper Division Major Courses) 23-32 hours
      See areas of specialization below.
   E. Approved Electives hrs. 4-9 hours
      TOTAL SEMESTER HOURS 128 hours

(60 semester hours minimum senior institution credits-12 of which may be waived for students enrolled at area campuses.)

AREAS OF SPECIALIZATION

1. Computer Engineering Technology

   The Computer Engineering Technology specialty includes both hardware and software. Typical functions eventually performed by graduates include PC coordinator, computer applications coordinator, system integrator, system troubleshooter, system analyst, and hardware and software designer. Graduates may work in manufacturing, test, design, product improvement, system operations and maintenance, automated processing, robotics, and marketing. Graduates may evaluate new hardware and software and assist their companies to increase productivity by raising computer literacy and adopting new computer technology to old processes. Typical community college programs for entrance include Computer Technology, Computer Science, Computer Programming, and Electronics. The lower-level requirements (15 hours) that are typically taken at a community college are DC and AC Circuits, Digital Circuits, Microprocessors I, and Programming (Fortran or Pascal). The upper-level requirements are the Engineering Technology Core, which includes a CAD course, and the following selection of courses.

   Upper Level Required Courses (15 hours)
   CET 3144C Applied Microprocessor Technology 4 hours
   CET 3303 Microcomputer Technology 3 hours
   CET 4188 Microcomputer Technology II 4 hours
   CET 4333C Applied Computer Systems I 4 hours

   Upper Level Technical Electives. Courses must be selected so that the combination of lower and upper-level courses provide a balance of hardware and software. (11-12 hrs.)
   CET 4131C Microprocessor Electronics II 4 hours
   EET 3716 Electrical Network Analysis 3 hours
   EET 4158C Linear Integrated Circuits 3 hours
   CET 4334C Applied Computer Systems II 4 hours
2. Design Engineering Technology

The specialization in Design Engineering Technology provides advanced coursework in preparation of employment at the Baccalaureate level in the fields of manufacturing, testing and fabrication of mechanical parts, mechanical drafting, and building construction. Typical community college programs for entrance include those in Drafting and Design, Mechanical, Civil, and Building Construction Technologies. A minimum of five semester hours of engineering drawing or drafting must be included in the community college program.

Upper-Level Required Courses (24 hours)

- CET 3123C Microprocessor Electronics 3 hours
- EET 3035C Electricity and Electronics 4 hours
- EST 4535C Electro-Mechanical Design 3 hours
- ETI 3421 Materials and Processes 3 hours
- ETG 4530 Strength of Materials 3 hours
- ETM 4403C Applied Kinematics 3 hours
- ETM 4512 Applied Design of Machine Elements 3 hours
- ETG 4950 Senior Design Project 2 hours

Upper-Level Technical Electives (8 hours)

- ETC 4241 Construction Methods, Contracts & Specs. 4 hours
- ETC 4410C Applied Structural Design I 3 hours
- ETC 4415C Applied Structural Design II 3 hours
- CET 4131C Microprocessor Electronics II 4 hours
- ETI 4522C Applied Robotics 3 hours
- ETM 4750 Applied Air Conditioning 3 hours
- ETM 4220 Applied Energy Systems 2 hours
- ETI 4185 Applied Reliability 3 hours

(Other technical elective courses may be selected with approval of curriculum coordinator and Department Chair)

Approved electives to bring total to 128 semester hours 15-18 hrs.

3. Electronics Engineering Technology

The program in Electronics Engineering Technology provides advanced courses in preparation for employment opportunities in electronics at the Baccalaureate level. Graduates may work in such diverse fields as aerospace, medical instrumentation, computers, radio and television broadcasting, telecommunications, military electronics, consumer products, and education. They may be involved in applied design, product development, manufacturing, production, and operations, as well as in such activities as field engineering, sales, marketing, and technical services. The Associate degree technology courses transferred from another school must total at least 24 semester hours and include courses in DC and AC Circuits, Electronic Devices/Circuits, Digital Fundamentals/Circuits, Microprocessors, and Technical Report Writing. A minimum of 10 courses (upper and lower-level) which include laboratory are required for award of the BSET in Electronics Engineering Technology.

Upper-Level Required Courses (23 hours)

- EET 3716 Electrical Network Analysis 3 hours
- CET 3303 Microcomputer Technology 3 hours
- CET 4198C Digital Systems 4 hours
- EET 4329C Electronic Communications I 3 hours
- EET 4349C Electronics Communications II 3 hours
- EET 4158C Linear Integrated Circuits 3 hours
- EET 4732 Feedback Control 3 hours
Upper-Level Technical Electives (5-7 hours)  
(Select 2 courses from the following)  
EET 4339C  
Antennas & Propagation 3 hours  
EET 4389C  
Satellite Communication Systems 3 hours  
EET 4508  
Power Utilization 3 hours  
EET 4548  
Power Transmission 3 hours  
CET 4131C  
Microprocessor Electronics II 4 hours  
CET 4381  
Digital Signal Processing 3 hours  
CET 4915  
Senior Design Project 2 hours  
ETG 4931  
Current Topics in Technology 3 hours  
ETI 4185  
Applied Reliability 3 hours  
(Other technical elective courses may be selected with approval of curriculum coordinator and Department Chair)  
Approved electives to bring total to 128 semester hours 3-8 hours  

4. Information Systems Engineering Technology  
The specialization in Information Systems Engineering Technology provides advanced courses in preparation for employment in computer systems programming, programmer/analyst and technical systems analysis. Typical community college associate degree programs for entrance include those in Information Systems, Computer Science and Computer Programming.  
This option is only available at UCF Brevard Campus. Courses numbered 1xxx-2xxx may be completed at Brevard Community College. All students in CISET program are required to participate in Student-Industry project available during the senior year.  
Required Courses (45 hours)  
COP 1000  
Pascal I 3 hours  
COP 1001  
Pascal II 3 hours  
COP 2120  
Beginning Cobol 3 hours  
COP 2121  
Advanced Cobol 3 hours  
COP 1200  
Beginning Fortran (in core) 3 hours  
COP 1201  
Advanced Fortran 3 hours  
COP 2400  
Beginning Assembler 3 hours  
ENC 2210 or 3210  
Technical Writing 3 hours  
EET 3035C  
Electricity and Electronics 4 hours  
CET 3123C  
Microprocessor Electronics 3 hours  
CET 3323C  
Computer Organization Technology 3 hours  
CET 4427  
Applied Database Systems 3 hours  
CET 4505  
Applied Microcomputer Operating Systems 3 hours  
CET 4523  
Applied Systems Analysis II 3 hours  
CET 4915  
Senior Design Project 2 hours  
Upper-Level Technical Electives (Select two courses)  
CET 3303  
Microcomputer Technology I 3 hours  
CET 4361  
Applied Computer Graphics in Technology 3 hours  
CET 4527  
Applied Operating Systems II 3 hours  
CET 4627  
Applied Database Systems II 3 hours  
ETI 4185  
Applied Reliability 3 hours  
Lower-Level Technical Electives to bring total to 128 semester hours  
COP 2401  
Advanced Assembler 3 hours  
COP 2700  
Introduction to Database 3 hours  
COP 1003  
C Language 3 hours  
CGS 1000  
Introduction to Dataprocessing 3 hours  
CGS 1101  
Datamanagement Application 3 hours  
CIS 2321  
Introduction to Systems Analysis 3 hours  
ACG 2001  
Accounting I 3 hours  
MAN 2021  
Business Management 3 hours  
STA 2013 or 3023  
Statistics 3 hours  
ETG 4051  
Current Topics 3 hours  
(Other Technical Elective courses may be selected with approval of curriculum coordinator)  

5. Operations Engineering Technology  
The specialization in Operations Engineering Technology is designed to present the management operations, supervisory, and methods courses that are essential for
The curriculum is designed to accept a broad range of Associate Degree backgrounds and develop the management and supervisory skills necessary to produce a marketable graduate. AS Degree programs with emphasis on Architectural, Building Construction, Aerospace, Automotive Services, Civil, Computer, Fire Control, Drafting and Graphics, Industrial Management or Supervision, Quality Control, and Surveying Technologies are normally acceptable. Engineering drawing must be included in the Community College program. The Operations Engineering Technology program is divided into two options: General Operations and Construction Management (pending).

### Required Courses (28 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET 3123C</td>
<td>Microprocessor Electronics</td>
<td>3</td>
</tr>
<tr>
<td>CET 4131C</td>
<td>Microprocessor Electronics II</td>
<td>4</td>
</tr>
<tr>
<td>EET 3035C</td>
<td>Electricity and Electronics</td>
<td>4</td>
</tr>
<tr>
<td>ETI 3421</td>
<td>Materials and Processes</td>
<td>3</td>
</tr>
<tr>
<td>ETI 4611</td>
<td>Plant Layout, Matl. Handling and Work Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ETI 4650</td>
<td>Process Planning and Estimating</td>
<td>4</td>
</tr>
<tr>
<td>ETI 4185</td>
<td>Applied Reliability</td>
<td>3</td>
</tr>
</tbody>
</table>

### Upper-Level Technical Electives (5 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 4550C</td>
<td>Electro-Mechanical Design</td>
<td>3</td>
</tr>
<tr>
<td>ETI 3690</td>
<td>Technical Sales</td>
<td>2</td>
</tr>
<tr>
<td>ETI 4522C</td>
<td>Applied Robotics</td>
<td>3</td>
</tr>
<tr>
<td>ETI 4700</td>
<td>Occupational Safety</td>
<td>2</td>
</tr>
<tr>
<td>ETC 4241</td>
<td>Construction Methods, Contracts &amp; Specs.</td>
<td>4</td>
</tr>
<tr>
<td>EMT 4220</td>
<td>Applied Energy Systems</td>
<td>2</td>
</tr>
<tr>
<td>EMT 4750</td>
<td>Applied Air Conditioning</td>
<td>3</td>
</tr>
</tbody>
</table>

(Other technical electives may be selected with approval of the curriculum coordinator and Department Chair)

Approved electives to bring total to 128 semester hours. 20-22 hrs.
COLLEGE OF HEALTH AND PROFESSIONAL STUDIES

UNDERGRADUATE PROGRAMS
Cardiopulmonary Sciences (BS)
Communicative Disorders (BA/BS)
Criminal Justice (BA)
Hospitality Management (BS)
Legal Studies (BA)
Medical Record Administration (BS)
Medical Technology (BS)
Nursing (BSN)
Public Administration (BA)
Radiologic Sciences (BS)
Social Work (BSW)

GRADUATE PROGRAM*
Communicative Disorders (MA)
Health Sciences (MS)
Public Administration (MPA)

OTHER PROGRAMS
Pre-Occupational Therapy
Pre-Physical Therapy

*See the Graduate Studies catalog for information.
The mission of the College of Health and Professional Studies is to provide quality undergraduate and graduate education, to foster, through research, the development and transmission of knowledge, and to offer continuing education for community professionals and citizens.

To achieve these objectives, the College offers a diversity of programs preparing students for professions in the fields of Communicative Disorders, Criminal Justice, Legal Studies, Health Sciences, Hospitality Management, Nursing, Public Administration, and Social Work.

General Requirements for the Bachelors Degree

Some Departments or Programs in the College are upper-division, limited access programs. Acceptance by or registration at the University does not constitute admission to the following: Departments of Nursing, Social Work, and the Programs in Medical Laboratory Sciences, Medical Record Administration, and Radiologic Sciences. Application must be made to the appropriate chair or director. Additional information regarding prerequisites and grade point averages may be obtained from the desired Program or Department.

The following Departments and Programs do not have limited access: Departments of Communicative Disorders, Criminal Justice/Legal Studies, Hospitality Management, and Public Administration; and the Programs in Cardiopulmonary Sciences and Health Sciences.

DEPARTMENT OF COMMUNICATIVE DISORDERS

Chair: D. Ratusnik, HP 113, Phone (407) 275-2121
Faculty: Hedrick, Ingram, Mullin, Utt

The primary goal of the Department of Communicative Disorders is the preparation of clinical specialists in Speech/Language Pathology and Audiology. Undergraduate offerings are consistent with philosophies of the American Speech-Language-Hearing Association in that most coursework is designed to provide the student theoretical foundations on which to build competent clinical skills. An on-campus clinic as well as external affiliations including area public schools, community speech and hearing centers, hospital clinics, physicians' offices and industrial settings are available for the development of various clinical competencies. Faculty are engaged in generation and transmission of knowledge concerning speech-language-hearing processes and impairments via ongoing research projects. The professional phase of the program in speech/language pathology and audiology is accredited by the Educational Standards Board of the American Speech-Language Hearing Association.

In addition to coursework for majors, the Department offers a 4-course sequence in Sign Language: SPA 3333, SPA 4380, SPA 4381, SPA 4382.

MINOR

The Department of Communicative Disorders offers a minor consisting of a minimum of 22 semester hours.

Required courses: LIN 3710, 3710L and SPA 3001, 3101, 3112, 3112L, 4030, 4222, 4222L, and 4402, 4402L.

Bachelor of Arts or Bachelor of Science: Communicative Disorders

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIN 3710</td>
<td>Foundations of Language</td>
<td>3</td>
</tr>
<tr>
<td>LIN 3710L</td>
<td>Foundations of Language Lab</td>
<td>1</td>
</tr>
<tr>
<td>SPA 3001</td>
<td>Introduction to Communicative Disorders</td>
<td>3</td>
</tr>
<tr>
<td>SPA 3052</td>
<td>Clinical Observation &amp; Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

(Taken in Fall & Spring of Senior year)
SPA 3101        Physiological Bases of Speech and Hearing         3 hours
SPA 3112        Basic Phonetics                               3 hours
SPA 3112L       Basic Phonetics Lab                          1 hour
SPA 3550        Clinical Methods                             3 hours
SPA 3550L       Clinical Methods Lab                         1 hour
SPA 4030        Audiology I                                  3 hours
SPA 4033        Audiology II                                 3 hours
SPA 4011        Speech & Hearing Science                    3 hours
SPA 4201        Communicative Disorders-Articulation          3 hours
SPA 4201L       Communicative Disorders-Articulation Lab     1 hour
SPA 4222        Non-Organic Speech Disorders                  3 hours
SPA 4222L       Non-Organic Speech Disorders Lab               1 hour
SPA 4250        Organic Speech Disorders                     3 hours
SPA 4250L       Organic Speech Disorders Lab                 1 hour
SPA 4323        Aural Habilitation-Rehabilitation             4 hours
SPA 4402        Communicative Disorders-Language              3 hours
SPA 4402L       Communicative Disorders-Language Lab          3 hours
SPA 4336        Augmentative Communication Systems             3 hours

4. Restricted Electives
To be selected from the following:
DEP 3212        Psychological Approaches to Mental Retardation 3 hours
DEP 3202        Psychology of Exceptional Children            3 hours
EAB 3703        Principles of Behavior Modification           4 hours
STA 3023        Statistical Methods I                         3 hours
STA 4163        Statistical Methods II                        3 hours

The two statistics courses are required for graduation.

5. Electives
To be selected from the following:
DEP 3212        Psychological Approaches to Mental Retardation 3 hours
DEP 3202        Psychology of Exceptional Children            3 hours
EAB 3703        Principles of Behavior Modification           4 hours
STA 3023        Statistical Methods I                         3 hours
STA 4163        Statistical Methods II                        3 hours

Students who wish to obtain a Teachers Certificate for the State of Florida must include necessary coursework as electives.

6. B.A./B.S. Option students pursuing the B.A. degree are required the equivalent of 2 years of a foreign language, while students pursuing the B.S. degree are required the equivalent of 1 year of a foreign language plus 6 credit hours of Departmentally approved science courses.

Total Semester Hours Required: 130
4. Restricted Electives
   a. 12 additional semester hours of Legal Studies coursework.
   b. 9 semester hours of supporting courses chosen with the approval of the
      student's advisor. These courses may be selected from any department
      or program (including Legal Studies) so long as they are related to the
      law.

5. Electives

<table>
<thead>
<tr>
<th>Total Semester Hours Required</th>
<th>120</th>
</tr>
</thead>
</table>

Legal Studies Minor consists of 18 or more semester hours. Required courses: PLA 3013
plus a minimum of 12 semester hours of legal studies courses and 3 semester hours of
law-related courses selected with the aid of an advisor.

Criminal Justice Program

The Criminal Justice program is designed to provide students with a broad understanding
of crime and society’s control mechanisms as well as prepare them for professional careers
in criminal justice and related agencies. Satisfactory completion of program requirements
leads to the degree of Bachelor of Arts with a major in Criminal Justice.

Bachelor of Arts: Criminal Justice

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses (12 semester hours)
   - CCJ 3020 Criminal Justice System 3 hours
   - CCJ 3010 Crime in America 3 hours
   - CCJ 3290 Prosecution and Adjudication 3 hours
   - CCJ 3300 Corrections and Penology 3 hours
4. Restricted Electives
   a. 24 additional semester hours of CCJ coursework, of which at least 21
      hours must be upper division. Seniors can satisfy up to 9 hours of this
      requirement with internship and up to 6 hours with directed independent
      study; however, the combination of these non-class options shall not
      exceed 12 hours. Program standards must be met to be eligible for
      either internships or independent study credit.
   b. 15-16 additional semester hours of supporting courses to be selected
      with and approved by the student’s advisor. These courses may vary
      from student to student depending upon individual needs or objectives,
      but include selected courses from public administration, legal studies,
      sociology, statistics, and psychology.
5. Students must take a minimum of 30 hours from the department to obtain
   the UCF degree in Criminal Justice.
6. Electives

<table>
<thead>
<tr>
<th>Total Semester Hours Required</th>
<th>120</th>
</tr>
</thead>
</table>

DEPARTMENT OF HEALTH SCIENCES

Chair: J. Edwards, HPB 220 (407) 275-2972
Faculty: Acierno, Bergner, Mendenhall, Lytle, T. Edwards, Douglass, Worrell, Core, Crittenden,
Welker, Barr, Clark, Hitchcock, Thornton

The Department of Health Sciences offers a diversity of baccalaureate programs which
prepare students for professions in the fields of Cardiopulmonary Sciences, Medical
Laboratory Sciences, Medical Record Administration, and Radiologic Sciences. In addition,
the Department offers a graduate program in Health Sciences.
The mission of the Department is to provide quality undergraduate and graduate academic and clinical instruction with an accent on educating future leaders of the health care system. The Department seeks first to strengthen existing programs, as well as to identify and develop new programs which fulfill documented need for health care resources and technology. Another goal is to foster the development of knowledge through research, publications, scientific presentations, and grantsmanship. Finally, the Department seeks to provide continuing education for the health care community and consumer health education.

The Health Sciences department provides several courses to broaden the student's understanding of health care and provide counseling in pre-physical and pre-occupational therapy. All undecided and pre-physical and pre-occupational therapy students are strongly encouraged to enroll in HSC 2000 Introduction to the Allied Health Professions the first fall semester they are enrolled. This course provides a broad exposure to guest speakers representing all of the allied health professions. Following this awareness, students are prepared to make informed decisions relative to planning their preprofessional studies.

MINOR
The Department of Health Sciences offers a minor consisting of a minimum of 16 semester hours. In order to be awarded a minor in Health Sciences, a student must complete the required course work and maintain at least a 2.5 GPA and a minimum of C on all College of Health course work.

Required Courses: HSA 4121, HUN 3930, HSC 3110 and a minimum of 7 hours of upper-division courses in the Health Science Department majors may not count courses presently required in a department program.

The Department of Health Sciences requires a minimum overall GPA of 2.5 for admission to and graduation from its programs. In addition, a minimum grade of C is required for prerequisite courses and required courses within the major.

Program in Health Sciences
Director: T. Mendenhall, HP-209, (407) 275-2972

The program in Health Sciences offers a graduate program leading to a Master of Science in the Health Sciences with options in management, education and advanced clinical specialties. See the graduate catalogue for details.

Program in Medical Record Administration
Interim Director: C. Barr, HP 125, Phone (407) 275-2359

Medical Record Administrators are professional members of the modern health care team responsible for: (1) the acquisition and supervision of complete medical records on each patient, (2) the design and management of health information systems which collect, process, store, retrieve, and release health information and statistics, (3) assistance to administration, other health professionals, and medical staff in developing quality assurance programs by abstraction of medical data, preparation of statistical reports, and analysis of information, and (4) assistance in collection and analysis of data for public health services planning.

The curriculum of the Medical Record Administration program is approved by the Committee on Allied Health Education and Accreditation of the American Medical Association in collaboration with the Council on Education of the American Medical Record Association.

Before acceptance to the professional phase of the program, students are required to complete the following prerequisite courses: biology with lab, anatomy with lab, physiology with lab, statistics, an introduction to data processing or computer science, and an introduction to accounting or finance.

Application and acceptance to the University does not constitute admission to the program. SEPARATE APPLICATION must be made directly to the upper-division, limited access MRA program prior to February 1st of the year in which prerequisites will have been met to be considered an applicant. A personal interview is also required.

Upon completion of the approved program, the student is eligible to submit an application for writing the national registration examination administered by the American Medical Record Association to qualify as a Registered Record Administrator.
Bachelor of Science: Medical Record Administration

Degree Requirements

1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses

<table>
<thead>
<tr>
<th>Course Prefix</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>APB</td>
<td>Introduction to Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>COM</td>
<td>Business and Professional Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENC</td>
<td>Business Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>HSC</td>
<td>Health Care Finance</td>
<td>3</td>
</tr>
<tr>
<td>HSC</td>
<td>Health Law</td>
<td>3</td>
</tr>
<tr>
<td>HSC</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>HSC</td>
<td>Pathophysiologic Mechanisms</td>
<td>3</td>
</tr>
<tr>
<td>MAN</td>
<td>Management of Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MAN</td>
<td>Personnel Management</td>
<td>3</td>
</tr>
<tr>
<td>MRE</td>
<td>Introduction to Medical Records</td>
<td>4</td>
</tr>
<tr>
<td>MRE</td>
<td>Medical Record Organization &amp; Management</td>
<td>4</td>
</tr>
<tr>
<td>MRE</td>
<td>Fundamentals of Medicine</td>
<td>4</td>
</tr>
<tr>
<td>MRE</td>
<td>Directed Practice I</td>
<td>2</td>
</tr>
<tr>
<td>MRE</td>
<td>Directed Practice II</td>
<td>2</td>
</tr>
<tr>
<td>MRE</td>
<td>Coding Procedures</td>
<td>4</td>
</tr>
<tr>
<td>MRE</td>
<td>Coding Procedures II</td>
<td>2</td>
</tr>
<tr>
<td>MRE</td>
<td>Health Data Processing</td>
<td>3</td>
</tr>
<tr>
<td>MRE</td>
<td>Medical Record Department Management</td>
<td>3</td>
</tr>
<tr>
<td>MRE</td>
<td>Analysis of Medical Record Department Operations</td>
<td>4</td>
</tr>
<tr>
<td>MRE</td>
<td>Health Care Delivery Systems</td>
<td>4</td>
</tr>
<tr>
<td>MRE</td>
<td>Health Legislation</td>
<td>2</td>
</tr>
<tr>
<td>MRE</td>
<td>Health Information Retrieval Systems</td>
<td>4</td>
</tr>
<tr>
<td>MRE</td>
<td>Directed Practice III</td>
<td>2</td>
</tr>
<tr>
<td>MRE</td>
<td>Directed Practice IV</td>
<td>2</td>
</tr>
<tr>
<td>MRE</td>
<td>Medical Record Research</td>
<td>3</td>
</tr>
<tr>
<td>MRE</td>
<td>Management Affiliation</td>
<td>5</td>
</tr>
</tbody>
</table>

4. Restricted Electives

None

5. Electives: None

Total Semester Hours Required: 135

Program in Medical Laboratory Sciences

Director: D. Hitchcock, HP 217, Phone (407) 275-2359

Medical technologists are involved in medical diagnosis, treatment, surveillance, management, research, and education. They use highly sophisticated equipment such as electronic cell counters, automated analyzers, computers, and microscopes in the examination of body tissues and fluids.

The curriculum is designed to give students a thorough background in the physical and biological sciences; to develop the understanding, skills, and abilities essential to assume leadership roles in management and education; to develop a high level of proficiency in the clinical laboratory; and to develop an awareness for continuing education needed for professional growth.

Admission to the University does not constitute admission to the upper-division, limited access Medical Laboratory Sciences Program. SEPARATE APPLICATION must be made through the Medical Laboratory Sciences Office prior to February 1st of the year for which admission is sought. For the last seven months of the program the students will be assigned to a hospital laboratory for clinical experience. The affiliated hospitals are located in Lakeland, Orlando, and Winter Haven. It may be necessary for the student to move to Lakeland, Orlando, or Winter Haven during this period.

The degree in Medical Laboratory Sciences will be awarded upon completion of the University's didactic program and the clinical program in an affiliated hospital.

Upon receiving the degree in Medical Laboratory Sciences, the graduate will be eligible to write a national certification examination and the State of Florida licensure examination.
Bachelor of Science: Medical Laboratory Sciences

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses
   Prerequisites for professional phase admission
   - BSC 2010C General Biology 4 hours
   - MCB 3013C General Microbiology 5 hours
   - MCB 3203 Pathogenic Microbiology 3 hours
   - MCG 3203L Pathogenic Micro Lab 1 hour
   - CHM 2045, 2046 Chemistry Fundamentals I & II 7 hours
   - CHM 2046L Chemistry Fundamentals Laboratory 1 hour
   - CHM 2205 Introduction to Organic & Biochemistry 5 hours
   - CHM 3120C Analytical Chemistry 5 hours
   - MAC 1104 College Algebra 3 hours
   - STA 3023 Statistical Methods I 3 hours
   - CGS 3000 Computer Fundamentals for Business Applications I 3 hours

   Upper Division Professional Phase
   - PCB 3233 Immunology 3 hours
   - PCB 3233L Immunology Lab 1 hour
   - PCB 3703C Human Physiology 4 hours
   - MLS 3220C Techniques in Clinical Microscopy 2 hours
   - MLS 3305C Hematology 4 hours
   - MLS 3930 Concepts in Laboratory Education/ Management 3 hours
   - MLS 4830C, 4831C, 4832C, 4833C, 4834C Clinical Practice I, II, III, IV, & V 20 hours
   - MLS 4405 Clinical Pathogenic Microbiology 4 hours
   - MLS 4625C, 4630C Advanced Clinical Chemistry I & II 8 hours
   - MLS 4334C Hemostasis 2 hours
   - MLS 4550C Clinical Immunohematology 4 hours
   - MLS 4420C Clinical Mycology 1 hour
   - MLS 4431C Clinical Parasitology 2 hours
   - MLS 4511C Immunodiagnosics 5 hours
   - MLS 4910 Fundamentals of Research for Health Professionals 3 hours
   - MLS 4932 Medical Technology Seminars 2 hours

4. Restricted Electives:
5. Electives: None

Total Semester Hours Required 140

Program in Radiologic Sciences
Director: T. J. Edwards III, Phone (407) 275-2747

The University of Central Florida offers the only accredited Bachelor of Science in Radiologic Sciences degree program in Florida. The Radiologic Sciences Program offers students the opportunity to specialize in either Radiography or Radiation Therapy Technology. Radiographers and Radiation Therapy Technologists are integral members of the health care team dedicated to providing high quality patient care. Graduates are prepared to function as clinically competent Radiographers or Radiation Therapy Technologists and, with experience, advance to leadership positions in their profession. Employment opportunities in both fields are excellent.

The primary role of Radiographers is to perform medical imaging procedures for the diagnosis of disease and injury. The Radiographer enjoys an interesting and challenging variety of examinations/procedures which may include conventional radiography, fluoroscopy, vascular imaging, computed tomography and magnetic resonance imaging. Employment opportunities are available in hospitals, imaging centers, and private physician offices. Career advancement opportunities include positions in radiology administration, education, quality assurance, and public health physics.
Radiation Therapy Technologists work closely with physicians to deliver high energy radiation for the treatment of cancer. The Radiation Therapy Technologist delivers the prescribed amount of radiation to the precise tumor site while assessing and reporting patient progress throughout the course of treatment. Employment opportunities are available in hospitals and treatment centers. Career advancement opportunities include positions in radiology administration, education, quality assurance, and dosimetry.

The program works in conjunction with Central Florida Regional Hospital, Sanford; Florida Hospital, Altamonte Springs; Jewett Orthopaedic Clinic, Winter Park; Halifax Medical Center, Daytona Beach; Waterman Medical Center, Eustis; and Winter Park Memorial Hospital, Winter Park.

The programs in Radiography and Radiation Therapy Technology are accredited by the Committee on Allied Health Education and Accreditation (CAHEA) in cooperation with the Joint Review Committee on Education in Radiologic Technology (JRCERT). Graduates are eligible to apply for admission to the certification exam administered by the American Registry of Radiologic Technologists (ARRT). The University of Central Florida is the sponsoring institution for the Radiography program. Halifax Hospital Medical Center is the sponsoring institution of the Radiation Therapy program.

The application deadline for admission to the upper-division, limited access phase of the program is February 1 of the year in which admissions is sought. Professional courses begin during the Summer semester. After successful completion of the Summer semester and continuance in the Fall semester, students may apply for admission to the Radiation Therapy area of specialization. Classes in Radiation Therapy begin in January.

**Registered Technologists**

Up to 45 semester hours of credit may be awarded to Registered Technologists (ARRT). Registered technologists with an A.S. degree in Radiologic Technology from a Florida public community college have the same choice of catalog options as students with an A.A. degree. Registered technologists may complete the general education and prerequisite courses concurrently with the professional courses. Courses for registered technologists are offered in Orlando and through Hillsborough Community College, Tampa.

Students considering a career in radiologic technology are encouraged to enroll in the Introduction to Radiologic Sciences course (RTE 1002). This course may be completed prior to beginning the limited access phase of the program.

**Bachelor of Science: Radiologic Sciences**

**Degree Requirements**

1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required courses

**Prerequisites**

- CGS 1060 Introduction to Computer Science 3 hours
- MAC 1104 College Algebra 3 hours
- PCB 3703C Human Physiology 4 hours
- PHY 2053C College Physics I 4 hours
- ZOO 3733C Human Anatomy 4 hours

**Professional Phase**

Radiography Program of Study

**JUNIOR LEVEL—Summer Semester**

- RTE 1002 Introduction to Radiologic Sciences 3 hours
- RTE 3123 Introduction to Patient Care 2 hours
- RTE 3528C Radiographic Procedures I 3 hours
- RET 3412C Principles of Radiographic Exposure I 3 hours

**JUNIOR LEVEL—Fall Semester**

- RTE 3806 Clinical Education I 4 hours
- RTE 3549C Radiographic Procedures II 3 hours
- RTE 3457C Principles of Radiographic Exposure II 3 hours
- RTE 3684 Physics of Image Production 2 hours
- ACG 2001 Principles of Accounting I 3 hours
- HSC 3640 Health Law 3 hours
### JUNIOR LEVEL—Spring Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTE 3387</td>
<td>Medical Physics</td>
<td>3</td>
</tr>
<tr>
<td>RTE 3564</td>
<td>Special Radiographic Procedures</td>
<td>2</td>
</tr>
<tr>
<td>RTE 3816</td>
<td>Clinical Education II</td>
<td>4</td>
</tr>
<tr>
<td>STA 3023</td>
<td>Statistical Methods I</td>
<td>3</td>
</tr>
<tr>
<td>HSA 3122</td>
<td>US Health Care Systems</td>
<td>3</td>
</tr>
<tr>
<td>PHY 2054C</td>
<td>College Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>

### SENIOR LEVEL—Summer Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTE 4826</td>
<td>Clinical Education III</td>
<td>5</td>
</tr>
<tr>
<td>RTE 4566</td>
<td>Advanced Imaging Modalities</td>
<td>3</td>
</tr>
</tbody>
</table>

### SENIOR LEVEL—Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTE 4876</td>
<td>Clinical Education IV</td>
<td>6</td>
</tr>
<tr>
<td>RTE 4362</td>
<td>Radiobiology</td>
<td>1</td>
</tr>
<tr>
<td>RTE 4207</td>
<td>Methods of Radiology Management</td>
<td>3</td>
</tr>
<tr>
<td>HSC 4550</td>
<td>Pathophysiologic Mechanisms</td>
<td>3</td>
</tr>
<tr>
<td>EDG 4321</td>
<td>Teaching Strategies</td>
<td>4</td>
</tr>
</tbody>
</table>

### SENIOR LEVEL—Spring Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTE 4843</td>
<td>Clinical Education V</td>
<td>6</td>
</tr>
<tr>
<td>RTE 3156</td>
<td>Radiographic Pathology</td>
<td>2</td>
</tr>
<tr>
<td>RTE 4569</td>
<td>Quality Assurance</td>
<td>3</td>
</tr>
<tr>
<td>RTE 4720</td>
<td>Anatomy for the Medical Imager</td>
<td>3</td>
</tr>
</tbody>
</table>

Select One:

- RTE 4209 Radiological Administrative Practice 2 hours
- RTE 4256 Directed Study in Clinical Education 2 hours

### Radiation Therapy Technology Program of Study

#### JUNIOR LEVEL—Summer Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTE 1002</td>
<td>Introduction to Radiologic Sciences</td>
<td>3</td>
</tr>
<tr>
<td>RTE 3123C</td>
<td>Introduction to Patient Care</td>
<td>2</td>
</tr>
<tr>
<td>RTE 3528C</td>
<td>Radiographic Procedures</td>
<td>3</td>
</tr>
<tr>
<td>RTE 3412C</td>
<td>Principles of Radiographic Exposure I</td>
<td>3</td>
</tr>
</tbody>
</table>

#### JUNIOR LEVEL—Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTE 3806</td>
<td>Clinical Education I</td>
<td>4</td>
</tr>
<tr>
<td>RTE 3549C</td>
<td>Radiographic Procedures II</td>
<td>3</td>
</tr>
<tr>
<td>RTE 3457C</td>
<td>Principles of Radiographic Exposure II</td>
<td>3</td>
</tr>
<tr>
<td>RTE 3684</td>
<td>Physics of Image Production</td>
<td>2</td>
</tr>
<tr>
<td>PHY 2054C</td>
<td>College Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>

#### JUNIOR LEVEL—Spring Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAT 3001</td>
<td>Introduction to Radiation Oncology</td>
<td>3</td>
</tr>
<tr>
<td>RAT 3242</td>
<td>Oncologic Pathology</td>
<td>2</td>
</tr>
<tr>
<td>RAT 3241</td>
<td>Clinical Radiobiology</td>
<td>3</td>
</tr>
<tr>
<td>RAT 3614</td>
<td>Radiation Therapy Physics I</td>
<td>2</td>
</tr>
<tr>
<td>RTE 3816</td>
<td>Clinical Education II</td>
<td>4</td>
</tr>
<tr>
<td>HSC 4550</td>
<td>Pathophysiologic Mechanisms</td>
<td>3</td>
</tr>
</tbody>
</table>

#### SENIOR LEVEL—Summer Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAT 4027</td>
<td>Radiation Oncology I</td>
<td>3</td>
</tr>
<tr>
<td>RAT 4618</td>
<td>Radiation Therapy Physics II</td>
<td>4</td>
</tr>
<tr>
<td>RTE 4826</td>
<td>Clinical Education III</td>
<td>5</td>
</tr>
</tbody>
</table>

#### SENIOR LEVEL—Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAT 4028</td>
<td>Radiation Oncology II</td>
<td>3</td>
</tr>
<tr>
<td>RAT 4619</td>
<td>Radiation Therapy Physics III</td>
<td>4</td>
</tr>
<tr>
<td>EVT 3371</td>
<td>Essential Teaching Skills in Voc. Ed.</td>
<td>3</td>
</tr>
<tr>
<td>RTE 4876</td>
<td>Clinical Education IV</td>
<td>6</td>
</tr>
<tr>
<td>STA 3023</td>
<td>Statistical Methods I</td>
<td>3</td>
</tr>
</tbody>
</table>
Cardiopulmonary Sciences currently encompasses two academic areas: the undergraduate curriculum leading to the Bachelor of Science Degree in Cardiopulmonary Sciences and a cardiopulmonary science emphasis in one option in the Master of Science Degree in Health Sciences (see graduate catalog for further information).

Cardiopulmonary Sciences is accredited with the Joint Review Committee for Respiratory Therapy Education.

As the health industry changes, Respiratory Therapists must continue to grow and change. In order to meet these rapid, sophisticated changes, the baccalaureate individual should possess basic entry-level skills, the desire to acquire more knowledge, and a solid foundation in the sciences.

This Department accepts Associate in Arts (AA) and Associate in Science (AS) transfers. Students should seek advisement from the program advisor as soon as they declare Cardiopulmonary Sciences as their major.

Students must be accepted by the University and meet all requirements for admission to the upper division. No separate application is necessary. A 2.5 GPA is required for graduation.

Bachelor of Science: Cardiopulmonary Sciences

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Prerequisites
   - STA 3023 Statistics 3 hours
   - MAC 1104 College Algebra 3 hours
   - BSC 2010C General Biology 4 hours
   - MCB 3013C General Microbiology 5 hours
   - ZOO 3733 Human Anatomy 4 hours
   - PCB 3703C Human Physiology 4 hours
   - CHM 1032 General Chemistry 3 hours
   - CHM 2045L Chemistry Fund Lab 1 hour
   - PHY 3053C College Physics I 4 hours

4. Professional curriculum
   - HSC 4550 Pathophys. Mechanisms 3 hours
   - RET 3026C Intro. Resp. Therapy 4 hours
   - APB 3263C Cardiopulmonary Phys 4 hours
   - APB 4650 Medical Pharmacology 3 hours
   - HSC 3930 AIDS: A Human Concern 3 hours
   - RET 3874 Clinical Pract. I 5 hours
   - RET 4244 Life Support Systems 3 hours
   - RET 4414C Pulmonary Funct. Tests 4 hours
   - RET 4503 Chest Medicine & Pt. Assessment 4 hours
   - RET 3714 Pediatrics 4 hours
   - RET 4715 Neonatal Medicine 4 hours
   - RET 4040 R.T. Education 2 hours
   - RET 3264C Mechanical Ventilation 4 hours
   - RET 3875 Clin. Practice II 8 hours

Total Semester Hours Required 138
The hospitality industry is comprised of the many business organizations that provide services to individuals away from home. The hospitality industry, the number one employer in the United States, requires high technical and managerial competence for managing the numerous services provided by the varied organizations in the field.

The study of hospitality management prepares students for a broad range of managerial positions in hotels, motels, restaurants, catering services, resorts, country clubs, airlines, travel agencies, state and local convention and visitors bureaus, hospital and college food services, as well as supportive industries, such as consulting and research firms, public accountants, computer firms, or sales and marketing organizations. The program provides students opportunities to complete studies in all hospitality management areas as well as "hands-on" laboratory experience and for study in advanced specialized courses. In addition, "real world" experience is provided through a requirement of 1360 hours of paid employment in the hospitality field during each student's course of study.

Bachelor of Science in Hospitality Management

Degree Requirements
1. See Undergraduate Degree Requirements
2. Special department requirements:
   a. For Hospitality Management majors the mathematical foundations requirements are:
      MAC 1104—College Algebra and CGS 3000—Computer Fundamentals for Business Applications.
   b. For Hospitality Management majors the foreign language requirements are two semesters of one foreign language
3. Required Courses:
   a. Business Administration Studies
      ECO 2013—Principles of Economics I .................................................. 3
      ECO 2023—Principles of Economics II ................................................. 3
      ACG 2001—Principles of Accounting I ................................................ 3
      ACG 2011—Principles of Accounting II .............................................. 3
      MAN 3025—Management of Organizations .......................................... 3
      MAR 3023—Introduction to Marketing ................................................... 3
   b. Hospitality Management Core
      HFT 1000—Introduction to Hospitality Management ................................ 3
      FSS 2202C Food Production Techniques ............................................. 3
      HFT 2252—Rooms Division Management .............................................. 3
      HFT 2750—Fundamentals of Conventions and Conferences .................... 3
      HFT 3444—Hospitality Information System ........................................ 3
      HFT 3603—Legal Environment in the Hospitality and Tourism Industry ........ 3
      HFT 3700—Travel and Tourism Administration ................................... 3
      HFT 3930—Guest Lecture Series ...................................................... 1
      HFT 4420—Profit Planning & Decision Making .................................... 3
      HFT 4503—Hospitality and Tourism Marketing .................................... 3
   c. Hospitality Management Cooperative Education
      The Coop Education program provides students the opportunity to blend theory with practice by combining classroom education with study-related work experience. The work assignments enable hospitality
students to gain career experience in the field of their choice. All students majoring in Hospitality Management must complete a minimum of 1360 clock hours (equivalent to 34 full-time weeks) of paid study-related work experience in a hospitality or tourism enterprise. All work experience assignments have to be approved in advance by the departmental coop coordinator. The coop education requirement can be fulfilled partially in units of 1 credit or more.

d. Restricted Electives

Seven courses in one of the following tracks:

1. Lodging Management Track
   - FSS 3223 Quantity Food Management ........... .......... .......... .......... .......... ........... 3

2. Food Service Management Track
   - Four From: FSS 3241C, FSS 3301, FSS 4226, FSS 4284C, HFT 3313, HFT 4210, HFT 4343, HFT 4860

3. Conference and Convention Management Track
   - Three From: FSS 4284C, HFT 4210, HFT 4860, HFT 4932

4. Travel and Tourism Track

4. Electives

Total semester hours 125

*Hospitality Management majors are restricted to the listed courses offered by the College of Business Administration. No other courses offered by the College of Business Administration may be applied towards a degree in Hospitality Management.

MINOR

The Hospitality Management Department offers a minor consisting of 24 semester hours.

Required courses: HFT 1000, HFT 2252, FSS 2202C, HFT 2750, HFT 3603, HFT 3444, HFT 3700, one 3000/4000 level hospitality restricted elective. A GPA of 2.0 is required for these courses. Nine (9) semester hours must be taken at UCF.

DEPARTMENT OF NURSING

Chair: J.C. Kijek, HP 410, Phone (407) 275-2744
Faculty: Conroy, Covelli, Dorner, Eldridge, Giovino, Guarda, Hennig, Horvath, Judkins, Koch, Moore, Peterson, Primus, Ramey, Smith, Wink

The nursing curriculum at UCF and its extension campuses leads to the Bachelor of Science in Nursing degree, the basis of professional nursing practice. The BSN graduate is
prepared to provide comprehensive care in a variety of acute, community, and rehabilitative settings. Program emphasis includes clinical nursing practice, health promotion and maintenance, and preparation for assuming leadership roles. The baccalaureate curriculum provides the foundation for graduate study in nursing.

Acceptance to the University does not constitute admission to the upper-division, limited access nursing major. SEPARATE APPLICATION must be made directly to the Admissions Office prior to February 1st of the year in which Fall admission is sought. R.N.s and minority applicants receive special consideration. Completion of the A.A. degree or General Education Program is required. Graduates are eligible to take the licensing examination for registered nurses.

Courses for nurses registered in the State of Florida are offered at the Orlando, UCF Daytona Beach, and UCF Brevard campuses. University credit may be awarded to R.N. students for selected nursing courses based on standardized test scores.

Bachelor of Science: Nursing

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and or department requirements
3. Required Courses

Prerequisites to Nursing Major to be satisfactorily completed prior to admission to the major

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCB 3013C</td>
<td>General Microbiology</td>
<td>5</td>
</tr>
<tr>
<td>ZOO 3733C</td>
<td>Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>PCB 3703C</td>
<td>Human Physiology</td>
<td>4</td>
</tr>
<tr>
<td>CHM 2205</td>
<td>Introduction to Organic/Biochemistry</td>
<td>5</td>
</tr>
<tr>
<td>STA 2014</td>
<td>Principles of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>or 3023</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>SOW 3104</td>
<td>Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>Human Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>DEP 3004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUN 3011</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Upper-Division Professional Phase

HSC 4550  Pathophysiologic Mechanisms  3 hours
NUR 3119  Introduction to Baccalaureate Nursing  3 hours
NUR 3748C  Concepts Basic to Nursing Practice  6 hours
NUR 3066  Health Assessment  3 hours
NUR 3166  Critical Inquiry  3 hours
*NUR 3749C  Scientific Theories of Nursing I  6 hours
*NUR 3795C  Scientific Theories of Nursing II  6 hours
*NUR 3755C  Scientific Theories of Nursing III  5 hours
*NUR 3796C  Scientific Theories of Nursing IV  5 hours
*NUR 4756C  Scientific Theories of Nursing V  6 hours
NUR 4758C  Scientific Theories of Nursing VI  6 hours
NUR 4757C  Scientific Theories of Nursing VII  6 hours
NUR 4797  Professional Development and Issues  3 hours
NUR 4941  Selected Nursing Practicum  3 hours

4. Restricted Electives: One course in nursing  3 hours

5. Electives: None

Total Semester Hours Required  139

*Students who are Registered Nurses in Florida must pass examinations for credit for these courses prior to enrollment in:

NUR 3709  Transitional Concepts in Nursing  6 hours

DEPARTMENT OF PUBLIC ADMINISTRATION

Chair: R. Shapek, PH 102, Phone (407) 275-2604
Faculty: Aristigueta, Colby, Jurie, Lawther, Rosell

The Public Administration course of study is designed to provide students with a broad understanding of the roles and functions of administrative agencies in the American system of government as well as prepare them for professional careers in public service at the federal, state, regional, or local level. Satisfactory completion of program requirements leads to the degree of Bachelor of Arts with a major in Public Administration. The baccalaureate program in Public Administration is offered on the Orlando and Brevard campuses.

Bachelor of Arts: Public Administration

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses (27 semester hours)
   PAD 3003  Introduction to Public Administration  3 hours
   PAD 4034  Administration of Public Policy  3 hours
   PAD 4104  Administrative Theory  3 hours
   PAD 4204  Fiscal Management  3 hours
   PAD 4414  Public Personnel Administration  3 hours
   POS 2041  American National Government  3 hours
   ECO 2013  Principles of Economics I  3 hours
   CGS 1080  Introduction to Computer Science or
           Business Application  3 hours
   CGS 3000  Computer Fundamentals for
           a course in social science research with an emphasis on statistical methods  3 hours

4. Restricted Electives
   30 additional semester hours taken from: (1) Public Administration electives including the internship; and (2) one or more allied public science fields. All courses are selected with and approved by the student's advisor. Among such supporting fields are accounting, legal studies, communica-
tions, computer sciences, criminal justice, economics, political science, social work, sociology, and statistics.

5. Electives

Total Semester Hours Required: 120

MINOR

The public administration program offers a minor in public administration consisting of 21 hours:

1. All five of the required core courses for the PAD major will be required of the PAD minor. These are: PAD 3003, PAD 4414, PAD 4104, PAD 4204, and PAD 4034.
2. Two additional courses may be selected from among the list of PAD restricted electives or related courses in other fields. These courses will be chosen with the consent of the PAD undergraduate advisor.

DEPARTMENT OF SOCIAL WORK

Chair: K.J. Kazmerski, FA 215, Phone (407) 275-2114
Faculty: Abel, Green, Suh, Tropf

The Department of Social Work offers a professional degree program which is nationally accredited by the Council on Social Work Education. Its primary focus is the preparation of students for entry-level professional social work practice within diverse human service organizations such as hospitals, schools, correctional settings, public welfare departments, child placement organizations, community centers, and counseling agencies.

Before applying for the professional phase of the program, students must have completed courses in biology, computer science, economics, political science, psychology, and sociology. Applications to this limited access program may be obtained at the Department of Social Work.

Bachelor of Social Work

Degree Requirements
1. See Undergraduate Degree Requirements
2. See special college and/or department requirements
3. Required Courses (45 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOW 3104</td>
<td>Assessing Human Development</td>
<td>3</td>
</tr>
<tr>
<td>SOW 3111</td>
<td>Assessing Human Systems</td>
<td>3</td>
</tr>
<tr>
<td>SOW 3203</td>
<td>Social Welfare and Community Resources</td>
<td>3</td>
</tr>
<tr>
<td>SOW 3232</td>
<td>Social Welfare Policies and Issues</td>
<td>3</td>
</tr>
<tr>
<td>SOW 3401</td>
<td>Social Work Research</td>
<td>3</td>
</tr>
<tr>
<td>SOW 4431</td>
<td>Evaluating Social Work Practice and Service Programs</td>
<td>3</td>
</tr>
<tr>
<td>SOW 3300</td>
<td>Generalist Practice in Social Work</td>
<td>3</td>
</tr>
<tr>
<td>SOW 3352</td>
<td>Interpersonal Skills in Social Work Practice</td>
<td>3</td>
</tr>
<tr>
<td>SOW 4341</td>
<td>Micro-level Roles and Interventions in Social Work</td>
<td>3</td>
</tr>
<tr>
<td>SOW 4343</td>
<td>Macro-level Roles and Interventions in Social Work</td>
<td>3</td>
</tr>
<tr>
<td>SOW 4620</td>
<td>Social Work with Minorities</td>
<td>3</td>
</tr>
<tr>
<td>SOW 4510</td>
<td>Field Education</td>
<td>9</td>
</tr>
<tr>
<td>SOW 4522</td>
<td>Field Education Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

4. Electives

Total Semester Hours Required: 120

Social Welfare Enhancement Options

Students desiring additional studies in a social welfare area must satisfy the requirements of the basic curriculum while concurrently completing the optional area.

1. Child Welfare Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYO 4100</td>
<td>The Family</td>
<td>3</td>
</tr>
<tr>
<td>SOW 4654</td>
<td>Children’s Services</td>
<td>3</td>
</tr>
</tbody>
</table>
EDF 3603 Analysis of Educational Foundations 3 hours
or
EDF 4003 Overview of Education 3 hours
Elective from approved list — see advisor
In addition, SOW 4510 Field Education must be completed in a child welfare agency

2. Gerontology Certificate Program
   See Office of Undergraduate Studies section

3. Health Services Option
   SYO 4400 Medical Sociology 3 hours
   HSA 4120 Community and Public Health Services 3 hours
   or
   HSA 4121 History and Future of Health Care 3 hours
   SOW 4602 Social Work in Health Settings 3 hours
Elective in Health Studies
In addition, SOW 4510 Field Education must be completed in a health setting.
COLLEGE OF EXTENDED STUDIES

Dean: John B. O’Hara, Research Pavilion-Suite 220, Phone (407) 249-6100
Associate Dean: Jennie L. Loudermilk, Research Pavilion-Suite 220, Phone (407) 249-6100

The College of Extended Studies develops, coordinates, and implements noncredit and sponsored credit institute programs of extension, outreach, and continuing education in cooperation with academic colleges and departments of the University. Learners wishing to continue their education are offered, as an alternative to regular credit courses, opportunities for academic credit, professional and personal growth, and enrichment at off-campus locations. The primary purpose is to provide lifelong learning opportunities by using university resources to benefit nontraditional and traditional learners.

A broad spectrum of programs, many designed specifically for individuals and groups, include short courses, in-service training, conferences, seminars, institutes, special training programs, study-travel programs, and workshops. Educational courses are conducted in cooperation with outside agencies for non-matriculated and nontraditional students who wish to complete baccalaureate degree requirements. Professional level courses are offered to meet the educational needs of business, professional, government, service, and civic organizations. To substantiate the content of professional programs as well as to offer credentials to verify the learner’s participation, Continuing Education Units (CEU) are offered to qualified and eligible participants.

Additionally, training activities can be custom designed for specific professional groups or organizations desiring to complement their internal personnel training and development programs. Specialized certification courses, in response to legislative mandates (e.g. certified risk managers in certain health care facilities) are also offered.

The College of Extended Studies administers the Center for Multilingual Multicultural Studies, the Institute of Government, the Center for Executive Development, and the Real Estate Institute, which is located at the University’s Winter Park Campus. Registration in the College of Extended Studies courses does not require admission to the University, nor does it imply acceptance.

The College of Extended Studies manages UCF’s newest facility: the Winter Park Center. Located in the heart of Central Florida’s growth area, it is the University’s primary conference/workshop center. Six meeting rooms serve groups from 10 to 100 in a modern, urban setting. Adjacent to the center, Valencia Community College has classroom and computer labs used on a shared basis. This facility is available for use by the public and the university community. For more information, please contact the UCF Winter Park Center (407) 645-0310.

Center for Multilingual Multicultural Studies
Director: Consuelo Stebbins, PC 530, Phone (407) 281-5515

The Center provides English instruction for foreign students and area business persons. The intensive English program combines the latest in teaching methodology with computer-assisted instruction. Full-time students enrolled at the Advanced level may elect to take courses as nondegree-seeking students while enrolled in the English language program. Student (F-1) visas are extended to qualified applicants. Special attention is given to preparing students for academic coursework in their specialized fields of study. Four levels of instruction are offered which range from Beginning to Advanced. Students are required to take an entry placement test to determine their level of proficiency. The Center also offers special courses in Accident Reduction, TOEFL Preparation, and Foreign Languages: Spanish for Business purposes and French for Hospitality Management for community residents.

Institute of Government
Program Coordinator: Phyllis Allison, Winter Park Center, Phone (407) 275-2520

Through the College of Extended Studies, the Institute of Government, an affiliate of the Florida Institute of Government, offers educational and training assistance to elected and appointed officials, local government managers, administrators, and senior management staff on topics selected by the UCF Institute of Government Steering Committee. Training workshops, conferences, seminars, technical assistance, video tapes (for in-house training)
and liaison between UCF and specific training requests of a governmental jurisdiction are provided in an eleven-county service area.

Beginning in February 1990, the UCF Institute of Government will sponsor, in conjunction with the Florida City/County Managers Association, the first annual statewide public policy forum for experienced city and county managers and selected elected officials to improve the effectiveness of local governments in the state of Florida.

Center for Executive Development
Director: David Roberts, CEBA II 236, Phone (407) 275-2446

The Center for Executive Development is the continuing education outreach program of the College of Business Administration. The basic charter of the center is to transfer knowledge and technology from the faculty in the college to the business community. This transfer is accomplished by presenting programs in three different formats: open enrollment, in-house programs, and programs conducted in conjunction with professional organizations. The educational content falls within the basic functional areas of business: Accounting, Economics, Finance, Management, and Marketing. Programs are offered on the main campus, at the satellite campuses, and at client company locations.

Real Estate Institute
Director: Jan Pirtle, Winter Park Center, Phone (407) 645-0310

The Real Estate Institute, through the College of Extended Studies, offers continuing education courses, workshops, and institute for the Real Estate profession. Pre-license courses offered satisfy Florida Real Estate Commission requirements; post-licensing courses develop expertise in specialized areas such as appraising, property management, and mortgage brokering.

The institute offices are housed in the University’s newest facility: the Winter Park Center in Winter Park. Courses, workshops, and institutes are offered throughout the eleven-county service area of the University of Central Florida.
INSTITUTES AND CENTERS FOR RESEARCH

Center for Economic Education
The Center for Economic Education strives to increase public knowledge of economic principles and their applications in daily life.
Researchers at the Center develop, collect, and distribute economic educational materials. They also consult with and provide instruction to area schools (K-12), community colleges, and community organizations. Instruction focuses on the principles of economics and their use in making rational economic decisions. Additionally, the Center conducts research in economic education.
Contact Person: Robert L. Pennington, Director, PH 310, Phone (407) 275-2870

Center for Research in Electro-Optics and Lasers
The Center for Research in Electro-Optics and Lasers (CREOL) is an interdisciplinary institute that links University research and degree programs in advanced optics of several academic departments to high technological industry.
CREOL conducts research in laser propagation, laser materials interaction, laser development, ultra-fast phenomena (pico and femtosecond laser pulses), detector technology, nonlinear optics, fiber optics, optical processing, thin film optics, image processing, and stimulated scattering and nonlinear optical spectroscopy. The Center integrates its research efforts with industry and education.
CREOL helps its corporate members (industrial affiliates) to expand their research and development and to recruit students and alumni, identifies important needs and future trends in electro-optics and lasers, promotes communication between its members and other research institutions studying optics, and supports the activities of electro-optics companies, particularly small businesses.
CREOL also provides faculty and students with basic coursework in physical optics, laser physics, laser systems, Fourier optics, and mathematical methods. Additionally, CREOL incorporates into its education program coursework in electrical engineering, physics, and specialized courses in electro-optics and lasers.
Laboratory research facilities accommodate femtosecond and high rep-rate picosecond YAG, nanosecond YAG, single mode, and picosecond CO₂ electro-optics, thin film optics and coating technology, surface micro-metrology, solid state lasers, metal vapor lasers, micro-lasers, turbulence, and propagation.
Contact Person: M. J. Soileau, Professor of EECS & Physics, Director, CREOL, 12424 Research Parkway, Orlando, FL 32826 Phone (407) 658-6800, FAX (407) 658-6880.

Dick Pope, Sr. Institute for Tourism Studies
The Dick Pope Sr. Institute for Tourism Studies serves Florida tourism through research, promotion, public awareness programs, and education.
The institute conducts studies in domestic and international tourism, the decision-making process of tourists, the economic impacts of tourism, and conducts marketing research for theme parks, hotels and restaurants as well as national and regional tourism promotion agencies.
Additionally, the institute publishes the Tourism Barometer II, a quarterly projection of Florida tourism activity. This publication is distributed state-wide.
The educational needs of the tourism industry are met with credit and non-credit coursework. The four-year baccalaureate program in hospitality management prepares students to work as managers in the hospitality and tourism industries. Non-credit, non-degree programs tailored to the needs of specific enterprises and professional associations of the tourism industry include short courses, seminars, workshops, conferences, in-service training programs, and executive development programs.
Contact Person: Abraham Pizam, Director CEBA II 407, Phone (407) 275-2188.

Florida-Canada Institute
The Florida-Canada Institute (F.C.I.) is a creation of the Florida Department of Education, co-hosted by the University of Central Florida and Palm Beach Community College. The
mandate of the F.C.I. is to foster the growth of the relationship between Canada and Florida through student and faculty exchanges, seminars, speakers, classes, and cultural and trade events. One of the functions of the F.C.I. is to encourage and facilitate research in the field of Canadian-American relations.

Contact Person: Henry Kennedy, Director of Canadian Studies, HFA 209 Phone (407) 275-2079

Florida Sinkhole Research Institute
The Florida Sinkhole Research Institute acts as a central clearinghouse for data and professional expertise on the sinkhole problem. The Institute provides a public service by aiding homeowners with information and advice, and also conducts extensive research about the sinkhole problem and related groundwater issues.

Contact Person: Barry F. Beck, Director, Research Bldg Alpha, Phone (407) 281-5644.

Florida Solar Energy Center
Created by the Florida Legislature in 1974, the Florida Solar Energy Center is nationally recognized for comprehensive programs in alternative energy research and development. FSEC’s multidisciplinary staff of engineers, physicists, architects and educators is augmented by undergraduate and graduate student assistants.

Current major activities include the following:
• A decade-long R&D program in photovoltaics—the solar cells that generate electricity from sunlight.
• R&D on advances in building energy use in hot, humid climates, including innovations in design, materials and systems.
• Development of innovative cooling concepts such as thermal storage systems and air conditioning systems augmented by heat pipes and power electronics.
• R&D on hydrogen and other fuel alternatives.
• Refinement of solar water heating system designs for both institutional and residential applications.
• Development of detailed, accurate, cost-effective computer tools for research, design, and analysis.
• Education and training of energy specialists.

Located at Cape Canaveral, FSEC’s 16-acre complex provides extensive photovoltaic research facilities; a unique passive cooling laboratory, a variety of environmental chambers and HVAC, power electronics and systems labs, as well as comprehensive meteorological, computer, and data acquisition capabilities.

FSEC publishes and distributes a wide variety of publications based on the results of research, and its library holds one of the most extensive collections of alternative energy-related documents in the U.S.

Institute for Simulation and Training
The Institute for Simulation and Training (IST) is an interdisciplinary organization that develops research programs in simulation and simulation training devices. The institute draws on the expertise of faculty and academic resources of the University of Central Florida, the Naval Training equipment center, the Army Project Manager for Training Devices, and many industrial affiliates in simulation and training.

The Institute conducts research in a variety of areas related to simulation and training. These areas include simulation/gaming, special purpose computer architecture, software engineering, logistics systems, computer-generated imagery systems, human factors engineering, instruction systems design, technical/instructional writing, electro-optics application in training, operations research, data base design and development, computer-based design and development, computer-based instruction, artificial intelligence, and robotics.

Contact Person: A. Louis Medin, Director, Research Pavilion, Suite 300, Phone (407) 658-5000.

Institute for Statistics
The Institute for Statistics provides statistical consulting and analytical support to all areas of the University. The Institute makes valuable contributions to research by supporting non-statistical researchers with statistical consulting assistance during the planning of experiments and investigations, analysis of data, and the evaluation of results.
The Institute also provides statistical support to various governmental agencies and private organizations.

**Contact Person:** Dr. Lorrie Hoffman, Director, BIO 330, Phone (407) 281-5525.

**Institute for Technical Documentation**

The Institute for Technical Documentation offers a variety of services of client companies, including the development of original technical documentation, the translation of documentation written in foreign languages, and the development of seminars to assist clients in writing their own documentation.

The Institute consists of a core of permanent professional staff, supplemented by University faculty, staff, and students, all of whom have demonstrated expertise in technical writing of documentation. These services are enhanced by the cooperative efforts of educators, engineers, foreign language experts, psychologists, and scientists who act as consultants to the Institute.

Computer-assisted processing aids in translating foreign languages, word processing and editing text, gathering reference material, and conducting information searches. Trained writers, established facilities, and continued contact with personnel in industry and research enable the Institute to engage in a wide variety of documentation projects.

**Contact Person:** Gloria W. Jaffe, Director, FA 450, (407) 275-2212.

**Local Area Network Institute**

The UCF Local Area Network Institute is a research and development center which focuses on Local Area Networking in Education. One of its major functions is to advance UCF as a leader in the field of academic local area networking through distributing software developed at UCF to other educational institutions. The Institute also provides training and information about networking in general.

For more information about the UCF LAN Institute contact G. Hale Pringle, Director, 12424 Research Parkway, Suite 215, Orlando, FL 32826. Phone (407) 249-7730

**Management Institute**

The Management Institute of the College of Business Administration provides seminars, workshops, and conferences on business and management-related topics. The Institute is designed to support an organization's needs relating to every aspect of business management. This support may be in the form of short, intensive seminars presented on site or on campus; special topic seminars prepared for particular needs; or specially scheduled workshops and seminars. Excellence in programming and individual attention are key objectives of the Institute. Examples of seminars and workshops held include: Time Management, The Supervisor as a Successful Manager, Management Skills for Women, CPA Review, and Tax and Accounting Conference.

**Contact Person:** David J. Roberts, Director, PH 216, Phone (407) 275-2446.

**Small Business Development Center**

The Small Business Development Center (SBDC) was established as part of a statewide program in cooperation with the U.S. Small Business Administration.

The resources of the SBDC are utilized to counsel and train small business clients and prospective owners in a variety of areas, including finance and accounting, marketing, production, engineering, and technical and paralegal problems.

**Contact Person:** Aloyse T. Polfer, Director, CEBA II, Phone (407) 281-5554.

**Small Business Institute**

The Small Business Institute offers professional help to owners of small businesses in need of managerial guidance. The objectives of the institute are: to stimulate the expansion of existing small businesses; to encourage the formation of economically sound small businesses; to provide training to proprietors and employees of small businesses; to improve the quality of management and operation of business; to serve as a catalyst to focus resources on a variety of economic problems; to develop a clearinghouse for business data; and to increase the opportunities for socially and/or economically disadvantaged entrepreneurs to enter the economic mainstream.

**Contact Person:** Ronald S. Rubin, Director, PH 410, Phone (407) 275-2682.
COURSE DESCRIPTIONS

CLASSIFICATION OF COURSES
The University course numbering system is as follows:
1000-2999 are freshman and sophomore level courses and are designed primarily for these students.
3000-4999 are junior- and senior-level courses and are designed primarily for these and other advanced students. When approved for inclusion in an individual program of graduate study by a supervisory committee approved by the Dean of Graduate studies, selected 4000-4999 courses may serve the needs of individual graduate students.
5000-5999 are beginning graduate and advanced undergraduate level courses—open to graduate students and those seniors who receive approval of the appropriate Dean(s).
6000-6999 are beginning and professional level courses open only to graduate students and do not apply toward a baccalaureate degree.

FLORIDA STATEWIDE COURSE NUMBERING SYSTEM
The course numbers appearing in the catalog are part of a statewide system of prefixes and numbers developed for use by all public postsecondary and participating private institutions in Florida. One of the major purposes of this system is to make transferring easier by identifying courses which are equivalent, no matter where they are taught in the state. All courses designated as equivalent will carry the same prefix and last three digits.
The classifying and numbering of courses was done by community college and university faculty members in each academic discipline. Their work was reviewed by faculty members in all of Florida's postsecondary institutions who made suggestions and criticisms to be incorporated into the system.
The course numbering system is, by law, descriptive and not prescriptive. It in no way limits or controls what courses may be offered or how they are taught. It does not affect course titles or descriptions at individual schools. It seeks only to describe what is being offered in postsecondary education in Florida in a manner that is intelligible and useful to students, faculty, and other interested users of the system.
The course numbering system was developed so that equivalent courses could be accepted for transfer without misunderstanding. Each public institution is to accept for transfer credit any course which carries the same prefix and last three digits as a course at the receiving institution. For example, if a student has taken SYG-000 at a community college, he cannot be required to repeat SYG-000 at the school to which he transfers. Further, credit for any course or its equivalent, as judged by the appropriate faculty task force and published in the course numbering system, which can be used by a native student to satisfy degree requirements at a state university can also be used for that purpose by a transfer student regardless of where the credit was earned.
It should be noted that a receiving institution is not precluded from using nonequivalent courses for satisfying certain requirements.

General Rule for Course Equivalencies
All undergraduate courses bearing the same alpha prefix and last three numbers (and alpha suffix, if present) have been agreed upon to be equivalent. For example, an introductory course in sociology is offered in over 40 postsecondary institutions in Florida. Since these courses are considered to be equivalent, each one will carry the designator SYG-000.

First Digit
The first digit of the course number is assigned by the institution, generally to indicate the year it is offered—i.e., 1 indicates freshman year, 2 indicates sophomore year. In the sociology example mentioned above one school which offers the course in the freshman year will number it SYG 1000; a school offering the same course in the sophomore year will number it SYG 2000. The variance in the first number does not affect the equivalency. If the prefix and last three digits are the same, the courses are substantially equivalent.
Titles
Each institution will retain its own title for each of its courses. The sociology courses mentioned above are titled at different schools "Introductory Sociology," "General Sociology," and "Principles of Sociology." The title does not affect the equivalency. The courses all carry the same prefix and last three digits; that is what identifies them as equivalent.

Lab Indicators
Some courses will carry an alpha suffix indicating a lab or field experience. The alpha suffixes "L" and "C" are used as follows to indicate laboratories:

"L" means either (a) a course, the content of which is entirely laboratory or (b) the laboratory component of a lecture-lab sequence in which the lab is offered at a different time/place from the lecture course.

"C" means a combined lecture-lab course in which the lab is offered in conjunction with the lecture at the same time/place.

Examples: Marine Biology OCB-013 (lecture only)
Marine Biology OCB-013L (lab only)
Marine Biology OCB-013C (lecture & lab combined)

Therefore, OCB 013C is equivalent to OCB-013 plus OCB-013L.

An alphabetical listing of prefixes:

ACG Accounting General
ACO Accounting: Occupational/Technical
ADV Advertising
AFH African History
AFR Air Force ROTC
AMH American History
AML American Literature
ANT Anthropology
APA Applied Accounting
APB Applied Biology
ARE Art Education
ARH Art History
ART Art
ASH Asian History
AST Astronomy
AVM Aviation Management
BCH Biochemistry
BCN Building Construction
BOT Botany
BSC Building Science
BSE Introductory Biology
BTE Business Teacher Education
BUL Business Law
CAP Computer Applications
CBH Comparative Psychology & Animal Behavior
CCE Civil Construction Engineering
CCJ Criminology & Criminal Justice
CDA Computer Design/Architecture
CEG Civil Geotechnical Structures
CES Civil Engineering Structure
CET Computer Engineering Technology
CGN Civil Engineering
CGS Computer General
CHI Chinese
CHM Chemistry
CHS Chemistry-Specialized
CIS Computer & Information Systems
CJT Criminal Justice Technology
CLA Classical and Ancient Studies

CLP Clinical Psychology
COC Computer Concepts
COE Cooperative Education
COM Communications
COP Computer Programming
COT Computer Theory
CPO Comparative Politics
CRM Computer Resources/Management
CRW Creative Writing
CWR Civil Water Resources
CYP Communication Psychology
DAA Dance Activities
DAE Dance Education
DEP Development Psychology
EAB Experimental Analysis of Behavior
EAS Engineering: Aerospace
ECM Engineering: Computer Mathematics
ECO Economics
ECP Economic Problems & Policy
ECG Economic Systems & Development
EDA Education: Administration
EDG Education: General
EDH Education: Higher
EDM Education: Middle School
EDP Education: Psychology
EDS Education: Supervision
EED Education: Emotional Disorders
EEL Engineering: Electrical
EES Environmental Engineering Science
EET Electrical Electronic Technology
EEX Education: Exceptional Child-Care Competencies
EGC Guidance & Counseling
EGM Engineering: Mechanical
EGN Engineering: General
EGS Engineering: Support
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIN</td>
<td>Engineering: Industrial Disabilities</td>
</tr>
<tr>
<td>ELD</td>
<td>Education: Specific Learning Disabilities</td>
</tr>
<tr>
<td>EMA</td>
<td>Engineering: Materials</td>
</tr>
<tr>
<td>EME</td>
<td>Education: Technology &amp; Media</td>
</tr>
<tr>
<td>EML</td>
<td>Engineering: Mechanical</td>
</tr>
<tr>
<td>EMR</td>
<td>Education: Mental Retardation</td>
</tr>
<tr>
<td>ENC</td>
<td>English Composition</td>
</tr>
<tr>
<td>ENG</td>
<td>English-General</td>
</tr>
<tr>
<td>ENL</td>
<td>English Literature</td>
</tr>
<tr>
<td>ENU</td>
<td>Engineering: Nuclear</td>
</tr>
<tr>
<td>ENV</td>
<td>Engineering: Environmental</td>
</tr>
<tr>
<td>ENY</td>
<td>Entomology</td>
</tr>
<tr>
<td>EPH</td>
<td>Education: Physical &amp; Multiple Handicapped</td>
</tr>
<tr>
<td>ESE</td>
<td>Education: Secondary</td>
</tr>
<tr>
<td>ESI</td>
<td>Engineering Systems-Industrial</td>
</tr>
<tr>
<td>ESL</td>
<td>English as a Second Language</td>
</tr>
<tr>
<td>EST</td>
<td>Electronic Specialty Technology</td>
</tr>
<tr>
<td>ETC</td>
<td>Engineering Tech: Civil</td>
</tr>
<tr>
<td>ETG</td>
<td>Engineering Tech: General</td>
</tr>
<tr>
<td>ETI</td>
<td>Engineering Tech: Industrial</td>
</tr>
<tr>
<td>ETM</td>
<td>Engineering Tech: Mechanical</td>
</tr>
<tr>
<td>EUH</td>
<td>European History</td>
</tr>
<tr>
<td>EVI</td>
<td>Education: Visually Impaired-Blind</td>
</tr>
<tr>
<td>EVS</td>
<td>Environmental Science</td>
</tr>
<tr>
<td>EVT</td>
<td>Education: Vocational/Technical</td>
</tr>
<tr>
<td>EXP</td>
<td>Experimental Psychology</td>
</tr>
<tr>
<td>FIL</td>
<td>Film</td>
</tr>
<tr>
<td>FIN</td>
<td>Finance</td>
</tr>
<tr>
<td>FLE</td>
<td>Foreign Language Education</td>
</tr>
<tr>
<td>FOT</td>
<td>Foreign &amp; Biblical Languages in Translation</td>
</tr>
<tr>
<td>FRE</td>
<td>French Language</td>
</tr>
<tr>
<td>FRW</td>
<td>French Literature (Writings)</td>
</tr>
<tr>
<td>FSS</td>
<td>Food Service Systems</td>
</tr>
<tr>
<td>GEA</td>
<td>Geography: Regional Areas</td>
</tr>
<tr>
<td>GEB</td>
<td>General Business</td>
</tr>
<tr>
<td>GEO</td>
<td>Geography</td>
</tr>
<tr>
<td>GER</td>
<td>German Language</td>
</tr>
<tr>
<td>GEW</td>
<td>German Literature (Writings)</td>
</tr>
<tr>
<td>GLY</td>
<td>Geology</td>
</tr>
<tr>
<td>HBR</td>
<td>Modern Hebrew Language</td>
</tr>
<tr>
<td>HBT</td>
<td>Hebrew Language Translation</td>
</tr>
<tr>
<td>HFT</td>
<td>Hotel and Restaurant</td>
</tr>
<tr>
<td>HLP</td>
<td>Health Education</td>
</tr>
<tr>
<td>HMW</td>
<td>Modern Hebrew Literature (Writings)</td>
</tr>
<tr>
<td>HSA</td>
<td>Health Services Administration</td>
</tr>
<tr>
<td>HSC</td>
<td>Health Science</td>
</tr>
<tr>
<td>HUM</td>
<td>Humanities</td>
</tr>
<tr>
<td>HUN</td>
<td>Human Nutrition</td>
</tr>
<tr>
<td>IDH</td>
<td>Interdisciplinary Honors</td>
</tr>
<tr>
<td>INP</td>
<td>Industrial &amp; Applied Psychology</td>
</tr>
<tr>
<td>INR</td>
<td>International Relations</td>
</tr>
<tr>
<td>ISM</td>
<td>Information Systems Management</td>
</tr>
<tr>
<td>ISS</td>
<td>Interdisciplinary Social Sciences</td>
</tr>
<tr>
<td>ITA</td>
<td>Italian Language</td>
</tr>
<tr>
<td>ITW</td>
<td>Italian Literature (Writings)</td>
</tr>
<tr>
<td>JOU</td>
<td>Journalism</td>
</tr>
<tr>
<td>JST</td>
<td>Judaic Studies</td>
</tr>
<tr>
<td>LAE</td>
<td>Language Arts &amp; English Education</td>
</tr>
<tr>
<td>LAH</td>
<td>Latin American History</td>
</tr>
<tr>
<td>LEI</td>
<td>Leisure</td>
</tr>
<tr>
<td>LIN</td>
<td>Linguistics</td>
</tr>
<tr>
<td>LIS</td>
<td>Library Science</td>
</tr>
<tr>
<td>LIT</td>
<td>Literature</td>
</tr>
<tr>
<td>MAA</td>
<td>Mathematics-Analysis</td>
</tr>
<tr>
<td>MAC</td>
<td>Mathematics-Calculus &amp; Precalculus</td>
</tr>
<tr>
<td>MAD</td>
<td>Mathematics-Discrete</td>
</tr>
<tr>
<td>MAE</td>
<td>Mathematics Education</td>
</tr>
<tr>
<td>MAN</td>
<td>Management</td>
</tr>
<tr>
<td>MAP</td>
<td>Mathematics-Applied</td>
</tr>
<tr>
<td>MAR</td>
<td>Marketing</td>
</tr>
<tr>
<td>MAS</td>
<td>Mathematics: Algebraic Structures</td>
</tr>
<tr>
<td>MAT</td>
<td>Mathematics</td>
</tr>
<tr>
<td>MCB</td>
<td>Microbiology</td>
</tr>
<tr>
<td>MET</td>
<td>Meteorology</td>
</tr>
<tr>
<td>MGF</td>
<td>Mathematics: General &amp; Finite</td>
</tr>
<tr>
<td>MHF</td>
<td>Mathematics: History &amp; Foundations</td>
</tr>
<tr>
<td>MIS</td>
<td>Military Science</td>
</tr>
<tr>
<td>MLS</td>
<td>Medical Laboratory Science</td>
</tr>
<tr>
<td>MMC</td>
<td>Mass Media Communication</td>
</tr>
<tr>
<td>MRE</td>
<td>Medical Records</td>
</tr>
<tr>
<td>MTG</td>
<td>Mathematics: Topology &amp; Geometry</td>
</tr>
<tr>
<td>MUC</td>
<td>Music: Composition</td>
</tr>
<tr>
<td>MUE</td>
<td>Music Education</td>
</tr>
<tr>
<td>MUH</td>
<td>Music: History/Musicology</td>
</tr>
<tr>
<td>MUH</td>
<td>Music Literature</td>
</tr>
<tr>
<td>MUN</td>
<td>Music: Musical Ensembles</td>
</tr>
<tr>
<td>MUS</td>
<td>Music</td>
</tr>
<tr>
<td>MUT</td>
<td>Music: Theory</td>
</tr>
<tr>
<td>MVB</td>
<td>Music: Applied-Brasses</td>
</tr>
<tr>
<td>MVK</td>
<td>Music: Applied-Keyboard</td>
</tr>
<tr>
<td>MVO</td>
<td>Music: Applied-Other Instruments</td>
</tr>
<tr>
<td>MVP</td>
<td>Music: Applied-Percussion</td>
</tr>
<tr>
<td>MVS</td>
<td>Music: Applied-Strings</td>
</tr>
<tr>
<td>MVV</td>
<td>Music: Applied-Voice</td>
</tr>
<tr>
<td>MVW</td>
<td>Music: Applied-Woodwinds</td>
</tr>
<tr>
<td>NUR</td>
<td>Nursing</td>
</tr>
<tr>
<td>NUU</td>
<td>Nursing Universals</td>
</tr>
<tr>
<td>OCE</td>
<td>Oceanography</td>
</tr>
<tr>
<td>OST</td>
<td>Office Systems Technology</td>
</tr>
<tr>
<td>PAD</td>
<td>Public Administration</td>
</tr>
<tr>
<td>PCB</td>
<td>Process Cell Biology</td>
</tr>
<tr>
<td>PEL</td>
<td>Physical Education Acts (GEN)-Object Centrds., Land</td>
</tr>
<tr>
<td>PEM</td>
<td>Physical Education Acts (GEN)-Perform Centrds., Land</td>
</tr>
<tr>
<td>PEN</td>
<td>Physical Education Acts (GEN)-Water, Snow, Ice</td>
</tr>
<tr>
<td>PEO</td>
<td>Physical Education Acts (PROFNL)-Object Centrds., Land</td>
</tr>
<tr>
<td>PEP</td>
<td>Physical Education Acts (PROFNL)-Perform Centrds., Land</td>
</tr>
<tr>
<td>PEQ</td>
<td>Physical Education Acts (PROFNL)-Water, Snow, Ice</td>
</tr>
<tr>
<td>PET</td>
<td>Physical Education Theory</td>
</tr>
<tr>
<td>PGY</td>
<td>Photography</td>
</tr>
<tr>
<td>PHH</td>
<td>Philosophy, History of</td>
</tr>
<tr>
<td>PHI</td>
<td>Philosophy</td>
</tr>
<tr>
<td>PHM</td>
<td>Philosophy of Man &amp; Society</td>
</tr>
</tbody>
</table>
PHS  Physics-Specialized
PHY  Physics
PHZ  Physics Continued
PLA  Paralegal/Legal Asst./Legal Admin.
POS  Political Science
POT  Political Theory
PPE  Psychology of Personality
PSB  Psychobiology
PSC  Physical Sciences
PSY  Psychology
PUP  Public Policy
PUR  Public Relations
RAT  Radiation Therapy
REA  Reading
RED  Reading Education
REE  Real Estate
REL  Religion
RET  Respiratory Therapy
RMI  Risk Management & Insurance
RTE  Radiological Sciences
RTV  Radio-Television
RUS  Russian Language
SCE  Science Education
SED  Speech Education
SLS  Student Life Skills
SOP  Social Psychology
SOW  Social Work
SPA  Speech Pathology & Audiology
SPC  Speech Communication
SPN  Spanish Language
SPS  School Psychology
SPW  Spanish Literature (Writings)
SSE  Social Studies Education
STA  Statistics
STD  Student Development
SUR  Surveying
SYA  Sociology Analysis
SYD  Sociology of Demography and Area of Studies
SYG  Sociology, General
SYO  Sociology-Social Organizations
SYP  Sociology-Social Processes
TAX  Taxation
THE  Theatre
TPA  Theatre Production & Administration
TPP  Theatre Performance & Performance Training
TTE  Transportation & Traffic Engineering
URP  Urban and Regional Planning
VIC  Visual Communication
ZOO  Zoology

COURSES NUMBERED 0-999
Depending upon previous background and test scores earned, individual students may be required to complete more than the minimum number of credits required for graduation in their respective programs. Courses numbered less than 1000 (Statewide Common Course Numbers) are of subcollegiate level and may not be counted in meeting degree credit hour requirements for graduation.

SPECIAL COURSES
In addition to the regular courses listed in this bulletin, special courses may be available. Consult your academic advisor for details.

<table>
<thead>
<tr>
<th>Course</th>
<th>Undergraduates</th>
<th>Special Grad1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directed Independent Studies</td>
<td>3905</td>
<td>4906</td>
</tr>
<tr>
<td>Directed Independent Research</td>
<td>3912</td>
<td>4912</td>
</tr>
<tr>
<td>Special Topics/Seminars</td>
<td>3930</td>
<td>4932</td>
</tr>
<tr>
<td>Internships, Practicums, Clinical Practice</td>
<td>3940</td>
<td>4941</td>
</tr>
<tr>
<td>Directed Independent Research</td>
<td>4912</td>
<td>5917</td>
</tr>
<tr>
<td>Cooperative Education (COE)</td>
<td>1949, 2949, 3949, 4949</td>
<td>5949</td>
</tr>
<tr>
<td>Honors Undergraduate Thesis</td>
<td>3970</td>
<td>4970</td>
</tr>
</tbody>
</table>

These courses may be assigned variable credit. Some may be repeated upon approval.

1The Special Graduate Courses are primarily for graduate students, but may be taken by advanced seniors with the consent of their deans.

2Enrollment is limited to those students who are fully admitted to the Graduate Program.

3Enrollment is limited to those students who are admitted into the co-op program.

PR: PREREQUISITE
A course in which credit must be earned prior to enrollment in the listed course.

CR: COREQUISITE
A course which must be taken concurrently with or prior to the listed course.

CI: CONSENT OF INSTRUCTOR
HOURS CODE
Each course listed is followed by a code which shows hours credit, and contact hours.
Example:

CHM 3120C  
**Analytical Chemistry I:** CHM 3120C carries 5 hours credit but requires 9 contact hours; 3 in class and 6 in laboratory or field work. It is scheduled to be offered in the College of Arts and Sciences.

College designation: AS = Arts and Sciences; BA = Business Administration;  
ED = Education; EN = Engineering; HPS = Health;  
US = Undergraduate Studies

**AVAILABILITY OF COURSES**

The University does not offer all of the courses listed in the catalog each year. The Class Schedule should be consulted for those courses offered each semester.

**ACG 2001**  
**Principles of Financial Accounting:** PR: Sophomore standing and MAC 1104 or equivalent. Nature of accounting, financial statements, the accounting cycle, assets, current liabilities, long-term debt, and owner's equity; accounting for partnerships and corporations.

**ACG 2023**  
**Principles of Accounting I and II:** PR: Junior standing and MAC 1104 or equivalent. Same as 2001, 2301. Credits may not be earned in both ACG 2023 and the ACG 2001, 2301 sequence.

**ACG 2071**  
**Principles of Managerial Accounting:** PR: ACG 2001 and MAC 1104 or equivalent. The purpose of this course is to thoroughly familiarize the student with the various uses of accounting information for planning and control.

**ACG 3103**  
**Financial Accounting I:** PR: Junior standing and MAC 1104, ECO 2013, ECO 2023; and ACG 2011 or ACG 2023 or its equivalent with a grade of "C" in the accounting course. The accounting process, content and analysis of financial statements, and framework of accounting theory.

**ACG 3113**  
**Financial Accounting II:** PR: ACG 3103 with a grade of "C" or better. A continuation of ACG 3103.

**ACG 3301**  
**Management Accounting:** PR: C.I. and Junior standing. To thoroughly familiarize the student with the various uses of accounting information for planning and control.

**ACG 3361**  
**Cost Accounting I:** PR: Junior standing, MAC 1104, ECO 2013, and ECO 2023, and ACG 2011 with a grade of "C" in ACG 2011, completion of or concurrent enrollment in ACG 3103. Cost concepts, cost of goods manufactured, job order costing, process costing, standard costing, relevant cost analysis, and overhead/joint cost allocations.

**ACG 3501**  
**Financial Accounting for Governmental and Nonprofit Organizations:** PR: ACG 3103 with a grade of "C" or better, or C.I. Accounting for governments and other nonprofit organizations, with emphasis on financial reporting issues and problems.

**ACG 4123**  
**Financial Accounting III:** PR: ACG 3113 with a grade of "C" or better. Specialized financial accounting topics.

**ACG 4203**  
**Financial Accounting IV:** PR: ACG 3113 with a grade of "C" or better. Accounting for business combinations, consolidations.

**ACG 4401**  
**Accounting Information Systems I:** PR: ACG 3103 and CGS 3000, ACG 3113 and ACG 3361 with a grade of "C" or better. An introduction to manual and computer-based accounting information systems.

**ACG 4651**  
**Auditing:** PR: ACG 3113 and ACG 4401 with a grade of "C" or better. The standards, practices, and procedures followed in the audit function.

**ACG 5005**  
**Financial Accounting Concepts:** PR: Acceptance into the graduate program. (Not open for Accounting majors.) The conceptual background for financial statements.

**ACG 5206**  
**Financial Accounting V:** PR: ACG 4123 or C.I. and meet school admission requirements. Problems of partnerships, accounting for branches, bankruptcy, installment sales, accounting for estates and trusts, and interim reporting.

**ACG 5255**  
**International and Multinational Accounting:** PR: ACG 4123 or C.I. and meet school admission requirements. An examination of the environmental factors affecting international accounting concepts and standards. Cross-country differences in accounting treatments are compared.
Societal capabilities since and its role in American society. A study of the framework and formation of defense strategy.

The Development of Alrpower: PR: AFR 1111 or approval of the


AIR 2130

The Development of Airpower: PR: AFR 1101 or approval of the PAS. A study of the development of airpower from experiments by 18th-century balloonists to the achievement of combat airpower capabilities during World War II.

AIR 2131

The Aerospace Age: PR: AFR 2130 or approval of PAS. A study of the development of aerospace capabilities since World War II, highlighting technological advancements and the role of aerospace power in the contemporary world.

AIR 3220

Air Force Management and Leadership: PR: GMC or Two-Year Program Selection and/or approval of the PAS. An introductory study of Air Force management fundamentals, communications skills, and basic leadership styles.

AIR 3230

Air Force Management and Evaluation: PR: AFR 3220 or approval of the PAS. A concluding study of Air Force management fundamentals, including performance evaluation skills.

AIR 4201

Societal Role and Defense Strategy: PR: AFR 3230 or approval of PAS. Examination of the military and its role in American society. A study of the framework and formation of defense strategy.

AIR 4210

Jeffersonian Democracy, and the War of 1812.

Honors U.S. History: 1877-Present: PR: AMH 2010 or C.I. Same as AMH 2020 with honors-level content.

Sport in America: History of sport from colonial times to present. Emphasis on social and economic development, intercollegiate and professional sport, and changing attitudes toward work, sport, and play.

American Economic History: PR: AMH 2010 and 2020 or C.I. An introduction to the economic development of the U.S., with emphasis on agriculture, labor, industrialization, transportation, and banking.

History of the South to 1865: PR: AMH 2010 or 2020 or C.I. Development of the southern colonies, beginning sectionalism, the cotton economy, and slavery. Calhoun's constitutional theories, secession, Civil War and its aftermath.


History of the South Since 1865: PR: AMH 2010 and 2020 or C.I. Reconstruction, the "solid South" and the racial dilemma, progressivism for whites only, southern literature, 20th-century economic, political and social changes, and the new Reconstruction.

History of the Frontier: Eastern America: PR: AMH 2010 and 2020 or C.I. The progression of the westward movement from the colonial settlements to the Mississippi, considered as an interpretive approach to American history.

History of the Frontier: Western America: PR: AMH 2010 and 2020 or C.I. The development of the trans-Mississippi West and its impact upon American history.

Spanish Borderlands: PR: AMH 2010 and 2020 or C.I. Survey of Spanish settlement in South and Southwestern U.S., with emphasis upon cultural conflicts found in the imperial rivalries for control of the area.

History of Urban America: Cities as "spearheads in the wilderness, antiurban bias, urban promotion, rivalry, industrialization, ethnicity, reform movements including public health, housing, planning." Metropolitanism and demographic trends.

Military History: A survey of U.S. military history from the European background of the colonial period through the contemporary military experience.

Women in American History: Women in colonial America, "republican" motherhood, "separate spheres," suffrage battle, entry into paid labor force, new educational and professional opportunities, changing family pattern, "new" feminism.

Black American History: PR: AMH 2010 and 2020 or C.I. History of Negroes from their African heritage through American slavery to freedom and their role in 20th-century America.

History of the Hispanic Minorities in the U.S.: Course begins with 16th century through the modern period. Special emphasis on Chicanos, Puerto Ricans, and Cubans.

Canadian History: Canada since Colonial times and the present, but with emphasis on the period since the British North America Act, 1867.

Colonial America, 1607-1763: PR: AMH 2010 and 2020 or C.I. The voyages of discovery, the origins of the thirteen colonies, and their political, economic, social, and religious life in the 17th and 18th centuries.

The Age of the American Revolution, 1763-1789: PR: AMH 2010 and 2020 or C.I. The American Revolution — its origins, course, and impact upon American society — the Articles of Confederation, the Philadelphia Convention and its work.

Jeffersonian America: PR: AMH 2010 and 2020 or C.I. The Confederation era, the Federalists, Jeffersonian Democracy, and the War of 1812.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMH 4160</td>
<td>Jacksonian America: PR: AMH 2010 and 2020 or C.I. The risk of American nationalism, Jacksonian Democracy, the Mexican War, and sectional conflict.</td>
</tr>
<tr>
<td>AMH 4170</td>
<td>Civil War and Reconstruction: PR: AMH 2010 and 2020 or C.I. Reconstruction, and impact of industrialism.</td>
</tr>
<tr>
<td>AMH 4201</td>
<td>Robber Baron Era: PR: AMH 2010 and 2020 or C.I. The Agrarian Revolt, the Spanish-American War, and the Progressive Era.</td>
</tr>
<tr>
<td>AMH 4231</td>
<td>United States History: 1914-1945: PR: AMH 2010 and 2020 or C.I. The progressive Reforms of Woodrow Wilson, World War I, post-war prosperity, the Depression, and the New Deal; World War II.</td>
</tr>
<tr>
<td>AMH 4270</td>
<td>United States History: 1945-Present: PR: AMH 2010 and 2020 or C.I. Contemporary America from World War II.</td>
</tr>
<tr>
<td>AMH 4311</td>
<td>American Culture I: PR: AMH 2010 and 2020 or C.I. The European Backgrounds; Puritanism; Enlightenment; the Great Awakening; Revolutionary Thought; Romanticism; the Southern Mind and the Yankee Response; Popular Culture and the rise of recreation.</td>
</tr>
<tr>
<td>AMH 4313</td>
<td>American Culture II: PR: AMH 2010 and 2020 or C.I. The Darwinian Revolution; revolt of the intellectuals; the media explosion; mass entertainment in mass culture; the loss of community, the nuclear age, and presentism.</td>
</tr>
<tr>
<td>AMH 4510</td>
<td>Rise of the United States to World Power, 1776-1914: PR: AMH 2010 and 2020 or C.I. The evolution of basic American policies. American expansion, America's major wars, and the emergence of America as a world power.</td>
</tr>
<tr>
<td>AMH 4511</td>
<td>United States as a Great Power: 1914-Present: PR: AMH 2010 and 2020 or C.I. American foreign policy in World War I, the interwar period, World War II, and the Cold War.</td>
</tr>
<tr>
<td>AMH 5116</td>
<td>Colloquium in U.S. Colonial History: PR: Senior Standing or C.I. Reading and discussion of the literature on selected topics in U.S. history.</td>
</tr>
<tr>
<td>AMH 5137</td>
<td>Colloquium in U.S. Revolutionary Period: PR: Senior Standing or C.I. Reading and class discussion of the literature on selected topics in the Revolutionary Era, 1763-1789.</td>
</tr>
<tr>
<td>AMH 5149</td>
<td>Colloquium in Early U.S. Hist., 1789-1815: PR: Senior Standing or C.I. Reading and class discussion of the literature on selected topics of the early national period.</td>
</tr>
<tr>
<td>AMH 5169</td>
<td>Colloquium Age of Jackson: PR: Senior Standing or C.I. Intensive reading and class discussion on selected topics of the Jacksonian age.</td>
</tr>
<tr>
<td>AMH 5176</td>
<td>Colloquium in Civil War and Reconstruction: PR: Senior Standing or C.I. Intensive reading and class discussion on selected topics of the Civil War and Reconstruction era.</td>
</tr>
<tr>
<td>AMH 5219</td>
<td>Colloquium in Late 19th Century U.S.: PR: Senior Standing or C.I. Reading and class discussion of the literature on selected topics of late 19th-century U.S.</td>
</tr>
<tr>
<td>AMH 5296</td>
<td>Colloquium in 20th Century U.S.: PR: Senior Standing or C.I. Reading and class discussion on selected topics in 20th-century U.S.</td>
</tr>
<tr>
<td>AMH 5391</td>
<td>Colloquium in U.S. Cultural History: PR: Senior Standing or C.I. Students will read and discuss a common or diverse body of the significant literature in the field.</td>
</tr>
<tr>
<td>AMH 5407</td>
<td>Colloquium in American South: PR: Senior Standing or C.I. Intensive reading and class discussion on selected topics of Southern history from colonial origins to the present.</td>
</tr>
<tr>
<td>AMH 5446</td>
<td>Colloquium in U.S. Frontier: PR: Senior Standing or C.I. Reading and class discussion of the literature on selected topics of frontier history.</td>
</tr>
<tr>
<td>AMH 5515</td>
<td>Colloquium in U.S. Diplomatic History: PR: Senior Standing or C.I. A survey of the historical literature of American foreign policy.</td>
</tr>
<tr>
<td>AML 3031</td>
<td>American Literature I: PR: ENC 1102. Major American writers from beginning through Whitman.</td>
</tr>
<tr>
<td>AML 3051</td>
<td>American Literature II: PR: ENC 1102. Major American writers from Twain to present.</td>
</tr>
</tbody>
</table>
AML 4101

AML 4261
Literature of the South: PR: ENC 1102 or CI. Development of Southern literature from its beginnings in the "Old South" through the post-Civil War and the Southern Renaissance to the present. Emphasizes reading from Poe, Ransom, Tate, Faulkner, Porter, Warren, O'Connor, Percy, and Styron.

AML 4321

ANT 2003
General Anthropology: An introductory survey of the four major subfields of anthropology: Social Anthropology, Physical Anthropology, Linguistics, and Archaeology.

ANT 3122
Archaeological Method and Theory: A survey of archaeological field and laboratory techniques, including the interpretation of written archaeological reports.

ANT 3141
The Emergence of Civilizations: The emergence of high civilizations in Europe, Africa, Asia, and the ancient Americas.

ANT 3142
Old World Prehistory: A comparative study of social evolution in Africa, Europe, and Asia from the earliest humans to the beginnings of recorded history.

ANT 3144
Prehistory of the American Indians: The trajectory of New World society from the earliest big game hunters to the European conquest of the American civilizations.

ANT 3145
Archaeology of Complex Society: Theoretical perspectives on ancient hierarchies of power.

ANT 3153
Archaeology of North America: An introduction to the archaeology of North America, including its prehistoric and historic aspects.

ANT 3162
Archaeology of Middle and South America: An introduction to the prehistory of Middle and South America, focusing on the high civilizations up to and including the Spanish conquest.

ANT 3163
Mesoamerican Archaeology: An introduction to the prehistory of Mexico, Guatemala, and upper Central America from earliest times through the Spanish conquest.

ANT 3211
Human Origins (Anthropology I): The evolution of human society from foraging and hunting groups to the earliest cities and states.

ANT 3241
Magic, Ritual, and Belief: Patterns in religious behavior in various societies, with primary emphasis on myth, rite, taboo, and festival social phenomena.

ANT 3262

ANT 3271
Law and Culture: An introduction to law as an organizing force in society, including a study of primitive forms of law and social control.

ANT 3302
Sex, Gender and Culture: The traditional and changing roles of women and men viewed in a cross-cultural perspective.

ANT 3311
Indians of the Southeastern United States: A study of the social and cultural history of the Indians of the Southeast.

ANT 3312
Ethnology of North American Indians: A survey of the aboriginal cultures of North America, with emphasis on the pre-contact cultural condition.

ANT 3313

ANT 3328
Maya Archaeology: An examination of the Prehistoric Maya culture focusing on both the archaeology and current issues in the field.

ANT 3332
People and Cultures of Latin America: An overview of the history and society of the peoples of Latin America, emphasizing patterns of subsistence and social organization.

ANT 3360
Peoples of the Far East: A survey of the peoples of China, Japan, and Korea from the anthropological perspective.
ANT 3363
ANT 3410
ANT 3418
ANT 3422
ANT 3432
ANT 3462
ANT 3511
ANT 3512
ANT 3610
ANT 3705
ANT 4084
ANT 4124
ANT 4180
ANT 5479
APA 3471
APB 3600
APB 4651
APB 4652
APB 5236
APB 5450
ARE 3550
ARE 3554
ARE 3662
ARE 3663
ARE 3944
Applied Microbiology: PR: MCB 3013C or C.I. Microbial biochemistry of industrial processes including: economics, screening, scale up, quality control and applied genetics.
Antropology of Japan: An examination of Japanese culture and its contemporary behavioral and organizational patterns by drawing upon archaeology, cultural history, linguistics, cultural anthropology, and social organization.
Cultural Anthropology (Anthropology II): An introduction to human diversity as exemplified among various cultures and ethnic groups.
Aging and Death: General considerations and theories of aging and death in a cross-cultural perspective.
Culture and the Individual: Focus on the socio-cultural dimensions of child rearing, mental illness/mental health, sexual behavior, personality, and testing.
Medical Anthropology: The therapeutic environment examined in a cross-cultural perspective. The implications of the comparative approach to health care in the industrialized world.
The Human Species: Human biological variation in an evolutionary perspective.
Biobehavioral Anthropology: An introduction to the study of human behavior in terms of mutual interaction between human biology and cultural environments.
Language and Culture: PR: Sophomore standing. The study of language in a non-western setting; language and behavior; language and perception.
Action Anthropology: Application of principles of anthropology to problems of directed social and technological change.
Anthropological Method and Theory: Method, theory, research design and field techniques in the anthropological endeavor.
Advanced Archaeological Fieldwork: Supervised archaeological fieldwork. Students admitted only with permission of instructor.
Seminar in Laboratory Analysis: The processing of archaeological finds from excavation through publication.
Comparative Cultural Analysis: The dynamics of cultural processes in a multi-ethnic setting.
Accounting for Engineers: General Accounting principles and practice, cost accounting, budgeting, and control techniques. Not usable for BSBA degree credit.
Introduction to Pharmacology: Review of terminology and regulations. Study of drug types and usage.
Medical Pharmacology I: Drugs in pulmonary diseases; effects on nervous system, and neuroeffectors, depressants & stimulants; influence on metabolism and endocrines. Bronchodiilators, mycolytics, etc.
Medical Pharmacology II: PR: APB 4651 or C.I. Drugs used in cardiovascular disorders. Includes inotropic, chronotropic agents, beta blocker drugs, calcium channel antagonists.
Introductory to Art Therapy: A survey of the literature, theories and practices of art therapy.
Art Therapy Methods: This course presents methodologies used by the Art Therapists and demonstrates how Art Therapy is put into practice.
Community Arts I: A Survey of the basic theoretical issues related to community arts programming.
Community Arts II: A survey of the basic methodologies for applying the theoretical issues to community arts programming taught in Community Arts I.
Methodology for Teaching K-12 Art Education I: Methods and curriculum materials for teaching art in elementary and secondary schools.

Methodology for Teaching K-12 Art Education II: Continuation of ARE 4143.

Art in the Elementary School: Basic principles, purposes, scope and sequence; organization for instruction; evaluation of activities; selected art experiences.

Community Arts Internship: An on-site in-depth experience for community arts majors with a concentration in administration, education, or therapeutic experience.

Art for Exceptionalities: Concepts, principles, and methods of integrating art processes into the education of the physically, emotionally, and mentally handicapped.

Arts in Recreation: Art activities and experiences appropriate for use in playground, leisure services, occupational orientation and other recreational areas.

Found Arts: PR: C.I. Materials available for instruction in the public schools will be explored in depth in relation to their appropriateness and productive qualities.


Contemporary Visual Arts Education: PR: C.I. Continued study of current programs and innovations in public school Visual Arts Programs.

The History of Art I: Painting, sculpture and architecture from the Prehistoric Era through the Renaissance period.

The History of Art II: Painting, sculpture and architecture from the Baroque through the 20th century.

Honors History of Art II: Same as ARH 2051 with honors-level content.

History of Architecture: History of Architecture - Survey of Western architectural styles.

Art After 1945: A seminar for upper-level art students to examine historically the art of Post WWII.

African Art: Teach the continuatives between African, Afro-Caribbean and Afro-American Arts.

Asian Art: History of visual arts of China, Japan, India, and other Eastern cultures.

Southern Folk Arts: History of Folk Architecture, Ceramics, Painting, Sculpture, Textiles and Toys in three main Southern ethnic cultures: EuroAmerican, Afro-American, and American Indian.

History of Photography: The development of still photography in terms of historical, aesthetic and social content from 1839 to the present.

History of Prints: History of printmaking in the Western world, surveying works by the "great printmakers."

Happenings Art: To study the aesthetic and social significance of "Total Art" in its attempt to break down the customary distinctions between life and art.

Visual Arts Administration: Vitas; grant applications; Personnel; copyright laws; museum practices, etc.

Symbolism in the Visual Arts: A study of the origin, migration, and transmutation of signs, symbols and images in art history.

Greek & Roman Art: A study of the art and architecture of the ancient civilizations of the Mediterranean, comprising Greece, Etruria, and Rome.

Early Italian Renaissance Art: A survey of Italian Art and Architecture from 1300 to 1500.

Later Italian Renaissance Art: A survey of Art in Italy, from the High Renaissance through Mannerism.

Baroque Art: A study of European Art in the 17th and 18th centuries.
ARH 4430 AS 3(3,0)
19th Century Art: A survey of the trends and developments in art during the 19th century, including the art of America and of Western Europe.

ARH 4450 AS 3(3,0)
20th Century Art: A survey of the art from Fauvism, Futurism, Cubism to the art of the present.

ARH 4458 AS 3(3,0)
Women and Art in 20th Century America: A course on women artists, feminist aesthetics, and women's artistic cultures, focusing on 20th century America.

ARH 4655 AS 3(3,0)
Meso American Art: A survey of the art of Mexico and Central America, from the Pre-Colombia, through the Spanish Colonial, to the 20th century.

ARH 4690 AS 1(1,0)
Mexican Art—Fieldwork: A field trip in connection with ARH 4655.

ARH 4730 AS 4(4,0)
Environmental Art: Analysis of aesthetic design factors related to city planning, architecture, product design, and experimental environmental arts.

ARH 4800 AS 3(3,0)

ARH 4821 AS 3(3,0)
Methods in Art Administration: PR: ARH 3820. Theories and methodologies for designing, implementing and administering art programs for a variety of populations.

ARH 5451 AS 3(3,0)
Artistic Worldviews: PR: Post-Bac. status, 9 hours of art courses, or C.I. Art from individual and cultural perspectives of varying ethnic, religious, occupational, regional, and generational groups.

ARH 5478 AS 3(3,0)
Contemporary Women Artists: PR: 6 credits of art courses or C.I. An in-depth study on contemporary women artists from a feminist perspective.

ART 2201C AS 3(2,3)
Design Fundamentals I: Materials, processes, form. Emphasis on two-dimensional design problems, including problems in black and white and basic color theory.

ART 2202C AS 3(2,3)
Design Fundamentals II: Continuation of color theory and basic three-dimensional design using the various sculptural media.

ART 2300C AS 3(2,3)
Drawing Fundamentals I: Drawing as a means of formal organization. Introduction to problems in drawing methods and media. Emphasis on description techniques.

ART 2301C AS 3(2,3)
Drawing Fundamentals II: Continuation of ART 2300C.

ART 2481C AS 3(2,3)
Introduction to Computer Graphics: The principles underlying the generation and display of graphical pictures by computer. Topics include graphical software packages and graphics systems.

ART 3100C AS 3(2,3)

ART 3110C AS 3(2,3)
Ceramics: Basic concepts of ceramic design, experience in processes of forming, decorating, glazing, and firing pottery.

ART 3230C AS 3(2,3)

ART 3232C AS 3(3,2)
Graphic Design II: PR: ART 3280C or C.I. Methods, materials, and processes related to perceptual studies in graphic design.

ART 3280C AS 3(3,2)

ART 3281C AS 3(3,2)
Type & Design: A survey of type, calligraphy and letter forms and their appropriate use as subject matter for graphic design and publication.

ART 3330C AS 3(2,3)
Intermediate Drawing I: PR: Six semester hours of Drawing Fundamentals or C.I. Intermediate problems in drawing, with emphasis on the human form.

ART 3331C AS 3(2,3)
Intermediate Drawing II: PR: C.I. Continuation of Intermediate Drawing I.

ART 3400C AS 3(2,3)
Printmaking: PR: Three semester hours of Drawing Fundamentals or C.I.
ART 3484C

ART 3510C
Painting: PR: Three semester hours in Design Fundamentals and three semester hours in Drawing Fundamentals or C.I. Concentration of basic techniques and aesthetic factors in painting. AS 3(2,3)

ART 3701C
Sculpture: PR: Six semester hours in Design Fundamentals, to include three semester hours in three-dimensional work, or C.I. AS 3(2,3)

ART 4108C
Advanced Three-Dimensional Design: PR: ART 3100C. May be repeated for credit. Advanced problems in three-dimensional materials, processes, forms. AS 3(2,3)

ART 4111C
Advanced Ceramics: PR: ART 3110C. May be repeated for credit. AS 3(2,3)

ART 4130C
Fibers, Fabrics, Textiles and Synthetics: Textile design and production, including non-loom weaving processes. May be repeated for credit. AS 3(2,3)

ART 4136C
Metals, Woods, Leathers and Stones: Processes and techniques of production. ED 3(2,3)

ART 4166C
Advanced Graphic Design: PR: ART 3280C, ART 3232C, or C.I. Practical studio problems, with emphasis on organization of visual design elements. AS 3(3,2)

ART 4237C
Advanced Drawing: PR: ART 3331C. May be repeated for credit. AS 3(2,2)

ART 4238C
Advanced Printmaking: PR: ART 3400C. May be repeated for credit. AS 3(2,3)

ART 4703C
Advanced Sculpture: PR: ART 3701C. May be repeated for credit. AS 3(2,3)

ART 4909C
Crafts Design: Crafts design and production, including the use of rigid, flexible, and linear materials. ED 3(2,1)

ASH 3300
Survey of East Asia: PR: EUH 2000 and 2001 or C.I. An introduction to Far Eastern Cultures including India since the Age of the Moguls, China since early European penetration, and Japan since the Hermit Kingdom. AS 3(3,0)

ASH 4404
China in 19th and 20th Centuries: PR: EUH 2000 and 2001 or C.I. The Mongols in China; coming of the Europeans; social structure; Communist movement; Japanese aggression. AS 3(3,0)

ASH 4442
Modern Japan, 19th and 20th Centuries: PR: EUH 2000 and 2001 or C.I. A survey of the Tokugawa Shogunate; Western contact in the 19th century; World War I; Japanese militarism; World War II; and U.S. occupation. AS 3(3,0)

AST 2002
Astronomy: PR: PSC 1512. An up-to-date survey of the solar system, the properties and evolution of stars, galaxies, and cosmology. Optional night observation sessions offered. AS 3(3,0)

AVM 4510
Airline Management: PR: HFT 1000. The trends, operation, practices, and procedures of the airline industry. Special emphasis on ticketing, scheduling, marketing, and terminal management. US 3(3,0)

BCH 4053
Biochemistry I: PR: CHM 3211. A consideration of proteins, carbohydrates, nucleic acids, enzymes and their effect on biochemical systems, and inter-relationship of intermediary metabolism. AS 3(3,0)

BCH 4054
Biochemistry II: PR: BCH 4053. Continuation of BCH 4053. AS 3(3,0)

BCH 4103L
Biochemical Methods: PR: BCH 4053 and CHM 3120C. A laboratory course stressing the application of the chemical arts to the separation, identification, and quantification of materials of biological significance. AS 2(0,6)

BES 3512
Behavioral Weight Control: Application of behavioral techniques to produce weight loss. Diet, exercise, and behavioral self-regulation principles are used in an individual student case study approach. AS 2(2,0)

BOT 1000C
Plant Science: Plant life related to biological principles and the physical and cultural impact of plants on human individuals and civilization. Designed for non-majors. AS 4(3,2)
BOT 2010C
**General Botany:** PR: High school biology or C.I. Introduction to botany; plant structure and function, with emphasis on forms and applications important to man.

**BOT 2800**
**Plants and Man - Ethnobotany:** PR: C.I. Man’s historical and modern uses of plants economically important in various cultures. Designed for majors and non-majors.

**BOT 3154**
**Local Flora:** PR: BOT 2010C or C.I. Recognition and identification of Florida higher plants, especially those common to central Florida, stressing environmental and ethnobotanical significance. Weekend field trips may be required.

**BOT 3820**
**Plants and the Urban Environment:** PR: C.I. The selection, placement, propagation and care of ornamental plants in residential and industrial areas. Designed for majors and non-majors.

**BOT 4223C**
**Plant Anatomy:** PR: BOT 2010C. A study of development, structure and function of the principal organs and tissue of vascular plants.

**BOT 4303C**
**Plant Kingdom:** PR: BOT 2010C. A survey of the plant kingdom utilizing comparative morphology, structure and functions to demonstrate relationships among extant and extinct forms.

**BOT 4503C**
**Plant Physiology:** PR: PCB 3023 or C.I. A study of mechanisms used by plants to cope with the environment.

**BOT 4523**
**Plant Geography:** PR: 8 hours Botany or C.I. The major climatic plant formations of the world and historical plant geography.

**BOT 4713C**
**Plant Taxonomy:** PR: BOT 2010C. An introduction to systematic classification and identification of vascular plants, with emphasis on the flora of peninsular Florida.

**BOT 5495C**
**Bryology:** PR: BOT 4303C or C.I. A lecture-laboratory survey course on the diversity and classification of mosses, liverworts, and hornworts, with special emphasis on those found in Florida.

**BOT 5705C**
**Plant Biosystematics:** PR: Graduate standing or C.I. Evolutionary processes among plant taxa and populations utilizing cytology, morphology, biochemistry, breeding systems and co-evolution.

**BSC 1020C**
**Biological Principles:** A study of various biological factors which affect the health and survival of man in modern society. Designed for non-majors.

**BSC 1030C**
**Biology and Environment:** Biological implications of the interaction among human society, population, and technology in relation to the environment and natural systems. Designed for non-majors.

**BSC 2010C**
**General Biology:** PR: High school biology or C.I. Basic principles, unifying concepts, and facts of modern biology. Introduction to quantitative biological experimentation. For biological sciences, allied health sciences, and preprofessional majors.

**BSC 2010H**
**General Biology Honors:** PR: Eligibility for Honors Program. Basic principles and unifying concepts of modern biology. Introduction to quantitative experimentation using intensive, open-ended labs.

**BSC 4034**
**Biology and Society:** PR: An introductory course in biology or C.I. Biological concepts applied to current human problems - food production, pollution, diseases, energy, life support systems, natural ecosystems. Suitable for majors or non-majors.

**BSC 4103**
**History of Biology:** PR: C.I. People and events involved in the development of major biological concepts and disciplines. Suitable for majors and non-majors.

**BTE 3402**
**Business Instructional Analysis I:** PR: EDG 4321. Techniques, materials, and instructional media; psychological principles, evaluation, and current trends in typewriting instruction.

**BTE 4410**
**Business Instructional Analysis III:** PR: EDG 4321. Techniques, materials, and instructional media; psychological principles, evaluation, and current trends in accounting and basic business instruction.

**BUL 3111**
**Legal Environment of Business:** PR: Junior standing. Analysis of the law as a dynamic social and political institution in the business environment, including ethical considerations. (Not open to Accounting majors.)
BUL 3112  
**Business Law I**: PR: Junior Standing. Introduction to law: a social and political institution in the business environment. Analysis of statutory and common law principles involved in the formation, operation, and termination of recognized business organizations. Analysis of the effects of government regulation on business activity, including anti-trust and securities regulation.

BUL 3121  
**Business Law II**: PR: BUL 3112. Coverage of the Uniform Commercial Code; the law of commercial transactions, including sales, commercial paper, secured transactions and suretyship, contracts, wills and trusts, and property law.

BUL 3301  
**Property Law**: PR: BUL 3111. An analysis of real and personal property law, bailments, and insurance.

BUL 5125  
**Legal and Social Environment of Business**: PR: Admission to graduate program. Analysis of the legal and ethical environment of business, the effects of legislation and regulation on business activity, and the role of law and ethics in the decision-making process.

CAP 4453  
**Introduction to Robot Vision**: Pin hole camera and eye, perspective and orthographic projections, edges, regions, binary images, recognizing human faces, mobile robots, texture, illusions, robot arm kinematics.

CAP 4600  

CAP 5410  
**Computer Vision**: PR: COP 3530. Image formation, binary vision, region growing and edge detection, shape representation, dynamic scene analysis, texture, stereo and range images, and knowledge representation.

CAP 5500  
**Artificial Intelligence and Prolog**: PR: CAP 4600. Analysis of deductive databases, applications of logic programming to knowledge representation and "expert systems."

CAP 5601  
**Advanced Artificial Intelligence**: PR: CAP 4600. AI theory of knowledge representation, "expert systems," memory organization, problem solving, learning, planning, vision, and natural language.

CAP 5610  
**Machine Learning**: PR: CAP 4600 or C.I. Origin/evaluation of machine intelligence; machine learning concepts and their applications in problem solving, planning and "expert systems;" symbolic role of human and computers.

CAP 5700  
**Computer Graphics Systems I**: PR: COP 3530 or equivalent. Architecture of graphics processors; display hardware; principles of programming and display software; problems and applications of graphics systems.

CBH 3003  
**Comparative Psychology**: PR: PSY 2013. A study of comparative behaviors of lower animals.

CCE 4004  
**Construction Engineering I**: PR: EGN 3331 and CEG 4101C. Building construction, materials and types of construction, soils in construction and handbook applications in the field of construction engineering. Also form work design.

CCE 4014  
**Construction Estimating**: PR: MAC 1104, MAC 1114. Construction estimating techniques used in building construction. Classification of work and quantity survey procedures.

CCE 4031  
**Construction Scheduling**: Project planning, scheduling and cost management for building construction.

CCE 4101  
**Construction Materials**: Structural steels, concrete mixes, wood, masonry, concrete reinforcement, steel decks, formwork, insulation, and interior finish materials.

CCE 5005  
**Construction Engineering II**: PR: CCE 4004 or C.I. Construction planning, equipment, and methods used in heavy construction.

CCE 5035  
**Construction Law and Project Management**: PR: C.I. Contracts, specifications, and law for engineers. Strategic planning, management, development, design, and production of construction projects. Value engineering, project funding and cash flow.

CCJ 3010  
**Crime in America**: A survey of crime and criminality in the United States, with emphasis on crime data, its weaknesses, and types of criminal behavior.

CCJ 3020  
**Criminal Justice System**: An examination of the components and of their interdependence in light of their traditional autonomy.
CCJ 3210
Criminal Law in Action: Basic concepts of criminal law: elements of major crimes, criminal responsibilities, defenses, and parties to crime.

CCJ 3290
Prosecution and Adjudication: Examination of structures and goals of offices and prosecution and criminal trial courts, and of the processes of charging, adjudicating, and sentencing defendants.

CCJ 3300
The Corrections and Penology: Theories, structures, and methods of institutional and non-institutional processing and treatment of convicted criminals and juvenile offenders.

CCJ 3341
Community Treatment Modes: Treatment techniques and practices in the community setting. Builds upon modes covered in prerequisite course and may include practicum experience in a community setting.

CCJ 3451
Justice System Technology: Examination of the relevance of scientific and technological developments to justice systems and their applicability to the operations and management of the systems.

CCJ 3452
The Criminal Justice Manager: PR: C.I. Elements of first-line supervision and executive development. Administrative leadership; its nature; methods, and traits. Recent theories and research in leadership.

CCJ 3483
Public Sector Labor Relations in Criminal Justice: Examine the role of public sector labor relations in criminal justice to include management-employee relationships, collective bargaining process, employee organizations, and federal-state laws.

CCJ 4459
Justice Agency Operations: Elements, functions, and processes essential to the continuing management of various criminal justice agencies, institutions and court systems.

CCJ 4481
Police and Society: PR: CCJ 3020. Examination of the dynamics of public expectations of police, the impact of community demographic changes and police alienation from the community.

CCJ 4540
Delinquency Control: Examination of programs and institutions including juvenile court process, intake services, and remedial procedures and practices.

CCJ 4630
Comparative Justice Systems: A survey of contemporary foreign criminal justice and differences emerging from various political, cultural and legal systems.

CCJ 4640
Organized Crime: An examination of organized crime, including structures, history and activities, and of issues surrounding efforts to define and control it.

CCJ 4941
Criminal Justice Internship: PR: C.I. Internship in municipal, county, state or federal criminal justice agency. Includes assignments in police, courts, corrections components.

CCJ 5406
Research and Technology Implementation: Changing roles of social and physical sciences as related to the objectives and administration of public safety agencies.

CCJ 5407
Finance and Planning for Public Safety: Acquisition, control, and management of resources for criminal justice and public safety agencies; organization of finance systems, planning mechanisms and strategies for the budgetary process.

CCJ 5485
Issues in Justice Policy: Examination of selected issues of public policy regarding the functions and roles of criminal justice agencies vis-a-vis other government departments or agencies and public purposes.

CDA 4131
Programming for Large Scale Digital Systems: PR: Computer Science Major or C.I. and COP 3402C. Programming techniques and instruction sets for large scale digital computers.

CDA 4150
Introduction to Computer Architecture: PR: Computer Science Major or C.I. and COP 3402C and EEL 3341C. Survey of machine instructions, processor characteristics, and microprogramming concepts.

CDA 4300
Microprocessor Fundamentals: PR: Computer Science Major or C.I., COP 3402C and EEL 3341C. Semiconductor Technology, 8-bit and 16-bit Microprocessor Architectures and programming, memory system design, I/O methods, interrupts, development system concepts.
CDA 4311  AS 3(2,2)  Microprocessor Application: PR: Computer Science Major or C.I. and CDA 4300. Total system design methodology and applications, advanced topics on microprocessors, patent search and applications.

CDA 4312  AS 3(2,2)  Microprocessor Interface: PR: Computer Science Major or C.I. and CDA 4300. Interfacing of CPU to various devices, CPU support devices, peripheral devices and controllers, BUS concepts and standards, single chip computers.

CDA 5106  AS 3(3,0)  Advanced Computer Architecture I: PR: CDA 4105. Evolution of computer architecture; memory organization; cache; virtual memory; highspeed processor design; pipeline multi-functional and array machines; special architecture case studies; overview of channel architecture.

CDA 5110  AS 3(3,0)  Parallel Architecture & Algorithms: PR: COT 4210, CDA 5106. General-purpose vs. special-purpose parallel computers; arrays, message-passing; shared-memory; Taxonomy; parallelization techniques; communication synchronization and granularity; parallel data structures; automatic program restructuring.

CDA 5210  AS 3(3,0)  Architecture and Design of VLSI Systems: PR: CDA 4105 or equivalent. Overview of VLSI technology. Stick diagrams; logical design of basic subsystems; integrated system design tools; design of a VLSI computer system.

CDA 5212  AS 3(3,0)  VLSI Design Tools: PR: CDA 5210, a strong programming background and C.I. VLSI implementation systems; layout languages; graphic tools; sticks compactor; design rule checking algorithms; simulation models; routing algorithms; silicon compilers; knowledge-based VLSI tools.

CDA 5213  AS 3(3,0)  VLSI Testing and System Integration: PR: CDA 5210. Test vectors; fault models; design for testability; LSSD; languages for testing; performance measurements; interrupts, BUS concepts and standards; testing and systems integration.

CEG 3301  EN 3(2,2)  Engineering and Environmental Geology: PR: CHS 1440 or equivalent. Principles of physical geology, with emphasis on engineering and environmental topics. Study of land forms, geologic maps, geologic structure, weathering, groundwater, mass wasting, and earthquakes. Lab sessions are practical applications.


CEG 5015  EN 3(3,0)  Geotechnical Engineering II: PR: CEG 4101C. Continuation of CEG 4101C with emphasis on shear strength and design factors for earth pressures bearing capacity, and slope stability.

CEG 5805  EN 2(1,2)  Geotechnical Engineering Design: PR: CEG 4101C and CEG 5015. Project course on design of foundations and other soil structures using geotechnical design methodologies.

CES 4102  EN 3(2,2)  Structural Engineering Analysis: PR: EGN 3331. Topics in structural mechanics, energy methods, indeterminate structures by flexibility, stiffness method, analysis of columns.

CES 4130  EN 1(0,3)  Structures Laboratory: PR: EGN 3331; CR: CES 4102. Laboratory exercises on the behavior of structures and structural materials.

CES 4144  EN 3(3,0)  Matrix Methods of Structural Analysis: PR: EGN 3331. Structural analysis of beams, frames, and plates by matrix methods.

GES 4605  EN 3(2,2)  Structural Steel Design: PR: CES 4102 or C.I. Design of steel structural members. Selected topics in beam design, column design, plastic design, connections and built-up members.

GES 4608  EN 2(1,2)  Steel Design: PR: CES 4605. Project course on design of steel structures using steel and structural analysis methodologies.

GES 4702  EN 3(2,2)  Structural Concrete Design: PR: CES 4102 or C.I. Principles of designing reinforced concrete members. Selected topics in concrete mixes, beams, columns, and ultimate analysis.

GES 4709  EN 2(1,2)  Concrete Design: PR: CES 4702. Project course on design of concrete structures using concrete and structural analysis methodologies.

GES 5143  EN 3(3,0)  Matrix Structural Analysis: PR: CES 4102 or equivalent. Optimization and matrix methods applied to the design of real structures.

CET 3123C  EN 3(2,3)  Microprocessor Electronics: CR: EET 3035C. Introduction to the electronics of basic microprocessing.
CET 3144C

**Applied Microprocessor Technology:** PR: CET 3123C. Analysis and design of the architecture, components, and interfacing of microprocessor-based systems. An overview of IBM XT, AT, and PS/2 series.

CET 3303

**Microcomputer Technology I:** PR: CET 3123C. Microcomputer assembly programming, including overview of architecture and operating system environment.

CET 3323C

**Computer Organization Technology:** PR: CET 3123C. Digital logic, memory devices, interrupt and I/O handling techniques.

CET 3383

**Applied Systems Analysis and Design:** PR: Information Systems Technology major. The study of system and program development of complicated problems for computer solution.

CET 4131C

**Microprocessor Electronics II:** PR: CET 3123C. A continuation of CET 3123C, with emphasis on applications of microprocessor applications in engineering technologies.

CET 4188

**Microcomputer Technology II:** PR: CET 3303. Continuation of CET 3303. Macros, system subroutines, high-level language interfacing, device drivers, and operating system enhancements.

CET 4198C

**Digital Systems:** PR: AC Circuits and Digital Circuits I. Advanced digital circuits. Sequential logic, MSI and LSI devices.

CET 4333C


CET 4334C

**Applied Computer Systems II:** PR: CET 4333C. Continuation of computer systems with emphasis on advanced hardware and I/O devices. Networking.

CET 4345

**Minicomputer Applications in Technology:** PR: CET 3323C. Utilization of minicomputers in real time industrial and business environments. Analysis of data communications methods.

CET 4361


CET 4381

**Digital Signal Processing:** PR: EET 4329C and COP 1200 or equivalent. Introductory treatments of the concepts of digital signal processing. Survey of current applications, including consideration of available hardware and software.

CET 4427

**Applied Data Base Systems:** PR: CET 3383. Design and implementation of data base systems within the concept of central administration, structured data storage. Programming project.

CET 4429

**Applied Database II:** PR: CET 4427. Continuation of CET 4427—Study of Hierarchical database system. Programming project is required.

CET 4505

**Applied Microcomputer Operating Systems:** PR: COP 2001. Modifying the operating systems to support new types of devices. Analysis of limitations and strengths of commercial mass storage operating systems in industry. O.S. tool box usage.

CET 4523

**Applied Systems Analysis II:** PR: CET 3383. Continuation of CET 3383, with emphasis on distributed processing which includes the interfacing of minis, mainframes, software, communications, and data base technology into a responsive information system.

CET 4527

**Applied Operating Systems II:** PR: CET 4505. Continuation of CET 4505, with emphasis on multitasking. Multi-users environmental programming project is required.

CET 4915

**Senior Design Project:** PR: Computer, Electronics, or Information Systems Engineering Technology senior within 18 semester hours of graduation. Supervised individual or group projects involving project definition, planning, design, development, testing and evaluation. Progress reports and final report are required.

CGN 3501

**Civil Engineering Materials:** PR: C.I. The characterization of materials used in civil engineering works to include concrete, soils, bituminous, polymers and composite materials.

CGN 4300

**Civil Engineering Systems:** PR: EGN 3331, EGN 3353, and STA 3032. Application of mathematical techniques associated with operations research to the design and operation of systems that concern civil and environmental engineers.
CGS 1060C  AS 3(2,2)
Introduction to Computer Science: History, typical computer, number systems, control and data flow; peripheral components, memory devices, effects of computers on society, applications of computers. Not open to Computer Science Majors.

CGS 3000C  AS 3(2,1)
Computer Fundamentals for Business Applications: Hardware/software for business data processing; survey use of business applications programs utilizing prewritten programs. Not open to Computer Science Majors.

CGS 3061  AS 3(3,0)
Personal Computing: Survey of personal computers on the market; applications for education, entertainment and clerical work; programming in BASIC with exercises. Not open to Computer Science Majors.

CGS 3100  AS 3(3,0)
Business Applications Programming: PR: CGS 3000 or equivalent. Basic programming concepts and techniques, algorithm design; documentation, programming for selected business applications using BASIC. Programming projects. Not open to Computer Science majors.

CGS 3110  ED 3(2,1)
Microcomputer Applications in the Classroom: An introduction to the microcomputer as it applies to classroom instruction. Includes a survey of software appropriate for the K-12 classroom.

CGS 3262  AS 3(3,0)

CGS 3300  AS 3(3,0)

CGS 3422  AS 3(3,0)
Programming and Numerical Methods: CR: MAC 3312. Programming with a high-level language (e.g., FORTRAN). I/O, formatting and manipulation of one and two-dimensional arrays, with emphasis on numerical problems. Not open to Computer Science Majors.

CGS 4140  AS 3(3,0)
Computerized Health Information Systems: PR: CGS 3000 or equivalent. Analysis of computerized health information systems, with emphasis upon the design and implementation phases. On-site visitations of several local computerized health information systems. Not open to Computer Science majors.

CGS 5111  AS 3(3,0)
Applications of Computers in Education: PR: At least Senior standing in College of Education. Computer programming; computer-assisted instruction, computer-managed instruction; simulation and games; computerizing teachers' records. Not open to Computer Science majors.

CGS 5310  AS 3(3,0)
Computer-Based Educational Systems: PR: COP 4020 or equivalent. The design and implementation of computer-based educational systems. Selected projects using high-level programming languages.

CHI 1120  AS 4(4,1)
Elementary Chinese Language and Civilization I: Designed to initiate the student to the major language skills: listening, speaking, reading and writing.

CHI 1121  AS 4(4,1)
Elementary Chinese Language and Civilization II: PR: CHI 1120 or equivalent.

CHM 1020  AS 3(3,0)
Concepts in Chemistry: PR: MAC 1104 or MGF 1203. Concepts will be examined to provide insight into the significant role that chemistry plays in our culture. Intended as a general education course.

CHM 1032  AS 3(3,0)
General Chemistry: PR: MAC 1104, MGF 1203 or equivalent. An introductory study of the fundamental concepts of chemistry, primarily oriented toward COH and Biology Education majors.

CHM 2045  AS 4(3,1)
Chemistry Fundamentals I: PR: High school chemistry or CHM 1032. Basic physical theory of chemical reactivity, atomic structure, chemical bonding, periodicity, stoichiometry, equilibria, thermodynamics, and kinetics.

CHM 2045H  AS 4(3,3)
Honors Chemistry Fundamentals I: PR: Admission to University, Honors Program and high school chemistry. Same as CHM 2045 with honors-level content.

CHM 2046  AS 3(3,0)
Chemistry Fundamentals II: PR: CHM 2045. Continuation of CHM 2045.

CHM 2046L  AS 1(0,3)
Chemistry Fundamentals Laboratory: PR: CHM 1032 or CR: CHM 2046. Illustration of chemical principles and introduction to the techniques of inorganic and physical chemistry.
CHM 2046H
Honors Chemistry Fundamentals II: PR: 2045H. Same as CHM 2046 with honors-level content.

CHM 2205
Introduction to Organic and Biochemistry: PR: CHM 1032 or equivalent. An introduction to organic chemistry, stressing the chemistry of functional groups and a survey of the biochemistry of proteins, carbohydrates, lipids, and nucleic acids.

CHM 3120C
Analytical Chemistry: PR: CHM 2046. 2046L. Laboratory practices of classical and instrumental analysis. Choice of preferred analytical methods and techniques is emphasized through applications involving both inorganic and organic systems.

CHM 3210

CHM 3211

CHM 3211L
Organic Laboratory Techniques I: PR: CHM 3210. An introduction to the laboratory techniques of organic chemistry, including the preparation, reaction, and analysis of organic compounds.

CHM 3220L
Organic Laboratory Techniques II: PR: CHM 3211 and 3211L. Open-end laboratory to develop synthesis techniques and structure elucidation skills.

CHM 3410
Physical Chemistry I: PR: CHM 2046, PHY 3049, and MAC 3312. Rigorous treatment of atomic and molecular structure, thermodynamics, kinetics, and chemical bonding.

CHM 3410L
Physical Chemistry Laboratory I: PR: CHM 3120C and COP 1200 or CGS 4242. CR: CHM 3410. A practical course in the use of computers for collecting and analyzing data from a select number of physical chemistry experiments.

CHM 3411
Physical Chemistry II: PR: CHM 3410. Continuation of CHM 3410.

CHM 3411L
Physical Chemistry Laboratory II: PR: CHM 3410L. Classical as well as modern instrumental techniques coupled with computer data processing to measure physical properties and determine atomic and molecular parameters.

CHM 4130C
Advanced Analytical Laboratory Technique: PR: CHM 3211, CHM 3120C and CHM 3411. A lecture-laboratory course designed to give in-depth coverage to modern methods of analysis including electrochemistry, spectroscopy, and separation techniques.

CHM 4220

CHM 4221

CHM 4610

CHM 5235

CHM 5450
Polymer Chemistry: PR: CHM 3211. An introduction to the chemistry of synthetic polymers. Synthetic methods, polymerization mechanisms, characterization techniques, and polymer properties will be considered.

CHM 5580

CHM 5711
The Chemistry of Materials: PR: CHM 3211, CHM 4130C, and CHM 3411. Structure and properties of chemical products, with an emphasis on the correlation between molecular form and the functional properties deemed desirable for the product.

CHS 1440
Fundamentals of Chemistry for Engineers: PR: One year of high school chemistry or CHM 1032. Basic concepts of chemistry, with emphasis on problem solving and engineering applications. Atomic and molecular structure, states of matter, stoichiometry, equilibria, electrochemistry and thermodynamics.
CHS 3501: Introduction to Forensic Science: Intended for majors and non-majors to provide an overview of the specialty areas in Criminalistics (crime lab).

CHS 3505: Forensic Microscopy: PR: CHM 2046 or C.I. The study of the polarized light microscope and its use in the identification and comparison of trace evidence.

CHS 3511: Trace Evidence: PR: CHS 3505. An advanced study of the techniques used to identify and compare trace evidence.

CHS 3531: Forensic Analysis of Controlled Substances: PR: CHM 3120C. The study of the presumptive tests, isolation, and instrumental techniques used in identification of controlled substances.

CHS 4110C: Nuclear and Radiochemistry: PR: CHM 3120C and CR: CHM 3411. A lecture-laboratory course examining theories of fundamental particles, the chemical effects of nuclear transformations and the special uses of isotopes.

CHS 4200: Concepts in Industrial Chemistry: PR: CHM 3410. An introduction to industrial practices, emphasizing the application of chemical principles in the development of a commercial process or product.

CHS 4591: Forensic Science Internship: PR: C.I. Credit for full-time work (15 weeks; 600 hours) for a professional forensic laboratory. This course may be repeated for credit.

CHS 5241: Chemical Dynamics II: PR: CHS 5240. Continuation of CHS 5240.

CH 5250: Chemical Synthesis I: PR: CHM 3211, and 3411; or equivalent. Survey of chemical synthesis from the standpoint of planning a synthesis, intermediates, special techniques, protection of functional groups, experimental design and optimization of reaction conditions.

CIS 4321: Data Processing Systems Analysis and Design: PR: Computer Science Major or C.I. and COP 3530. Data organization; physical storage; database system architecture. Students participate in the design of a data processing system.

CIS 4322: Data Processing Systems Implementation: PR: Computer Science Major or C.I. and CIS 4321. System implementation project. Students experience the task of implementing a large computing system.

CIS 5101: Computational Techniques in Management Information Systems: PR: COP 4710. Computers in management information systems; analysis, design approaches, processing methods and data management; use of state-of-the-art software in design and development.

CIS 5420: Managing the Computer Professional: PR: COP 5711 and MAN 5051; or C.I. The programming group, team and project tasks, personality factors, motivating, training, experience.

CIS 5610: Software Engineering: PR: COP 4020. Study of design techniques for large software systems, modularization, task assignment, management techniques, implementation techniques, testing quality control, documentation, and maintenance.

CJT 3820: Security Administration: Discussion of modern security administration and the security-law enforcement interface, emphasizing a systems approach and utilizing the design of a security plan for a plant.

CJT 3821: Practical Security Applications: An examination of basic security principles applied to practical specific security situations encountered in the Central Florida area.

CJT 3842: Special Security Problems: Review and application of basic security principles to retail security, transportation/cargo security, utility security, computer security, and other special security situations.

CLA 3850: Classical Mythology: Myths of the Greeks & Romans studied through excerpts from ancient sources and experienced through works of art, literature, and music.


CLP 3302: Clinical Psychology: PR: PPE 3003 or CLP 3143. An overview of approaches to psychopathology, methods of clinical assessment, and various approaches to individual and group counseling.
Contemporary Behavior Therapy: PR: CLP 3143. Emphasis on the underlying principles and the specific intervention procedures which are utilized in contemporary behavior therapy, including treatment strategies for particular behavior disorders.

CLP 4440


CLP 5004

Psychology of Adult Adjustment: A survey of situations encountered during adulthood, including marriage, birth, parenthood, trauma, illness, death, etc. Effective adjustment.

CLP 5166

Advanced Abnormal Psychology: Consideration of classification, causation, management and treatment of emotional disorders. Review of theories and research in the field. Lecture/Laboratory.

COM 3011

Communication and Human Relations: Introduction to semantics; symbols and meaning and the relationship with human behavior.

COM 3110

Business and Professional Communication: PR: SPC 1600 or C.I. Theoretical and practical training in effective presentational speaking for business and professions.

COM 3120

Organizational Communication: A study of communication functions and problems within the contexts of hierarchies.

COM 3311

Communication as a Behavioral Science: Basic principles of the behavioral science approach to the study of contemporary communication.

COM 4463

Communication and Court Room Advocacy: A study of the application of communication theory and practice to the judicial setting.

COP 1200

Computer Programming: PR: College algebra and trigonometry or equivalent. Problem definitions, algorithms, flow charts, digital computer programming using a higher level language (FORTRAN). Not open to Computer Science Majors.

COP 2500

Programming I: PR: College algebra and college trigonometry. Techniques of algorithm development; structured programming concepts; algorithms for searching and sorting procedures; computer experience with a procedure-oriented language.

COP 2501

Programming II: PR: COP 2500. Continuation of COP 2500; recursion; simple data structures; program verification; continued experience with a procedure-oriented language.

COP 3120


COP 3400C

Assembly Language: PR: COP 2501 or equivalent programming experience. Computer structure, number systems, data representation, arithmetic and logic instructions, addressing schemes, looping techniques, sequential input/output, subroutines, macros, and other topics.

COP 3402C


COP 3530

Computer Science III: PR: COP 2501 and COT 3100. Design and analysis of implementation techniques of abstract data types, such as stacks, queues, linear lists, arrays, trees, and heaps.

COP 4020


COP 4124

COBOL Environment: PR: Computer Science core. Basic and advanced features; creation of user libraries; system utilities; file processing; sub-program linkage; programming efficiencies; compiler study; assembly interfaces, and JCL.

COP 4600

Programming Systems: PR: COP 3402 and COP 3530. The function and organization of operating systems. Design and implementation considerations regarding operating systems, compilers, assemblers and loaders.

COP 4710

Databases: PR: COP 3530. Basic concepts of databases, I/O processing, file organization and access, study of selected database systems, database project.
COP 5021 Programming Languages II: PR: COP 4020 and COT 4210. Introduction to compiler construction, parsing, parser generators, attributed grammars and the implementation of block structures and recursion. Students write a high-level language translator.

COP 5570 Software Tools: PR: COP 4600 and COP 5021. Systems programming languages, concurrent programming, design and implementation of software development/maintenance tools. A large programming project is required.

COP 5611 Operating System Design Principles: PR: COP 4600. Structure and functions of operating systems, process communications techniques, high-level concurrent programming, virtual memory systems, elementary queueing theory, security, distributed systems, case studies.


COT 3100 Introduction to Discrete Structure: PR: MAC 3311 and knowledge of a programming language. Logic, sets, functions, relations, combinatorics, graphs, Boolean algebras, finite-state machines, Turing machines, unsolvability, computational complexity.


COT 5310 Formal Languages and Data Theory: PR: COP 4020 and COT 4210. Classes of formal grammars and their relation to automata, normal forms, closure properties, decision problems, LR(K) grammars.


COT 5501 Computational Methods/Applications: PR: COT 4500. Computational solution techniques for algebraic equation, ODE and PDE Models of applications selected from science, engineering, applied mathematics, and computer science.

COT 5510 Computational Methods/Linear Systems: PR: COT 4500 and MAS 3113. Mathematical models for linear systems, linear programming, the simplex method, integer and mixed-integer programming, introduction to nonlinear optimization and linearization.

CPO 3034 Politics of Developing Areas: Comparative analysis of theories, problems and politics of development in Third World nations.

CPO 3103 Comparative Politics: Government and politics in selected nations, with emphasis upon comparative analysis of contemporary problems, politics, political culture, behavior, and institutions.

CPO 3132 Introduction to Canadian Studies: A multi-disciplinary approach to the study of Canada, its people, culture, government, and economy.

CPO 4024 Non-Western Politics: Examination of the political system of one or two non-western nations, including the relationship of socio-cultural and historical environment to the political system.

CPO 4123 Government and Politics of Great Britain: A survey of British government, society, politics and institutions, emphasizing parliamentary traditions. Britain's foreign policy and European role will be discussed.

CPO 4133 Government & Politics of Canada: Examines the origins and development of Canadian government. Focuses on the functioning of federalism, nationality politics, foreign policy, and relations with the United States.
CPO 4303 Comparative Latin American Politics: Comparative analysis of politics, society and culture in Latin America and selected countries of the region.

CPO 4643 Government and Politics of the Soviet Union: Study of the origins, institutions, and functioning of the Soviet system, including the role of the Communist party and its influence on domestic and foreign policy formation and implementation.

CPO 5090 Issues in Comparative Politics: PR: C.I. Analysis of contemporary problems and issues of comparative politics such as political economy, development, authority patterns, and instability.

CRW 2000 Introduction to Creative Writing: PR: ENC 1102. An exploratory course in the several types of creative writing; group analysis of original writing; critical reading of established authors.

CRW 2100 Introduction to Fiction Writing: PR: ENC 1102. Practice in writing the short story; group analysis and criticism of work produced by individual students.

CRW 2300 Introduction to Verse Writing: PR: ENC 1102. Practice in writing poetry; group analysis and criticism of work produced by individual students.

CRW 3010 Creative Writing Workshop I: PR: C.I. Practice in established forms: essay, short story, and poetry.

CRW 3011 Creative Writing Workshop II: PR: CRW 3010 or C.I. Individualized practice in writing in one of the established forms; analytic study of the work of pertinent authors.


CRW 3410 Writing Scripts: PR: ENC 1102 and Grammar Proficiency Exam. Theory and practice of writing scripts for film and TV.

CRW 4940 Advanced Writing Workshop I: PR: C.I. Intensive writing practice in fiction, non-fiction, or verse.

CRW 4941 Advanced Writing Workshop II: PR: CRW 4940. Continuation of CRW 4940.

CRW 5092 Teaching Creative Writing: PR: Senior standing or C.I. Creative writing practicum.

Hydrology: PR: STA 3032; EGN 3353. Hydrological cycle, probabilistic forecasting, rainfall excess, meteorology, groundwater, storm-water runoff, flood routing and design applications.

Hydraulics: PR: EGN 3353. Transmission systems, peak flows, water distribution, wastewater and storm water collection, pipe flow, open channels and pumps with design applications.

Hydraulic Engineering: PR: EGN 3353. Environmental and civil engineering hydraulics application. Pipe and open channel flow, fittings, flow measurements, etc.

Water Resources Engineering: PR: CWR 4101C, CWR 4201C. Systems identification and solution to complex water allocation problems, and other hydraulic engineering designs and operations using economic analysis and operations research techniques.

DAA 2200 Theatre Dance I: Fundamentals of Classical Ballet; includes practical class work as well as Dance History lectures.

DAA 3000 Theatre Dance: PR: DAA 2200 & 3201 or C.I. Specialized study of Theatre Dance styles of the 1920s to the 1980s. Demonstration and performance of students highlighting segments of Broadway shows. May be repeated for credit.

DAA 3100 Theatre Modern Dance: PR: DAA 2200 & 3201 or C.I. Exploration of form, style, and technique in creative movement. Includes practical class work and history lectures.

DAA 3160C Movement as an Art Form: Analysis of creative movement techniques that increase body awareness and enhance the communicative potential through the instrument of dance.

DAA 3201 Intermediate Classical Ballet: PR: DAA 2200 or C.I. In-depth study of classical ballet technique, including principles, theory, and practice technique.

DAA 3500 Intermediate Jazz Dance: PR: DAA 2200 or C.I. Introduction of the basic movements of American Jazz Dance, including practical class work as well as Jazz Dance history.
DAA 3600  AS 3(2,2)
Theatre Tap Dance: Exploration of form, style, and technique in the basic fundamental movements of tap dance. May be repeated for credit.

DAA 4501  AS 3(2,2)
Advanced Jazz Dance: PR: DAA 2200 & DAA 3500 or C.I. In-depth study of Jazz Dance as a major style of dance, using theory and practice in jazz technique.

DAA 4710  AS 3(2,2)
Theatre Dance Choreography and Performance: PR: By audition. Students will create and present a piece choreographed and performed by other dancers in concert. May be repeated for credit.

DAE 3300  ED 3(2,1)
Dance Techniques: Analysis of creative dance and movement techniques as they relate to the teaching of physical education.

DAE 3370  ED 3(1,2)
Dance and Rhythms: An analysis of creative movement and rhythmical activity as they relate to teaching physical education in grades K-8.

DEP 3004  AS 3(3,0)

DEP 3202  AS 3(3,0)
Psychology of Exceptional Children: Psychological problems of exceptional children, including diagnosis, associated emotional problems, effects of institutionalization, special class placement, attitudes, and appropriate intervention methods.

DEP 3212  AS 3(3,0)
Psychological Approaches to Mental Retardation: The problems of mentally retarded citizens, including diagnosis, environment versus heredity, legal restrictions, institutionalization, as well as methods of behavioral remediation.

DEP 3464  AS 3(3,0)
Psychology of Aging: PR: PSY 2013. An examination of basic psychological processes related to the aging process, with emphasis on the applied implications of changes in perceptual-motor, social-emotional and cognitive-intellectual function.

DEP 5057  AS 3(2,2)
Developmental Psychology: PR: Graduate admission or C.I. Psychological aspects of development including intellectual, social, and personality factors.

EAB 3703  AS 4(3,2)
Principles of Behavior Modification: PR: EXP 3404. An examination of the control of behavior through applications of principles and theories of learning. Examples are drawn from clinical and social psychology and from child rearing. Lecture/Practicum.

EAB 3704  AS 3(3,0)

EAB 5765  AS 3(3,0)
Applied Behavior Analysis with Children and Youth: PR: DEP 5057 and EXP 5445 or C.I. Advanced survey of principles, procedures, and techniques of applied behavior analysis, with special attention to applications with children and youth.

EAS 4101  EN 3(3,0)
Aerodynamics I: PR: EML 4709. Fundamental aerodynamic analysis of wings and bodies in incompressible and compressible flows.

EAS 4105  EN 3(3,0)

EAS 4134  EN 3(3,0)
Gas Dynamics: PR: EGN 3353. Study of compressible flows phenomena, including isentropic, Fanno line, and Raleigh line flows, shocks, nozzle design, external flow.

EAS 4200  EN 3(2,2)

EAS 4300  EN 3(3,0)
Propulsion Systems: PR: EAS 4134. Analysis of jet propulsion systems, including turbojets, ramjets, and rockets.

EAS 4505  EN 3(3,0)
Orbital Mechanics PR: EGN 3321, MAP 3302. The solar system; coordinates and time-keeping; observational data; the two-body and many-body problems; perturbations.

ECM 3000  EN 1(0,2)
Survey of Computer Engineering: Introduction to the field of computer engineering, including appreciation of its breadth, depth, and scope in modern engineering practice.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECM 3507C</td>
<td>Computer-Aided Engineering Design</td>
<td>PR: EGN 3210 and EEL 3342C or C.I.</td>
<td>Review of currently available CAE tools for digital hardware and software design applications.</td>
</tr>
<tr>
<td>ECM 4114</td>
<td>Engineering Mathematical Analysis</td>
<td>PR: MAP 3302.</td>
<td>The application of mathematical methods to engineering problems. Vector and tensor fields, state space, coordinate systems, orthogonal functions.</td>
</tr>
<tr>
<td>ECM 4230</td>
<td>Engineering Data Structures</td>
<td>PR: ECM 4804.</td>
<td>Design of algorithms and data structures, with emphasis on performance analysis, memory organization, stacks, queues, linked lists, searches, and sorts. Concept of object-oriented programming.</td>
</tr>
<tr>
<td>ECM 4301</td>
<td>Engineering Applications of Computer Methods</td>
<td>PR: MAP 3302, STA 3032, ECM 4804.</td>
<td>Engineering applications of numerical methods, including solution of differential equations, simulation, optimization, and multidimensional root-finding, integration and series approximations.</td>
</tr>
<tr>
<td>ECM 4411</td>
<td>Discrete Time Systems</td>
<td>PR: EGN 4703.</td>
<td>Discrete time signals, convolution, properties of linear discrete systems, the z-transform, system response, digital filters.</td>
</tr>
<tr>
<td>ECM 4451</td>
<td>Engineering Applications of Intelligent Systems</td>
<td>PR: ECM 4230.</td>
<td>Intelligent models, computer vision, natural language understanding, pattern analysis, knowledge-based systems, symbolic programming, and advanced architectures.</td>
</tr>
<tr>
<td>ECM 4504C</td>
<td>Embedded Computer Systems</td>
<td>PR: ECM 4509C, ECM 4230, ECM 4723C.</td>
<td>Computer Applications in Systems role, sensor and actuator interfacing. Design projects, including problem statements and specifications, design methodology, implementation, testing, and documentation.</td>
</tr>
<tr>
<td>ECM 4508C</td>
<td>Computer System Design I</td>
<td>PR: EEL 3342.</td>
<td>Basic computer architecture and organization. Introduction to design of computer systems at gate, register, and processor level. Assembly language programming in support of micro design.</td>
</tr>
<tr>
<td>ECM 4509C</td>
<td>Computer System Design II</td>
<td>PR: ECM 4508C, ECM 4804.</td>
<td>Continuation of ECM 4508C. The study of instructions, interrupts and DMA for I/O subsystem development in the design of microcomputer systems. Role of high-level languages.</td>
</tr>
<tr>
<td>ECM 4708C</td>
<td>Modeling and Design of Engineering Systems</td>
<td>PR: ECM 4301, EEL 4657.</td>
<td>State variables for modeling linear and nonlinear systems. Use of continuous simulation languages for analysis and design of dynamic systems.</td>
</tr>
<tr>
<td>ECM 4721C</td>
<td>Systems Lab Instrumentation</td>
<td>PR: EGN 4703.</td>
<td>Introduction to the types of instrumentation used in the field of Industrial Process Control. Hands-on experience with controllers, sensors, transmitters and final control elements.</td>
</tr>
<tr>
<td>ECM 4723C</td>
<td>Computer Control Systems</td>
<td>PR: EEL 4657, ECM 4708C, ECM 4508C.</td>
<td>Discrete-time systems, the z-transform, and single loop computer control systems. Digital simulation in the analysis and design of processes with embedded computers.</td>
</tr>
<tr>
<td>ECM 4804</td>
<td>Engineering Software Design</td>
<td>PR: COT 3100, EGN 3420.</td>
<td>Software design, development, testing and documentation; introduction to a modern programming language; design and development of a large software project.</td>
</tr>
<tr>
<td>ECM 4814</td>
<td>Real Time Computer Systems</td>
<td>PR: EGN 4703 and ECM 4504C.</td>
<td>Computer I/O systems and equipment, sampling, quantization, buffering and real time processing. Use of a mini-computer system for data acquisition, display and control.</td>
</tr>
<tr>
<td>ECM 4910</td>
<td>Senior Project in Computer Engineering</td>
<td>PR: Senior Standing and C.I.</td>
<td>Front-end analysis, design, implementation, and documentation of a representative industrial system design project.</td>
</tr>
<tr>
<td>ECM 5135</td>
<td>Engineering Math Analysis I</td>
<td>PR: MAP 3302.</td>
<td>Topics in advanced engineering mathematics, including systems of differential equations, phase plane, linear algebra, and vector differential calculus.</td>
</tr>
<tr>
<td>ECM 5431</td>
<td>Expert Systems and Knowledge Engineering</td>
<td>PR: ECM 4451 or C.I.</td>
<td>Introduction to expert systems in engineering. Expert systems tools and interviewing techniques. This course is hands-on and project-oriented.</td>
</tr>
<tr>
<td>ECM 5441</td>
<td>Image Processing</td>
<td>PR: MAP 3302, EGN 4703.</td>
<td>Two-dimensional signal processing techniques; pictorial image representation; spatial filtering; image enhancement and encoding; segmentation and feature extraction; introduction to image understanding techniques.</td>
</tr>
</tbody>
</table>
Pattern Recognition: PR: MAP 3302, EGN 4703. Graph-theoretic and syntactic methods of pattern analysis. Decision functions; optimum decision criteria; training algorithms; feature extraction; unsupervised learning; data reduction and potential functions.

Microcomputer-based Monitoring and Control Systems: PR: EEL 3342C or equivalent, CGS 3422 or equivalent. Machine-language programming; software development aids; interfacing considerations.

Engineering Applications of Computer Graphics: PR: CGS 3422. Introduction to the use of computer graphics with engineering applications. Laboratory program assignments.

Software Engineering I: PR: CGS 3422, ECM 4504C or equivalent. Design reliability, testing, and implementation of engineering software.

Principles of Economics I: An introduction to macroeconomics, including an overview of the market economy; national income, employment, and price level determination, stabilization policies, and international economics.

Honors Principles of Economics I: PR: Open to Honor Students only. Same as ECO 2013 with honors-level content.

Principles of Economics II: The determination of prices in a market economy; their role in allocating consumer and producer goods and in distributing incomes, including attempts to improve market efficiency through public policy.


Mathematical Economics I: PR: ECO 2013 and 2023 and calculus. The study of economic processes expressed as equations and economic systems as mathematical models.


Economics of the Public Sector: PR: ECO 2023. A study of fiscal institutions and decision-making, and how government budgetary policy (spending, taxing, borrowing, and debt management) affects the economy and its citizens.

Economic Concepts: PR: Acceptance into the graduate program. Introduction to micro and macro economic analysis.

Statistics for Business and Economics: PR: Acceptance into the graduate program and MAC 3233. Statistical theory and problems relating to business and economics, including time series and correlation theory, index number theory and statistical inference.

Contemporary Labor Economics: PR: ECO 2023 and ECO 2013. The analysis of labor problems and issues in a dynamic contemporary economy through the interaction of the four major institutions: households, firms, government, and unions.


Transportation Economics: PR: ECO 2023 and ECO 2013. Economic characteristics and governmental regulation of public carriers. Consideration of competitive relations between modes of transportation and criteria for public investment in transportation and criteria of public investment in transportation systems.

Business, Government, and Industrial Organizations: PR: ECO 2023 and ECO 2013. A study of the performance of industries representative of various types of market structure and practices, as well as the public policies affecting these industries.

Urban and Regional Economic Problems: PR: ECO 2023 and ECO 2013. Analysis of the location, organization and problems of urban and regional economic activities.

Managerial Economics: PR: Junior standing. ACG 2011 or ACG 2023, ECO 2023, ECO 2013 and ECO 3411. The uses of economic analysis in economic decision-making and business policy formulation.


Junior Student Teaching-Elementary: PR: EDG 4321, RED 3012, MAE 3810 and 3811 or MAE 3112. Student teaching assignment in an elementary school under the supervision of a certified classroom teacher.

Junior Student Teaching-All K-12 Majors: PR: Except. Ed. Majors; EDG 4321; RED 3012; MAE 3112. Student teaching under the supervision of a certified teacher. Half in elementary, half in secondary.


Senior Student Teaching-Elementary: PR: EDE 3942 or EDE 3943. Student teaching in an elementary school under the supervision of a certified classroom teacher. Scheduled concurrent seminars.

Individualized Instruction in the Elementary School: PR: Regular Certificate or C.I. Study of basic philosophy, organizational patterns, techniques, materials, and activities related to individualizing instruction in the elementary school classroom.


Analysis of Educational Foundations: PR: Junior standing or C.I. Analysis of and participation in general and specific dimensions of teaching with socio-economic, historical and philosophical factors emphasized.

Classroom Learning Principles: PR: Junior standing or C.I. Principles of learning as applied to classroom teaching situations, with emphasis on student development, behavior, self-concept and motivation.

Applications of Technology in Education: Classroom applications of instructional media, including computers. Includes experiences with equipment, commercial and teacher-made media, and their uses.
Overview of Education: A brief analysis of the American educational system, focusing on social, political, economic, and intellectual development through an internal atmosphere of interaction and discussion.

Preparation and Management of Classroom Instruction: PR: C.I. Study of strategies for instructional planning and classroom management that result in optimum learning.

Teaching Strategies: Analysis of the learning environment; emphasis on planning for instruction, skill development, and measurement and evaluation.

Teaching in the Schools: PR: Teaching Strategies or C.I. Selected dimensions of teaching; teaching skills; reading and writing in content areas; problem solving, school organization, and professional ethics.

Directed Field Experience: PR: Approval of Professional Laboratory. Field experience in an appropriate educational setting under the direction of a supervising teacher and/or university supervisor.

Teaching the Non-English Student: PR: FLE 3063 or C.I. Bilingual and non-linguistic instruction in curriculum areas in English as a second language.

Teaching in the Middle School: Methods of middle school teaching; team planning and teaching; development and learning patterns of the emerging adolescent; use of alternative teaching strategies.

Techniques for the Developing Professional in Education: PR: C.I. Analysis, study, development, and use of techniques for enhanced instruction in the educational setting.

Teaching Individuals, Small and Large Groups: PR: C.I. Study of teaching skills for effectively instructing individuals in various educational groups, with consideration of developmental and behavioral characteristics of students.

Clinical Practice: PR: Admission to STEP II, III or IV, Clinical Internship in an appropriate educational setting under the direction of a university supervisor or peer teacher.

Educational Psychology: PR: PSY 2013. Application of psychological principles and research methods to classroom behavior and learning.

Supervision of Professional Laboratory Experiences: PR: C.I. Study of the undergraduate professional laboratory experiences program, with emphasis on the role and responsibilities of the Teacher Education Associate or Supervising Teacher.

Early Childhood Screening and Curriculum Development: A study of screening requirements and procedures; kindergarten through grade three; preventive, development, and enrichment materials and strategies; perception and readiness; organization; teacher-aides.

Programs and Trends in Early Childhood Education: PR: Regular Certificate or C.I. Philosophy, content, facilities, instructional materials, and activities appropriate for children ages 3 to 8 years; current research; issues and trends. Concurrent laboratory experiences.

Organization of Instruction in Early Childhood Education: PR: Regular Certificate or C.I. Organization in instruction relating to language arts, social sciences, sciences, mathematics, health and physical education, problems relating to reading readiness and cognition (K-3). Concurrent laboratory experiences.

Creative Activities in Early Childhood: PR: Regular Certificate or C.I. Organization of instruction and methods for creative activities involving music, art, literature and educational toys, integration of activities, and basic skills curriculum (K-3). Concurrent laboratory experience.

Introduction to the Emotionally Disturbed: PR: Senior standing. Development and practice of appropriate cognitive, affective, and motor strategies for selected categories, levels, and degrees of severity of exceptional population.

Curriculum and Program Adaptations, E.H.: PR: Senior standing. Development of highly specialized techniques and materials to be used with exceptional students.


Analog Filter Design: PR: EEL 3307C, EEL 3122. Analog filter design, both passive and active, from low pass prototypes using frequency transformations and based on low sensitivity.
Semiconductor Devices I: PR: EGN 3373. Electronic devices including p-n junctions, bipolar transistors, field effect transistors and device models.

Electronic Engineering: PR: EEL 3306, EGN 3375C and MAP 3302. Electronic devices and circuits design, including small signal amplifiers and switching circuits.


Introduction to Digital Circuits and Systems: PR: PHY 3049 or C.I. Switching theory and devices. Combinational and sequential logic. Logic design using standard components such as ROM, arithmetic units, multiplexers, registers, and counters.

Electromagnetic Fields: PR: EGN 3375C and MAP 3302. Introduction to electric and magnet fields and electromagnetic waves.


Senior Electrical Design: PR: EEL 4657, and all required EEL 3xxx courses. Application of the design process in the solution of realistic and meaningful problems. Feasibility, design, and testing of individual or team projects.


Microwaves: PR: EEL 3470. Microwave devices and systems and measurement techniques.

Optical Engineering: PR: EEL 3470, EEL 3552C or C.I. Lens systems, aberrations, sources, radiometry, detectors, physical optics, interferometric devices, applications to engineering design problems.

Communication Systems: PR: STA 3032, EEL 3552C and EEL 3307C. Information transmission, modulation, and noise; design and comparison systems in the presence of noise.

Data Communications Engineering: PR: EEL 4701C or ECM 4504C. Analysis, design and operation of Data Communications Systems. Applications in remote computing networks and process monitoring.

Data Acquisition and Control: PR: EEL 3122, EEL 3307C, EEL 3342C. Fundamentals of signal acquisition and conditioning, filtering, signal conversion, microcomputer input and output interface circuits, channels, transducers, feedback.


Digital Systems Organization: PR: EEL 3342C. The study of basic machine organization, operation, and subsystem integration. System investigation and design using a register transfer and control-sequence design language.

Digital Systems Design: PR: EEL 4701C or C.I. Continuation of EEL 4701C. Microprocessor and LSI-based approaches to the design of digital systems. Current topics in the design of control communications and display systems.


EEL 5355C EN 4(3,3)
Fabrication of Solid-State Devices: PR: EEL 3306. Fabrication of microelectronic devices, processing technology, ion implantation and diffusion, device design and layout. Laboratory includes device processing technology.

EEL 5357 EN 3(3,0)
CMOS Analog IC Design: PR: EEL 3306 and EEL 4709. The objective of this course is to present the principles and techniques of the design of analog circuits that are to be implemented in CMOS technology.

EEL 5365 EN 3(3,0)
Introduction to Digital Systems: PR: EEL 3342C or equivalent. Analysis and synthesis of combinational, synchronous and asynchronous sequential logic circuits. Introduction to controller design using a digital design language.

EEL 5370C EN 4(3,1)

EEL 5434 EN 3(3,0)
Microwave Solid-State Devices: PR: EEL 4436 or EEL 5555. Device and circuit principles of p-n junctions, BJTs, FETs, gunn, IMPATT, TRAPATT and BARITT diodes.

EEL 5441 EN 3(3,0)
Introduction to Wave Optics: PR: EEL 4440 or PHY 4424 or C.I. Electromagnetic foundation of light waves as applied to reflection, refraction, diffraction, interference, polarization, coherence, and guided waves.

EEL 5446 EN 3(3,0)
Optical Systems Design: PR: C.I. Design principles of lens and mirror optical systems evaluation of designs using computer techniques.

EEL 5450C EN 3(2,1)
Thin Film Optics: PR: PHY 4424 or EEL 4440 and EEL 5441 or EEL 5451. Principles of thin film optics and its applications in optical, electro-optical, and laser systems.

EEL 5451L EN 3(1,4)
Electro-Optics Laboratory: PR: EEL 3470 or C.I. Study of laboratory techniques for optical measurements and performance of devices on electro-optic devices to determine operational characteristics.

EEL 5462C EN 3(3,1)
Antenna Analysis and Design: PR: EEL 3470 or equivalent. Fundamentals of antennas; dipoles, loops, arrays, apertures, and horns. Analysis and design of various antennas.

EEL 5513 EN 3(3,0)
Introduction to Digital Signal Processing: PR: EEL 3552C, EEL 3122C Sampling theory; Z-transform theory; theory; introduction to digital filters and computation of DFT.

EEL 5517 EN 3(3,0)
Surface Acoustic Wave Devices and Systems: PR: EEL 3552C. Course discusses SAW technology which includes the physical phenomenon, transducer design and synthesis, filter design and performance parameters. Actual devices and communication systems are presented.

EEL 5542 EN 3(3,0)

EEL 5555 EN 3(2,1)
RF Communications: PR: EEL 3552C. RF communication systems, 10 MHz to 1500 MHz. Scattering parameter noise, receiver design, system implementation, spread spectrum. RF network and spectrum analyzers, PC board layout.

EEL 5563 EN 3(3,0)

EEL 5630 EN 3(3,0)

EES 3104C EN 3(2,3)

EES 4111C EN 3(2,3)
EES 4202C
Chemical Process Control: PR: EGN 3704. Engineering design, measurements, and analysis of chemical systems in environmental engineering to control treatment processes such as softening, coagulation, disinfection, scrubbing, neutralization, and others.

EES 4401C
Environmental Health: PR: EGN 3704. Topics and design examples in industrial hygiene, occupational and radiological health hazards, and pollution effects, such as those due to air noise, solid wastes, etc.

EES 5415C
Potable Water Treatment: PR: EES 4202C and 4111C. Engineering application of potable water chemistry involving coagulation, softening, filtration, corrosion, disinfection quality and drinking water.

EET 3035C
Electricity and Electronics: PR: MAC 1104 and MAC 1114. Basic principles of electric circuits and electronic amplifiers. Introduction to integrated circuits.

EET 3716

EET 4158C
Linear Integrated Circuits: PR: EET 3716. Study of linear integrated circuits and design of electronic systems.

EET 4329C
Electronic Communications I: PR: EET 3716. The study of active RF circuits and modulation/demodulation systems. Introduction to digital and data communications.

EET 4339C
Antennas and Propagation: PR: EET 3716 and CGS 3422 or equivalent. Basic theory and technology used in high frequency transmission lines and wave-guides, propagation and radiation, antennas.

EET 4349C
Electronics Communications II: PR: EET 3716. Pulse and digital communication concepts, radar principles, digital radio and space communications, fiber optics communications. Technology of radiation and propagation. Associated lab experiments.

EET 4399C
Satellite Communication Systems: PR: EET 4329C. Analysis of communications satellites and how they affect systems design; technology, tradeoffs, design strategies.

EET 4508

EET 4548

EET 4732
Feedback Control: PR: EET 3716. LaPlace transform analysis of electrical networks and feedback control systems. Analysis and design techniques, control system components, and applications to practical control systems.

EEX 3010
Orientation to Special Education: Definition, characteristics, theories, current trends, and controversies in the various categories of exceptional education.

EEX 3102
Language Development and Common Disorders: PR: Junior standing. Interdisciplinary approach to language development, identification and remediation of common disorders.

EEX 3221
Assessment of Exceptional Learners: Diagnosis of learning problems of exceptional students; assessing performance and determining appropriate placement and programming.

EEX 3241
Methods for Academic Skills for Exceptional Students: Teaching strategies, plus types of teacher-made materials that apply to all categories, ages, and levels of the exceptional population. Must be taken with or before Junior block.

EEX 3263
Arts and Sciences for Exceptional Students: PR: Junior standing. Adapting curriculum, materials, and teaching strategies in the area of language arts, science, social studies, music, and art for the exceptional student.

EEX 4243
Techniques for the Exceptional Adolescent-Adult: A study of strategies, skills and alternative procedures when teaching adolescents and adults.

EEX 4601
Behavioral Management: Study of management techniques based on behavioral management (applied behavioral analysis) principles for modifying the effective behavior of exceptional students.
**EEX 5051**  
Exceptional Children in the Schools: PR: Senior standing or C.I. Characteristics, definitions, educational problems, and appropriate educational programs for the exceptional children in schools.

**EGC 5005**  
Introduction to Guidance and Human Services: PR: Completion of Phase II of Educ. Prof. Prep. or Certificate or C.I. A basic course presenting an overview of the philosophy, organization, administration and operation of guidance and human services.

**EGC 5036**  
Guiding Human Relationships: PR: Senior standing or basic teacher certificate. Human relationship skills which will enhance intra- and interpersonal relation skills in classrooms.

**EGM 5584**  
Biomechanics and Biomaterials: PR: EGN 3365C and EGN 3331. Properties of natural biological materials and their relation to microstructure, biocompatibility, artificial biomaterials and their applications, with analysis of biomechanical forces of the body.

**EGN 1006**  
Introduction to Engineering: Role of the engineer as a creative design professional. Emphasis on understanding the creative process and the factors that influence it. Engineering orientation and case studies.

**EGN 2210**  

**EGN 3310**  
Engineering Analysis-Statics: PR: PHY 3048; CR: MAC 3312. Fundamental concepts of mechanics, including resultants of force systems, free-body diagrams, equilibrium of rigid bodies, and analyses of structures.

**EGN 3321**  
Engineering Analysis-Dynamics: PR: EGN 3310; CR: MAC 3313. Kinematics and kinetics of particles and rigid bodies; mass and acceleration, work and energy impulse and momentum.

**EGN 3331**  

**EGN 3343**  

**EGN 3353**  

**EGN 3358**  

**EGN 3365C**  

**EGN 3373**  
Principles of Electrical Engineering: PR: PHY 3049; CR: MAP 3302. Fundamental laws of electrical circuits and circuit analysis; fundamentals of electronics and power systems.

**EGN 3375C**  

**EGN 3420**  
Engineering Analysis: PR: High-level language or equivalent (FORTRAN preferred); MAC 3312. Engineering analysis and computation using FORTRAN; engineering applications of numerical methods including curve fitting, matrix operations, root finding, integration and plotting.

**EGN 3613**  

**EGN 3704**  
Engineering and the Environment: PR: CHS 1440 and MAC 3312. Process engineering for air, energy, water, and land environment and the role of engineering in control of these environments.

**EGN 4032**  
Professionalism, Practice and Ethics: PR: Junior or Senior standing. Study of the professional engineer's role, practice, and responsibility to act in the interests of public health, safety, and welfare.
Technology and Social Change: PR: History/Humanities Sequence or C.I. Review of existing theories of social change, analysis of the role of technology as related to social change, and study of contemporary events in technology and their possible impact on society.

Engineering Administration: PR: EGN 3613 and Senior standing. Engineering organization and administration; delegation of authority and responsibility; effective use of resources; project management; R and D planning; ethics in professional practice.


Systems Analysis and Control: PR: EGN 3343, 3353, 3373; MAP 3302. Analysis and design of process control systems, including first and second order systems and classical linear control theory.

Science in History: Examination of the reciprocal relations of science and society from ancient to recent times.

Engineering and Technology in History: PR: History/Humanities sequence or C.I. Important developments in engineering and technology and their effect on society and our socio-economic processes.

Engineering and Technology in North America: PR: History/Humanities sequence or C.I. Episodes and periods of significant technological change in North America, with emphasis on 19th and early 20th-century developments.

Topics in Urban Development: Production, distribution, and consumption of various commodities. Engineering relationships to distribution, internal structure, function of urban developments, interrelationships of engineering, social, economic, and cultural phenomena.

Energy and Society: Investigation of available energy forms; energy resources versus requirements in an increasingly complex technological society; possible solutions and future predictions.

Environment and Society: PR: C.I. Environmental factors of importance to people's interaction with the environment; engineering and non-engineering measures to insure improvement and maintenance of environmental quality. Not for engineering students.

Telecommunications: Telecommunications and its role in contemporary local, national, and international society.

Computers, Cybernetics and Society: The effects of computers and the cybernetic revolution of the individual and society. Effects of positive and negative feedback on biological, technological and social systems. Computers and their interactions with the human system.

Systems Modeling: PR: CGS 1060 or equivalent. Representation of man/machine systems through analytic and computer-based models. Case studies in the analysis and improvement of systems in industry, education, and government.

Man and Machine: The influence and interrelationship of invention and technical progress on the evolution of social forms and institutions.

Engineering and Public Works: PR: C.I. The purposes, function, and role of engineering within public works.

Topics in Technological Development: PR: C.I. Case studies of selected topics in the engineering and technological development of western civilization. The weight-driven clock, steam engine, electric power, radar, electronics, etc.


Industrial Engineering Senior Project Design: PR: ESI 4234, EIN 4116C, ESI 4523C, APA 3471, EIN 4333C. Capstone design course, application of IEMS techniques to real-world design applications.

Safety Engineering and Administration: Analysis of accidents in the industrial operating environment. Application of fault trees, OSHA requirements. Consideration of accident costs and organizational aspects of accident prevention.

Human Engineering: PR: EIN 3315C; Senior standing. Man/machine systems; design and conduct of human engineering studies.

Industrial Engineering Applications in The Service Industries. PR: EIN 3315, ESI 4312, ESI 4254. Application of industrial engineering principles to improve the quality and productivity of service industries such as restaurants, banks, hotels, health care, etc.


Industrial Facilities Planning and Design: PR: EIN 4391C, EIN 4333C. Comprehensive design of industrial production systems, including interrelationships of plant location, process design, and materials handling. Laboratory assignments.

Manufacturing Engineering: PR: EIN 3314C, EGN 3363. Introduction to manufacturing engineering, with emphasis on current and emerging technologies in metalworking and electronics.

Computer-Aided-Manufacturing: PR: EIN 4391C. Computer-Aided-Manufacturing (CAM) including computer numerical control (CNC), robotics, parts classification (GT) and manufacturing resource planning (MRP).

Industrial Engineering Senior Design Project: PR: Senior standing. Capstone design course; application of IEMS techniques to real-world design applications.

Management Information Systems I: PR: C.I. The design and implementation of computer-based Management Information Systems. Consideration is given to the organizational, managerial, and economic aspects of MIS.

Ergonomics: PR: C.I. Applications of anthropometry, functional anatomy, mechanics, and physiology of musculoskeletal system concepts in the engineering design of industrial tools, equipments, and workstations.

Training Simulator Engineering: Introduction to significant topics relative to the development and use of simulators for knowledge transfer in the technical environment.

Training Systems Engineering: How human performance deficiencies should be addressed from a systems engineering point of view. Manpower, personnel, and training considerations will be examined.

Engineering Logistics: Study of the logistics life cycle involving planning, analysis and design, testing, production, distribution, and support.

Forecasting: PR: STA 5156, ESI 5170 Industrial applications of forecasting methods with emphasis on microcomputer-based packages.


Tool Engineering and Manufacturing Analysis: PR: EIN 4391 or C.I. Tool materials and design, tolerance technology, theory of metal cutting, and machineability.

Scheduling and Sequencing: Basic problems, models, and techniques of scheduling. Emphasis on general job shop scheduling problems. Analytical, graphical, and heuristic methods are examined.

Expert Systems in Industrial Engineering: Overview of basic concepts, architecture and construction of expert systems, in IE. Intelligent simulation training systems, case studies and problems. Laboratory exercises.

ED 4011

ELD 4242: Program Planning for Specific Learning Disabilities: PR: Senior standing. Development of highly specialized techniques and materials to be used with exceptional students.

ED 4242

EME 3000: Engineering Polymeric, Ceramic, and Composite Materials: PR: EGN 3363 or C.I. Structure, properties, processing of engineering polymeric, ceramic, and composite materials.

EME 3000


EME 3012L


EME 4413

EME 5108: Surface Science: PR: PHY 3049 and C.I. Methods of chemical and physical analysis of surfaces, with emphasis on ultra-high vacuum spectrosopies utilizing electron, ion and photon probes.

EME 5108


EME 5126

EME 5140: Introduction to Ceramic Materials: PR: EGN 3363. Uses, structure, physical and chemical properties, and processing of ceramic materials. Discussions will include recent developments for high technology applications.

EME 5140

EME 5163: Polymer Science & Engineering: PR: EGN 3363. Molecular structure, physical and chemical properties, preparation and processing of macromolecular materials. Discussions will include recent developments for high technology applications.

EME 5163


EME 5304


EME 5326

EME 5526: Mechanical Metallurgy: PR: EML 3234. Study of the microscopic mechanical behavior of metals and alloys, with emphasis on fracture, fatigue, and creep.

EME 5526

EME 4006: Utilizing Media and Library Resources: PR: Junior standing, completion of Basic General Education requirements. Planning, producing, and utilizing media for effective presentation. Use of the library, resources, and services. Research methods and bibliographic skills.

EME 4006

EME 5051: Technologies of Instruction & Information Management: Theories and practices in utilizing instructional media and information technologies. Emphasis on new and emerging technologies and their effects on the school and media program.

EME 5051

EME 5054: Instructional Technology: A Survey of Applications: Applications of instructional technology in settings other than public schools. Survey of facilities, programs, and services in business, industry, religion, government, higher education, and medical settings.

EME 5054

EME 5056: Communication for Instructional Systems—Process: Principles of written and oral communications for instructional technologists; development of assertiveness and interpersonal skills; conducting training programs for employees; creating hard copy materials.

EME 5056

EME 5057: Communication for Instructional Systems—Application: PR: EME 5056. Applications of technology, communications theory, platform skills, and instructional design to the effective presentation of training programs and instruction.

EME 5057

EME 5208: Production Techniques for Instructional Settings: Skills in producing instructional materials. Emphasis on graphic, audio, video, and photographic skills and the application of instructional and communication theories.
EME 5225 Media for Children and Young Adults: Survey of materials for children’s and young adults’ informational and recreational needs; analysis, evaluation, and utilization of print and non-print materials.

EME 5408 Computer Applications in Instructional Technology. Techniques and skills for the use of computers for productivity and instruction by the instructional technologist.

EML 3101 Thermodynamics of Mechanical Systems: PR: EGN 3343. Applied thermodynamics, availability analysis, thermodynamics of reactive and non-reactive mixtures, thermodynamic relations of properties. Thermodynamic design analysis of complete mechanical systems.


EML 3236 Structure and Properties of Alloys: PR: EGN 3365C. Relation of properties to microstructure and applications of major ferrous and non-ferrous alloys.

EML 3262 Kinematics of Mechanisms: PR: EGN 3321. Graphical, mathematical, and computer-aided kinematics, analysis, and synthesis of basic mechanisms.


EML 4260 Dynamics of Machinery: PR: EML 3262, EML 4222. Critical speeds and response of flexible rotor systems, whirl, gyroscopic effects; balancing of rotating and reciprocating masses; cam dynamics.

EML 4304C Measurements Laboratory: PR: EGN 3373, EGN 3353, EGN 3331. Fundamental theory and practice of static and basic electrical dynamic measurements, transducer principles and data acquisition. Laboratory experiments conducted to reinforce thermal, fluid, and mechanical concepts.

EML 4312 Feedback Control Design: PR: MAP 3302, EGN 3373. Mathematical modeling of control system components; pneumatic, hydraulic, electromechanical control systems; transient and frequency response; stability and root locus; controller design.

EML 4411 Mechanical Power Systems: PR: EML 3101. Analysis and design of large power generating systems and components, with emphasis on steam plants utilizing both chemical and nuclear fuels.

EML 4501C Engineering Design I: CR: EML 4304C. Application of the design process in the team solution of a state-of-the-art problem. Aerospace, mechanical, thermo-fluid, or material problems are considered.

EML 4502C Engineering Design II: PR: EML 4501C. Continuation of the design process in the team building and testing of a prototype. A test plan and a test report are completed.

EML 4535 Computer Aided Design: PR: EML 3101, 3500, and CGS 3422 or equivalent. Introduction to computational methods in mechanical and thermal systems design.


EML 4600 HVAC Systems Engineering: Heating, ventilation, air-conditioning, and refrigeration principles and systems design. Psychrometrics, heating and cooling loads, equipment and components, and distribution systems.


Acoustics: PR: MAP 3302. Elements of vibration theory and wave motion; radiation, reflection, absorption, and transmission of acoustic waves; architectural acoustics; control and abatement of environmental noise pollution; transducers.

Intermediate Mechanics of Materials: PR: EGN 3331 and MAP 3302. Elements of plane elasticity; failure theories; curved beams; columns; bending and torsion of thin-walled structures; theory of thin plates; applications to design.

Tribology: Principles of fluid film lubrication; bearing design and application; friction and wear of materials.


Energy Conversion: PR: EML 3101 and PHY 3101. Direct methods of energy conversion; particular emphasis on fuel cells, thermoelectrics, thermionics, solar energy, photovoltaics, and magnetohydrodynamics.

Energy Analysis: PR: C.I. Examination of energy demands and potential supply, computer simulation of resource depletion, alternate energy resources, transportation systems, economic and environmental constraints.

Photovoltaics: PR: EGN 3375C, EGN 3331, or C.I. Direct conversion of solar energy into electricity; crystalline and thin-film cell technologies; stand-alone and utility-interactive applications; emphasis on system design, sizing, and analysis.

Energy Conservation: PR: EML 4142. Analysis of energy use in economic sectors and design of conservation methodologies to reduce energy use. Heating and cooling loads, passive building designs will be presented.

Engineering Design with Composite Materials: PR: EAS 4200, or EML 3500 or C.I. Mechanics of structural components of composite materials under static, thermal, vibratory loads. Instability. Lamina and laminate theory, energy methods, failure theories, and structural joining methods.

Environmental Thermodynamics: PR: EML 3101 and EML 4142. Thermodynamics of the environment, emphasizing analysis and design of thermal systems. Building heating and cooling load calculations and energy conservation technologies analyzed.


Introduction to Mental Retardation: PR: Senior standing. Development and practice of appropriate cognitive, affective, and motor strategies for selected categories, levels, and degrees of severity of exceptional population.

Curriculum Method and Materials for Retarded Persons: PR: Senior standing. Development of highly specialized techniques and materials to be used with exceptional students.

Composition I: Expository writing with emphasis on effective communication. Writing topics to be based on selected readings.

Honors Freshman Composition I: PR: Score of 60+ on TSWE of SAT or C.I. Same as ENC 1101, with honors-level content.

Composition II: PR: ENC 1101. Frequent writing based on the analysis of short stories, dramas, poems, and a novel.
ENC 1102H
Honors Freshman Composition II. PR: ENC 1101H or C.I. Same as ENC 1102, with honors-level content.

Note on Freshman English Program:
ENC 1101 and 1102 must be taken before enrolling in any English course numbered above 1102.

ENC 2290
Careers in Writing: An examination of career opportunities in technical writing, emphasizing industrial, commercial, and governmental opportunities.

ENC 3210

ENC 3211
Introduction to Technical Writing: Provides definition, history, rhetorical bases of technical writing and its relationship to general English studies.

ENC 3241
Technical Report Writing: PR: ENC 1102. Instruction and practice in scientific writing, including preparation of scientific reports in the student’s particular field.

ENC 3283
Science and the Lay Reader: PR: ENC 3310, ENC 3311 or ENC 3341 or C.I. Analysis of lay scientific magazine articles and practice in scientific writing for the lay audience.

ENC 3310
Magazine Writing I: PR: ENC 1102. Intensive practice in description narration, exposition and argumentation; control of tone, mood, viewpoint, and level of diction. Applicable to article, essay, and short story writing.

ENC 3311
Advanced Expository Writing: PR: ENC 1102. Practice of expository writing directed to general reader.

ENC 3341
Magazine Writing II: PR: ENC 3310 or C.I. Structure and organization of articles, essays, profiles, and reviews, market analysis; data gathering. May be repeated for credit.

ENC 4215

ENC 4218
Graphics Capabilities for the Technical Writer: PR: ENC 4293; to be taken concurrently with ENC 4215. Study and preparation of visuals and graphics in technical writing and documentation: use of computer graphics; slides; transparencies; charts; graphs; drawings.

ENC 4245
Writing from Engineering Documents: PR: C.I. Introduction to reading and interpretation of basic engineering charts: specs, vocabulary, design, and the writing techniques necessary for clear translation.

ENC 4254
Technical Writing and the Uses of Imagination: PR: ENC 3310 or ENC 3311 or ENC 3341. An analysis of and practice in imaginative approaches to scientific or technical ideas.

ENC 4280

ENC 4293
Technical Documentation I: PR: ENC 3210 or 3341. Practice in translating highly technical information into organized documentation: hardware, software, military specifications. Theory of designing and organizing technical manuals. Preparation of proposals. Interview skills.

ENC 4294
Technical Documentation II: PR: ENC 4293. Practical application of editing theory to large ongoing projects from the student’s particular field. Should be taken concurrently with ENC 4215.

ENC 4295
Technical Documentation III: PR: ENC 4294. Designing, writing, and illustrating manuals, e.g., repairs, maintenance or users. Project supervised by a member of a student’s major department or technical editor of a corporation.

ENG 3010
Practical Criticism: PR: ENC 1102. Student evaluation of selected fiction, poetry, and drama through practical exercises in literary criticism.

ENG 3210
Literary Magazines. PR: ENC 1102. Examination of fiction and poetry trends in current literary magazines, identifying editorial policies in publication of contemporary literature.

ENG 3820
Careers in English:

ENG 5018
Literary Criticism: PR: Graduate standing or C.I. Historical survey of major critics from classical antiquity to the modern era.
Rhetoric and Literature: PR: Graduate standing or C.I. Investigates the development of written strategies of persuasion. Traces their relation to practical and imaginative literature. Applications to classroom teaching of literature and composition.

English Literature I: PR: ENC 1102. Beowulf to 1798.

English Literature II: PR: ENC 1102. From 1798 to 1914.

Survey of British Literature Since 1914. PR: ENC 1102

Shakespeare Texts and Film: PR: ENC 1102. An introduction to the art of William Shakespeare through comparative analysis of selected plays and their representation in film.


English Renaissance Poetry and Prose: The course will examine selected poetry and prose of Wyatt, Surrey, Sidney, Spenser, Raleigh, Daniel, Shakespeare, Chapman, Lyly & others.


The Victorian Age: Study of poets and essayists from 1837 to 1900, including Tennyson, the Brownings, Arnold Hopkins, Carlyle, Mill; emphasizing Dickens, George Eliot, the Brontes, and Hardy.

Chaucer: PR: ENC 1102. The Canterbury Tales, Troilus and Criseyde, and other works.

Shakespeare Studies: PR: ENC 1102. Reading, analysis, and discussion of Shakespeare's plays. May be repeated for credit.


18th Century Studies: PR: ENC 1102. Reading, analysis, and discussion of literature in English: 1660-1880. May be repeated for credit.


Restoration and 18th Century English Drama. PR: Senior standing or C.I.

English Renaissance Poetry and Prose: PR: Senior standing or C.I. The course will examine selected poetry and prose of Wyatt, Surrey, Sidney, Spenser, Marlowe, Raleigh, Daniel, Shakespeare, Chapman, Lyly, and others.

The Age of Dryden and Pope: PR: Senior standing or C.I. Prose, poetry, drama, and literary traditions of British neoclassicism.

Studies in Shakespeare: PR: Senior standing or C.I. A selection of representative plays, with emphasis on Shakespeare's development as an artist: aesthetics of dramatic literature.


Eighteenth Century Studies: Reading, analysis, and discussion of literature in English: 1660-1880.

Nuclear Engineering: PR: PHY 3101. Introduction to the principles of nuclear engineering, nuclear chain reactions, reactor systems and control, health physics, radiation shielding, and applications of nuclear energy.

Air Pollution: PR: EGN 3704, EGN 3353. Sources, causes, and effects of air pollution. Engineering design, analysis, and modeling for the control of air pollution.

Solid and Hazardous Wastes: PR: EGN 3704 or C.I. Engineering design, planning, and analysis problems associated with storage, collection, processing, and disposal of solid and hazardous wastes.

Water Resources Design: PR: CWR 4101C and CWR 4201C. Project course on designs of large and small water transmission systems using local and state regulations.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV 4561</td>
<td>Environmental Engineering -- Process Design</td>
<td>PR: EGN 3704 and EGN 3353</td>
<td>Water treatment and wastewater treatment design considerations with effluent and sludge handling, treatment, and disposal.</td>
</tr>
<tr>
<td>ENV 4562</td>
<td>Environmental Engineering Systems Design</td>
<td>PR: ENV 4651. CR: CWR 4201C</td>
<td>Project course on design of water and wastewater treatment plants, solid waste, and atmospheric controls.</td>
</tr>
<tr>
<td>ENV 4651</td>
<td>Urban Systems Engineering</td>
<td>PR: C.I.</td>
<td>Theories and history of city development with administrative, planning, management, and maintenance of municipal services.</td>
</tr>
<tr>
<td>ENV 5045L</td>
<td>Research Methods in Environmental Engineering</td>
<td>PR: STA 3032, ENV 4651 or C.I.</td>
<td>Experimental design and modeling of environmental engineering systems using fundamental concepts of computer programming, probability and statistics.</td>
</tr>
<tr>
<td>ENV 5335</td>
<td>Hazardous Waste Management</td>
<td>PR: EGN 3704 or C.I.</td>
<td>Engineering planning and analysis associated with the handling, storage, treatment, transportation, and disposal of hazardous wastes.</td>
</tr>
<tr>
<td>ENV 5505</td>
<td>Sludge Management Operations in Environmental Engineering</td>
<td>PR: ENV 4561.</td>
<td>Theory and design of sludge management operations and processes in environmental engineering, including stabilization dewatering and ultimate disposal.</td>
</tr>
<tr>
<td>ENY 4004C</td>
<td>General Entomology</td>
<td>PR: ZOO 2010C</td>
<td>Introduction to insects; their identification, biology, and ecology.</td>
</tr>
<tr>
<td>EPH 5335</td>
<td>Physical and Sociological Implications of Handicapping Conditions</td>
<td></td>
<td>Overview of physical and sociological factors which may contribute to delayed learning or physical impairments in the exceptional populations. Physical interventions and first-aid practices are examined.</td>
</tr>
<tr>
<td>ESE 3940</td>
<td>Junior Student Teaching -- Secondary Level</td>
<td>PR: EDG 4321.</td>
<td>Student teaching in a secondary school under the supervision of a certified classroom teacher.</td>
</tr>
<tr>
<td>ESE 4943</td>
<td>Senior Student Teaching -- Secondary Level</td>
<td>PR: ESE 3940 or EDE 3942.</td>
<td>Student teaching in a secondary school under the direction of a certified classroom teacher. Scheduled concurrent seminars.</td>
</tr>
<tr>
<td>ESE 5214</td>
<td>Secondary School Curriculum Improvement</td>
<td>PR: Regular Certificate or C.I.</td>
<td>Secondary School self-studies for curriculum projects, accreditation reports, or staff development.</td>
</tr>
<tr>
<td>ESI 4234</td>
<td>Quality Engineering</td>
<td>PR: STA 3032.</td>
<td>Basic concepts and techniques of quality control; applications of statistics in industrial research; design of quality assurance systems; reliability engineering.</td>
</tr>
<tr>
<td>ESI 4312</td>
<td>Operations Research</td>
<td>PR: STA 3032, EIN 4118C.</td>
<td>Introduction to linear, non-linear, and dynamic programming. Decision analysis, random processes, and queuing. Course covers theory through application and implementation of results.</td>
</tr>
<tr>
<td>ESI 4314</td>
<td>Quantitative Techniques in Industrial Engineering</td>
<td>PR: EGN 4634 and STA 3032.</td>
<td>Extension of EGN 4634 and STA 3032, with primary emphasis on O.R. and statistical applications to industrial engineering problems.</td>
</tr>
<tr>
<td>ESI 4523C</td>
<td>Systems Simulation</td>
<td>PR: STA 3032, EIN 4118C.</td>
<td>Methods and procedures for simulating large-scale systems with digital computers. FORTRAN and simulation languages are used.</td>
</tr>
<tr>
<td>ESI 5170</td>
<td>Microcomputer Practicum</td>
<td>PR: Graduate standing or C.I.</td>
<td>Survey of personal computer programming and use in decision support applications in engineering.</td>
</tr>
<tr>
<td>ESI 5236</td>
<td>Reliability Engineering</td>
<td>PR: ESI 4234, or equivalent or C.I.</td>
<td>Reliability theory and modeling approaches. Topics include: failure data analysis, maintainability, reliability standards (DOD), software reliability, reliability in design, and electronic systems reliability.</td>
</tr>
<tr>
<td>ESI 5316</td>
<td>Operations Research</td>
<td>PR: EGN 4634.</td>
<td>Methods of operations research, including formulation for models and derivation of solutions; linear programming, network models queueing theory, simulation, and nonlinear optimization techniques.</td>
</tr>
<tr>
<td>ESI 5531</td>
<td>Discrete Systems Simulation</td>
<td>PR: STA 3032, CGS 3422.</td>
<td>Methods for performing discrete systems simulation, including network modeling will be treated.</td>
</tr>
</tbody>
</table>
EN 3(0,4)  Occupational Safety: Accident prevention and the operation of an industrial safety program. Basic requirements of the Occupational Safety and Health Act standards.
Covers traditions of Roman Republic, Carthaginian Wars, democratic institution east of the Rhine. Minoans and Mycenaeans to the Age of Alexander. Emphasis on achievements of Classical Age.

EUH 3411
Ancient Rome: PR: EUH

Ancient Greece: PR: EUH

Second World War and Rebirth of Europe: PR: EUH

The influence of Renaissance humanism on arts, letters, and politics; Luther and Protestantism; the Catholic Counter-Reformation and the Thirty Years' War.

EUH 3235

Romanticism and Realism: PR: EUH 2000 and 2001 or C.I. Napoleon and nationalism; new ideas; conservation; liberalism, romanticism, republicanism and socialism; urbanization, technology and mass culture, religious decline; Realpolitik, racism, imperialism, and militarism.

EUH 3242


EUH 3261

Second World War and Rebirth of Europe: PR: EUH 2000 and 2001 or C.I. Origins of World War II; Hitler's "New Order," and resistance movements; Cold War; de-Stalinization of Russia; Sovietization of East Central Europe; Western reconstruction, and prosperity.

EUH 3401


EUH 3411


EUH 3651

War and Society: Evolution of weapons, tactics, strategy; role, social status, recruitment of soldiers; influence of military on governments; and international efforts to preserve peace.

EUH 4264

Fascism and the Totalitarian Dictatorships: PR: EUH 2000 and 2001 or C.I. Totalitarian ideologies, institutions, and practices in Lenin's and Stalin's Russia. Mussolini's Italy, and Hitler's Third Reich; fascist movements in the non-totalitarian states.

EUH 4456

France, 1914-Present: PR: EUH 2000 and 2001 or C.I. World War and aftermath; Locarno spirit; rise of Fascism and French response, World War II; Fourth Republic and Reconstruction; deGaulle and the Fifth Republic.

EUH 4461

Rise of Modern Germany: PR: EUH 2000 and 2001 or C.I. Central Europe from the Reformation to 1890; Thirty Years' War; Austro-Prussian rivalry; German Enlightenment, Bismarck, and Second Reich.

EUH 4465

Hitler's Third Reich: PR: EUH 2000 and 2001 or C.I. German nationalism and militarism; World War I and the Versailles Treaty; the Weimar Republic and the rise of the Nazis; Second World War, division and recovery.
EUH 4500  English History to 1485: PR: EUH 2000 and 2001 or C.I.  AS 3(3,0)
EUH 4501  English History: 1485-1815: PR: EUH 2000 and 2001 or C.I.  AS 3(3,0)
EUH 4502  British History: 1815-Present: PR: EUH 2000 and 2001 or C.I.  AS 3(3,0)
EUH 4530  British Empire and Commonwealth: PR: EUH 2000 and 2001 or C.I.  AS 3(3,0)
EUH 4571  History of Russia to 1801: PR: EUH 2000 and 2001 or C.I.  AS 3(3,0)
EUH 4574  History of Russia: 1801-1917: PR: EUH 2000 and 2001 or C.I.  AS 3(3,0)
EUH 4576  History of the Soviet Union: 1917-Present: PR: EUH 2000 and 2001 or C.I.  AS 3(3,0)
EUH 4620  European Great Powers: 1815-1914: PR: EUH 2000 and 2001 or C.I.  AS 3(3,0)
EUH 4621  War and International Politics in Europe. 1914 to Present: PR: EUH 2000 and 2001 or C.I.  AS 3(3,0)
EUH 5237  Colloquium Europe from 1815-1848: PR: Senior standing or C.I.  AS 3(3,0)
EUH 5238  Colloquium Europe from 1848-1914: PR: Senior standing or C.I.  AS 3(3,0)
EUH 5247  Colloquium in Europe, 1919-1939: PR: Senior standing or C.I.  AS 3(3,0)
EUH 5265  Colloquium in Europe since WW II: PR: Senior standing or C.I.  AS 3(3,0)
EUH 5371  Colloquium in Spanish History: PR: Senior standing and C.I.  AS 3(3,0)
EUH 5517  Colloquium in Tudor-Stuart England: PR: Senior standing or C.I.  AS 3(3,0)
EUH 5527  Colloquium in 18th Century England: PR: Senior standing or C.I.  AS 3(3,0)
EUH 5579  Colloquium in Soviet Russia: PR: Senior standing or C.I.  AS 3(3,0)
EUH 5595  Colloquium in Czarist Russia: PR: Senior standing or graduate status.  AS 3(3,0)
EUH 5608  Colloquium European Intellectual History: PR: Senior standing or C.I.  AS 3(3,0)
EVS 4795  Air Pollution Control: Fundamental techniques applicable to analyzing composition and sources of pollutants, measuring concentrations, and controlling emissions.  EN 3(2,2)
EVT 3062  Professional Role of the Vocational Teacher: PR: EVT 3371 or C.I.  ED 3(3,0)
EVT 3311  Preparation for Clinical Teaching in Vocational Education: PR: EVT 3371 or C.I. Teacher competencies in planning for clinical instruction preparing self, students, and agency for clinical instructional activities.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVT 3365 ED</td>
<td>Methods of Training in Vocational Subjects</td>
<td>PR: EVT 3371 or C.I. Study, practice, and achievement of basic teaching techniques specifically applicable to vocational education.</td>
</tr>
<tr>
<td>EVT 3367</td>
<td>Evaluation of Vocational Instruction</td>
<td>PR: EVT 3371 or C.I. Study, practice, and achievement of competency in assessing student cognitive, affective, and psychomotor performance in vocational education.</td>
</tr>
<tr>
<td>EVT 3371</td>
<td>Essential Teaching Skills In Vocational Education</td>
<td>Study, practice, and achievement in selected essential teaching skills for beginning vocational instructors.</td>
</tr>
<tr>
<td>EVT 3562 ED</td>
<td>Special Needs of Vocational Students</td>
<td>PR: EVT 3371 or C.I. Achievement of teacher competency in meeting the special educational needs of the handicapped, culturally different, slower learner, and those with reading deficiencies.</td>
</tr>
<tr>
<td>EVT 3815</td>
<td>Management of the Vocational Classroom and Laboratory</td>
<td>PR: EVT 3371 or C.I. Organization and management of school facilities for instructional purposes and skill in providing for student health and safety.</td>
</tr>
<tr>
<td>EVT 4368</td>
<td>Advanced Teaching Techniques for Vocational Education</td>
<td>PR: EVT 3365 or C.I. Study, practice, and achievement of higher level teaching techniques, especially those involving interaction and higher cognitive levels.</td>
</tr>
<tr>
<td>EVT 5260</td>
<td>Cooperative Programs in Vocational Education</td>
<td>PR: Regular Certificate or C.I. Study of cooperative vocational programs and achievement of competencies needed to establish, manage, and coordinate co-op program activities in all vocational areas.</td>
</tr>
<tr>
<td>EVT 5315</td>
<td>Applied Clinical Teaching Techniques in Vocational Education</td>
<td>PR: Regular Certificate or C.I. Study and practice of clinical teaching methods, development of student performance assessment instruments, planning clinical learning experiences and record keeping.</td>
</tr>
<tr>
<td>EVT 5316</td>
<td>Clinical Coordination for the Health Occupations Teacher</td>
<td>PR: Regular Certificate or C.I. Development of clinical guidelines, resources, student schedules, and risk-management programs. Includes negotiating clinical contractual agreements and planning field supervision.</td>
</tr>
<tr>
<td>EVT 5561</td>
<td>Student Guidance in the Vocational Program</td>
<td>PR: Regular Certificate or C.I. Achievement of skills used by teachers as they gather student data, confer with students, and help students plan for employment or further education.</td>
</tr>
<tr>
<td>EVT 5564</td>
<td>Student Vocational Organizations</td>
<td>PR: Regular Certificate or C.I. Competencies needed by vocational teachers as they establish and supervise student vocational organizations in secondary and post-secondary schools.</td>
</tr>
<tr>
<td>EVT 5685</td>
<td>Competency-Based Vocational Education</td>
<td>PR: Regular Certificate or C.I. Achievement of teacher competencies unique to the installation and management of competency-based vocational training programs in secondary and post-secondary schools and community colleges.</td>
</tr>
<tr>
<td>EVT 5617</td>
<td>Management of Vocational Programs</td>
<td>PR: Rank III Certificate or C.I. Study and achievement of selected competencies needed by vocational teachers, supervisors, and local administrators in the management of vocational education programs in the schools.</td>
</tr>
<tr>
<td>EXP 3404</td>
<td>Basic Learning Processes</td>
<td>PR: PSY 2013 and PSY 3214. Theories and research findings from basic laboratory investigation of learning phenomena. Lecture/Lab.</td>
</tr>
<tr>
<td>EXP 3513C</td>
<td>Cognitive Psychology</td>
<td>Theory and research on attention, memory, complex human learning, and problem solving.</td>
</tr>
<tr>
<td>EXP 5208</td>
<td>Sensation &amp; Perception</td>
<td>PR: C.I. A study involving the human information processing with regard to physical and psychological variables in sensory and perceptual phenomena.</td>
</tr>
</tbody>
</table>
EXP 5255
Human Performance: PR: C.I. Human performance dimensions and concepts of assessment of human capabilities; performance acquisition, information processing and decision-making; applications of principles to understanding of stress and performance effectiveness.

EXP 5256
Human Factors I: Survey of human factors literature. Introduction to topics including human capabilities and human interfaces with human-machine systems.

EXP 5445
Psychology of Learning and Motivation: PR: DEP 5057 or C.I. Examination of theories and research concerning the acquisition and retention of behavior, as well as motivational factors which influence learning and behavior.

EXP 5506

EXP 5608

FIL 3100

FIL 3200
Beginning Film Production: Introduction to production utilizing video equipment. Basic technical and aesthetic aspects of production.

FIL 3242
Film Design: PR: ART 2201, ART 2300 and ART 2301. A series of exercises in craft, technique, and production design for film animation. Several types of animation techniques are explored.

FIL 3300
Film Documentary: The uses and analysis of the non-fiction film.

FIL 3400
History of Motion Pictures: The history of motion pictures as art and industry: from 1895 to the present.

FIL 3410
History of Animated Films: Survey from early animators to the development of the “cartoon” industry. Television animation included.

FIL 3503
Film Theory: Reading and writing in film theory; major historical and social emergences in the theoretical approach to film.

FIL 4102
Screen Adaptation: PR: FIL 3100 or CRW 3410; Grammar Proficiency Examination. Study of mediated narrative other than film/video and the adaptation of those forms into the screenplay.

FIL 4103
Advanced Screen Writing: PR: FIL 3100, or CRW 3410; FIL 4102, Grammar Proficiency Examination. Accelerated program of screenwriting.

FIL 4104

FIL 4202
Film Studio Techniques: PR: FIL 3200, FIL 4201. Culmination of the production sequence. Emphasizes 16/35 millimeter production within the context of a studio environment.

FIL 4201
Advanced Film Production: PR: FIL 3200. Advanced exploration of the aesthetic and technical facets of filmmaking.

FIL 4208
Film Directing: PR: FIL 4201. Principles and practice in directing narrative and documentary motion pictures.

FIL 4220

FIL 4230
Film Graphics Animation: PR: FIL 3410, FIL 3242. Problems involving conceptual design and scenic space are explored using various media, materials, and techniques.

FIL 4231
Computer Animation: PR: FIL 3410, FIL 3242. Mechanics of the moment are analyzed as students prepare animation boards using computer technology.

FIL 4504
Motion Picture Genre/Aesthetics: PR: FIL 3503 Analysis and evaluation of films; major genres, directors, styles, or periods considered in depth.
FIL 4600  AS 3(3,0)
The Film Producer: PR: FIL 4208. The role of the producer is examined in the context of theatrical film.

FIL 4601  AS 3(3,0)
Production Management: PR: FIL 3200. Preproduction, budgeting, script breakdown, construction of production boards, scheduling, location scouting, and crew procurement.

FIL 4942  AS 3(2,3)
Animation Workshop: PR: FIL 4230, FIL 4231. An intensive study of various film animation techniques under the tutelage of professional animators.

FIN 3100  BA 3(3,0)
Personal Finance and Investments: PR: Junior standing. Fundamentals of managing and investing one's money and acquiring, safeguarding, and disposing of one's assets. Not usable for credit by Finance majors.

FIN 3303  BA 3(3,0)

FIN 3324  BA 3(3,0)
Management of Financial Institutions: Analysis of management policies of financial institutions, including asset, liability, and capital management. The economic and regulatory influence on competition is considered.

FIN 3403  BA 3(3,0)
Business Finance: PR: ACG 2011 or ACG 3023 and STA 3023 or equivalent. With the balance sheet as a reference point, this course provides an introduction and overview of the acquisition, financing, and management of business assets.

FIN 3404  BA 3(3,0)
Intermediate Corporate Finance: In-depth study of the principles of corporate finance. Investment, financing, and capital decisions are examined.

FIN 3453  BA 3(3,0)
Financial Models: PR: FIN 3403, ECO 3411. Mathematical models applied specifically to financial problems, including those models suitable for representation and solution on computers.

FIN 3504  BA 3(3,0)

FIN 4127  BA 3(3,0)
Employee Benefits and Retirement Planning: PR: FIN 3403 and RMI 3011. This course considers the process of establishing specific financial objectives at various stages of life and how those objectives can be reached.

FIN 4514  BA 3(3,0)
Portfolio Analysis and Management: Portfolio and capital market theory in the determination of rational investment policies. Risk analysis, portfolio analysis, and evaluation techniques.

FIN 4424  BA 3(3,0)
Advanced Topics in Financial Management: Advanced study in financial management. Topics include capital budgeting, financial structure, and capital decisions. Case studies used extensively.

FIN 4503  BA 3(3,0)
Speculative Financial Markets: PR: FIN 4520. Study of options, futures, forward, and other speculative markets. Investments traded in these markets are examined analytically. Pricing and hedging models are considered.

FIN 4520  BA 3(3,0)
Security Analysis and Portfolio Management: PR: FIN 3502. A detailed investigation into the techniques of fundamental and technical security analysis, as well as industry and economic analysis. Further, examines portfolio construction and evaluation.

FIN 4624  BA 3(3,0)

FIN 5405  BA 3(3,0)
Financial Concepts: PR: Acceptance into the graduate program, ACG 5005 and ECO 5005 and ECO 5415 or equivalents. Effects of financial decisions upon the firm, interrelationships of these effects and alternatives available to financial managers in making these financial decisions.

FLE 3063  ED 2(2,1)
Foreign Language as Human Behavior: PR: Or CR: LIN 3010 or C.I. Nature of language, language learning, and teaching basic skills. Weekly laboratory.

FLE 3333  ED 4(3,2)
Foreign Language Instructional Analysis: EDG 4321. Objectives for a school curriculum and of methods and materials for teaching foreign language.

FRE 1005  AS 1(1,0)
French Diction: This course is especially designed for music and voice students, with an emphasis on musical terms, French songs, and opera libretti.
FRE 1120  AS 4(4,1)
Elementary French Language and Civilization I: Designed to initiate the student to the major language skills: listening, speaking, reading, and writing.

FRE 1121  AS 4(4,1)
Elementary French Language and Civilization II: PR: FRE 1120 or equivalent. Continuation of FRE 1120.

FRE 1170  AS 8(16,10)
Elementary French Study Abroad: Elementary French language and civilization taught in the native environment.

FRE 2200  AS 4(4,1)

FRE 2201  AS 4(4,1)
Intermediate French Language and Civilization II: PR: FRE 2200 or equivalent. Continuation of FRE 2200 with emphasis on French civilization.

FRE 2240  AS 4(4,0)
Intensive French Conversation: PR: One year of French or equivalent. Practical use of the language, leading toward fluency and correctness in speaking.

FRE 2270  AS 8(16,10)

FRE 3244  AS 3(3,1)
French Conversation: PR: FRE 2201 or equivalent. Development of skills in conversation and comprehension. This course may be repeated for credit. When repeated, credit will apply to general electives only.

FRE 3420  AS 3(3,0)
French Composition: PR: FRE 2201 or equivalent. Development of skills in composition. This course may be repeated for credit. When repeated, credit will apply to general electives only.

FRE 4421  AS 3(3,0)
Advanced French Conversation: PR: FRE 3244. Advanced conversation on directed topics from various disciplines. Literature, art, psychology, philosophy, music, business, and the sciences.

FRE 4422  AS 3(3,0)
Advanced French Composition: PR: FRE 3420. Readings and written limitations of modern literary styles in the form of themes, sketches, poems, and original stories.

FRE 4500  AS 3(3,0)
French Civilization and Culture: PR: FRE 3244 or FRE 3420. A survey analyzing development of key elements of French life: its historical, artistic, intellectual, scientific, spiritual contributions to the world via readings, lectures, films, and other media. Conducted in French.

FRE 4780  AS 3(3,0)
French Phonetics and Diction: PR: FRE 3244 or equivalent. French phonology, with emphasis on phonetic groupings.

FRW 3100  AS 3(3,0)
Survey of French Literature I: PR: FRE 2201 or equivalent. Main literary currents and works from the Middle Ages through the 18th century.

FRW 3101  AS 3(3,0)
Survey of French Literature II: PR: FRE 2201 or equivalent. Main literary currents and works of the 19th and 20th centuries.

FRW 3370  AS 3(3,0)
Short Stories of 18th, 19th and 20th Centuries: PR: FRE 2201 or equivalent. Selected readings designed to increase reading speed and develop analytical abilities. Authors include: Voltaire, Maupassant, Flaubert, Camus, and others.

FRW 3740  AS 3(3,0)
The French Literature of Canada: PR: FRE 2201 or equivalent. A survey of the French literature of Canada from the late 19th century to the present, with particular emphasis on the novel and short story.

FRW 4281  AS 3(3,0)

FRW 4310  AS 3(3,0)
Seventeenth Century French Theatre: PR: FRW 3100. Corneille, Racine, and Moliere. A study of the lives and principal works of the authors.

FRW 4324  AS 3(3,0)

FRW 4440  AS 3(3,0)
FRW 4532 AS 3(3,0)
FRW 4552 AS 3(3,0)
FRW 4620 AS 3(3,0)
Stylistics: PR: FRE 3420 or equivalent. An intense study of textual criticism. An examination of the relationship between language and literature; explanations and linguistic analysis of literary texts.
FSS 2202C HPS 3(1,3)
Food Production Techniques: PR: HFT 1000. Basic principles of menu planning, food and beverage preparation and service. Laboratory work.
FSS 3120 HPS 3(3,0)
Quantity Food Purchasing: PR: HFT 1000; FSS 2202C. The purchasing procedures, specifications, and controls of food products in the hospitality industry.
FSS 3222 HPS 3(3,0)
Quantity Food Management: PR: HFT 1000; FSS 2202C. Management of food production in institutions, quality control, recipe standardization, portion and cost control, menu planning.
FSS 3232C HPS 3(1,3)
Intermediate Techniques of Food Production: PR: HFT 1000, FSS 2202C. An advanced food production course which provides the student the opportunity to develop skills in pantry, garde manager, garnishing, and convenience foods and services. Laboratory class.
FSS 3241C HPS 3(1,3)
Classical Cuisine/Volume Feeding: PR: HFT 1000, FSS 2202C, FSS 3223. Provides the student with production and managerial experience in the area of world renowned traditional dishes, lecture, demonstration, and actual preparation of menu items.
FSS 3301 HPS 3(3,0)
FSS 4226 HPS 3(3,0)
Sanitation in the Food Service Industry: PR: HFT 1000, FSS 3223. The causes and prevention of food spoilage and food-borne illnesses. Certification through NIFI and ETS are both USDA approved.
FSS 4284C HPS 3(1,3)
Catering and Banquet Organization: PR: HFT 1000, FSS 2202C. Methods and procedures for successful on and off premise catering functions. Emphasis on food and beverage preparation, menu planning, service and sales techniques. Laboratory class.
GEA 3300 EN 3(3,0)
Geography of Middle America: Basic elements of physical, cultural, and economic geographies as they relate to the development of Middle America.
GEA 4206 EN 3(3,0)
Physical Geography of North America: Analysis of the North American landscape as affected by climate, vegetation, and geomorphology.
GEA 4410 EN 3(3,0)
Geography of South America: Analysis of the integrated physical, cultural, and economic geographies of South America and interpretation of their impact on modern development of the area.
GEB 3004 BA 3(3,0)
Management: PR: Junior standing. The interdisciplinary application of the managerial functions of planning, organizing, leading, and controlling. For Non-Business Majors ONLY.
GEB 4351 BA 3(3,0)
GEO 1200 EN 3(3,0)
Physical Geography: Basic physical elements of geography, including climate, landforms, soils, natural vegetation, minerals, and their integrated patterns of world distribution.
GEO 1200L EN 1(0,2)
GEO 3370 EN 3(3,0)
Resources Geography: Analysis of basic principles and problems associated with development, use, conservation, and management of natural resources, with special emphasis on the United States.
GEO 3370H EN 3(3,0)
Resources Geography (Honors): Analysis of human management of global resources and the resulting impact on the world's environment.
GEO 3470 AS 3(3,0)
World Political Geography: Analysis of factors which affect power relations among nations, including area, location, political styles, ethnic divisions, and the politics of energy.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEO 4140</td>
<td>Remote Sensing of the Environment</td>
<td>PR: GEO 1200 or C.I.</td>
</tr>
<tr>
<td></td>
<td>Interpretation and application of remote sensor imagery to physical, economic, and urban analysis.</td>
<td>EN 3(2,2)</td>
</tr>
<tr>
<td>GEO 4141</td>
<td>Geographic Information Systems</td>
<td>PR: GEO 1200 or GEO 3370 and programming experience. Analysis of land use, development, and natural resource planning through the employment of graphic and database management techniques.</td>
</tr>
<tr>
<td>GER 1005</td>
<td>German Diction: This course is especially designed for music and voice students, with an emphasis on musical terms, German songs, and opera libretti.</td>
<td>AS 1(0,1)</td>
</tr>
<tr>
<td>GER 1120</td>
<td>Elementary German Language and Civilization I: Designed to initiate the student to the major language skills: listening, speaking, reading, and writing.</td>
<td>AS 4(4,1)</td>
</tr>
<tr>
<td>GER 1121</td>
<td>Elementary German Language and Civilization II: PR: GER 1120 or equivalent. Continuation of GER 1120.</td>
<td>AS 4(4,1)</td>
</tr>
<tr>
<td>GER 2200</td>
<td>Intermediate German Language and Civilization I: PR: GER 1121 or equivalent. Designed to continue development of language skills at the intermediate level, together with a review of grammar.</td>
<td>AS 4(4,1)</td>
</tr>
<tr>
<td>GER 2201</td>
<td>Intermediate German Language and Civilization II: PR: GER 2200 or equivalent. Continuation of GER 2200 with emphasis on German civilization.</td>
<td>AS 4(4,0)</td>
</tr>
<tr>
<td>GER 2210</td>
<td>Intensive German Conversation: PR: One year of German or equivalent. Practical use of the language, leading toward fluency and correctness in speaking.</td>
<td>AS 3(3,0)</td>
</tr>
<tr>
<td>GER 3240</td>
<td>German Conversation: PR: GER 2201 or equivalent. Development of skills in conversation and comprehension through practice.</td>
<td>AS 3(3,0)</td>
</tr>
<tr>
<td>GER 3420</td>
<td>German Composition: PR: GER 2201 or equivalent. Development of skills in composition.</td>
<td>AS 3(3,0)</td>
</tr>
<tr>
<td>GER 4500</td>
<td>German Culture and Civilization: PR: GER 2201. A historical approach to German civilization, with emphasis on German movements that took on international dimensions.</td>
<td>AS 3(3,0)</td>
</tr>
<tr>
<td>GEW 3100</td>
<td>Survey of German Literature I: PR: GER 2201 or equivalent. Main literary currents and works from the Middle Ages through the 19th Century Romanticism.</td>
<td>AS 3(3,0)</td>
</tr>
<tr>
<td>GEW 3101</td>
<td>Survey of German Literature II: PR: GER 2201 or equivalent. Main literary currents and works from 19th Century Realism to the present.</td>
<td>AS 3(3,0)</td>
</tr>
<tr>
<td>GEW 3370</td>
<td>Short Story: PR: GER 2201 or equivalent. German short prose works of the 19th and 20th centuries.</td>
<td>AS 3(3,0)</td>
</tr>
<tr>
<td>GEW 4480</td>
<td>German Post-War Literature: PR: GER 2201. This course examines post-war literature in West-Germany from 1950 to the present.</td>
<td>AS 3(3,0)</td>
</tr>
<tr>
<td>GEW 4531</td>
<td>The Age of Goethe and Schiller: PR: GER 2201. Selected texts of Goethe and Schiller are examined, with particular attention to their relationship to both German classicism and German romanticism.</td>
<td>AS 3(3,0)</td>
</tr>
<tr>
<td>GEW 4542</td>
<td>German Romanticism: PR: GER 2201. Main aspects of the German Romantic movement from Kleist and Novalis to Heine.</td>
<td>AS 3(3,0)</td>
</tr>
<tr>
<td>GEW 4554</td>
<td>German Realism and Naturalism: PR: GER 2201. The main literary works of German realism and naturalism from Gustav Freytag to Gerhart Hauptmann.</td>
<td>AS 3(3,0)</td>
</tr>
<tr>
<td>GEW 4560</td>
<td>German Symbolist and Impressionist Literature: PR: GER 2201. A study of the German symbolist and impressionist writers from Stefan George to Robert Musil.</td>
<td>AS 3(3,0)</td>
</tr>
<tr>
<td>GLY 1030</td>
<td>Geology and its Applications: Geologic principles, applications, and hazards including: gemstones, rock cycle, moving continents, mountain building, metal ores, fossil fuels, groundwater, sinkholes, beach erosion, landslides, earthquakes, &quot;tidal&quot; waves, volcanism.</td>
<td>AS 3(3,0)</td>
</tr>
<tr>
<td>GLY 4006</td>
<td>Geology of Our National Parks and Monuments: Unique geologic features preserved in our national park system and the processes that gave rise to these features.</td>
<td>AS 3(3,0)</td>
</tr>
<tr>
<td>HBR 1120</td>
<td>Elementary Modern Hebrew Language and Culture I: Designed to initiate the student to the major language skills: listening, speaking, reading and writing, as well as to constitute an introduction to Israeli culture.</td>
<td>AS 4(4,0)</td>
</tr>
</tbody>
</table>
HFT 4752 Convention Promotion and Public Relations: PR: HFT 1000. HFT 2750 (Fundamentals of Conventions and Conferences) Introduces specific concepts related to marketing conventions and meetings. Also considers destination marketing and telemarketing concepts in relation to convention management.

HFT 4753 Convention and Conference Services: PR: HFT 1000, HFT 2750. Provides an in-depth understanding of the acquisition and management of services (food and beverage, audio visual, transportation, etc.) integral to effective convention and conference operations.

HFT 4754 Exhibit and Trade Show Operations: PR: HFT 1000. HFT 2750 (Fundamentals of Conventions and Conferences). Provides an in-depth study of exhibit and trade show operations. Focuses on both supply and demand pertaining to exhibits and trade shows.

HFT 4860 Beverage Management: PR: HFT 1000, FSS 2202C, FSS 3223. The origin production, storing, marketing, and control of beverages in the hospitality industry.

HFT 4949 Cooperative Education: Provides paid, pre-professional work experience related to the students' major while they continue to attend school. Requires achievement of major-related learning objectives.


HIS 4150 History and Historians: PR: C.I. A study of European and/or American historiography. May be repeated once for credit.

HIS 4970 Senior Thesis: Original research paper available to advanced history majors, topics to be selected in consultation with a directing professor.

HLP 4460 Teaching Elementary School Health and Physical Education: PR: Admission to Phase II or C.I. Organization, practice, and conduct of health (including drug abuse) and physical education programs in the elementary school. Includes field experience.

HMW 3200 Readings in Modern Hebrew Literature: PR: 2 years of Hebrew or equivalent.

HSA 3112 U.S. Health Care Systems: PR: Major or minor in College of Health or C.I. A survey of the economic, social, and political aspects of the health care system in the United States.

HSA 3170 Health Care Finance: PR: MRE 3000. Budgeting; resources for funding current and long-term assets; cost and cost behavior; prospective payment; DRGs as reimbursement base.

HSA 4120 Community and Public Health Services: History and philosophy of public health, interphase of governmental, voluntary, and private health agencies; current community health problems, issues, and needs; social and economic factors.

HSA 4121 History and Future of Health Care: Health care institutions; purposes of health agencies, organizations and allied health professionals; new trends in health care delivery. Designed for non-majors.

HSA 4180 Organization and Management for Health Agencies: PR: STA 2014 and Major or Minor in College of Health or C.I. Organization and management of health agency organizations and management procedures.


HSA 4852 Risk Management Practicum: PR: HSA 4424. Assignment to a selected health care facility serving in an administrative capacity under the director of Certified Risk Manager.

HSA 5198 Information Systems and Computer Applications in Medicine: PR: Graduate standing or C.I. Overview of health information systems, with an emphasis on computer applications. Discussion of software and hardware requirements.

HSC 2000 Introduction to the Allied Health Professions: A survey of allied health professions with regard to duties, responsibilities, education and training, ethics, and relationships with other health professionals. Satisfactory/Unsatisfactory grade.

HSC 3110C Medical Self Assessment: Development of clinical skills and understanding of one's health to encourage active participation of individuals in their own health care.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSC 3531</td>
<td>Medical Terminology: A study of the language of medicine and allied health specialties, including work construction, definitions, and application of terms.</td>
</tr>
<tr>
<td>HSC 3640</td>
<td>Health Law: Principles of law as applied to the health field, with special reference to health practices.</td>
</tr>
<tr>
<td>HSC 3930</td>
<td>AIDS: A Human Concern: Analysis of the AIDS epidemic. Topics include: epidemiology &amp; immunology; basic facts, prevention; legal, economic, and ethical issues; psychosocial aspects; substance abuse; sexuality and decision-making.</td>
</tr>
<tr>
<td>HSC 4243</td>
<td>Analysis of Instruction in Health Professions: Development of teaching aids, audiovisuals, learning packets. Course development, questioning strategies, evaluation of didactic and clinical performance.</td>
</tr>
<tr>
<td>HSC 4244</td>
<td>Curriculum Planning in the Health Professions: Curriculum design and approval process for Health Science program. Curriculum design for professional, patient, and consumer education.</td>
</tr>
<tr>
<td>HSC 4564</td>
<td>Health Care Needs of the Elderly: Overview of the physical and emotional needs of the elderly, including the institutional health care available.</td>
</tr>
<tr>
<td>HSC 4651</td>
<td>Health Care Ethics: A study of ethical issues in health care, including life-saving measures, rights to die, transplants, surrogate parenthood, privacy and confidentiality, and decision-making.</td>
</tr>
<tr>
<td>HUM 2211</td>
<td>Western Humanities I: Examples of the philosophy, religion, literature, music, and visual arts, from Ancient Greece through the Middle Ages; ideas that shaped our world.</td>
</tr>
<tr>
<td>HUM 2211H</td>
<td>Honors Western Humanities I: Same as HUM 2211 with honors-level content.</td>
</tr>
<tr>
<td>HUM 2230</td>
<td>Western Humanities II: PR: HUM 2211 or C.I. Continuation of HUM 2211, from the Renaissance through the Modern World.</td>
</tr>
<tr>
<td>HUM 2230H</td>
<td>Honors Western Humanities II: PR: HUM 2211 or C.I. An interdisciplinary course in the history of Western culture from Classical Greece through the Middle Ages.</td>
</tr>
<tr>
<td>HUM 3025</td>
<td>Critical Evaluation of the Arts: An inter-disciplinary study of contemporary theory and practice in the criticism and interpretation of the arts.</td>
</tr>
<tr>
<td>HUM 3250</td>
<td>Contemporary Humanities: Current trends in the arts and related developments in philosophy, science, and technology, focusing on the transition from modern to postmodern culture.</td>
</tr>
<tr>
<td>HUM 3401</td>
<td>Asian Humanities: An interdisciplinary survey of the cultures of India, China, and Japan, concentrating on their traditional art, literature, religion, philosophy, and music.</td>
</tr>
<tr>
<td>HUM 3431</td>
<td>Ancient World: Greece: History and culture of Greece from the Minoan-Mycenaean to the Hellenistic age, with emphasis on contributions in art, literature, and philosophy.</td>
</tr>
<tr>
<td>HUM 3432</td>
<td>Ancient World: Rome: History and culture of Rome from the Etruscan Period to the dissolution of the empire, with emphasis on contributions in architecture, law, and literature.</td>
</tr>
<tr>
<td>HUM 4301</td>
<td>The Classical Ideal: PR: HUM 2211 and HUM 2230 or C.I. The search for order and form in the arts of various times and cultures. Concerns reason, structure, objectivity, harmony. Open to all Juniors and Seniors.</td>
</tr>
<tr>
<td>HUM 4302</td>
<td>The Romantic Ideal: PR: HUM 2211 and HUM 2230 or C.I. The Romantic quest for identity with nature and the sublime in the arts of various times. Concerns feeling, imagination, subjectivity, creativity. Open to all Juniors and Seniors.</td>
</tr>
<tr>
<td>HUM 4303</td>
<td>The Spiritual Ideal: PR: HUM 2211 and HUM 2230 or C.I. Concerns works of art reflecting spiritual insight or the spiritual quest; mystical impulses contrasted to ethos and pathos.</td>
</tr>
<tr>
<td>HUN 2002</td>
<td>Modern Concepts in Nutrition: An examination of the eating patterns of today’s American people. Topics include: nutrients in our diets, consumer demand in the food industry, fast food outlets, food trends, and hunger.</td>
</tr>
<tr>
<td>HUN 3011</td>
<td>Human Nutrition: Essentials of nutrition related to the life cycle, including the physiological, psychosocial, and cultural aspects of nutrition and the inter-relationship with disease are emphasized.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Title</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>IDH 1921</td>
<td>Honors Symposium I: Readings, lectures and discussions covering aspects of scholarship, artistic, and other creative efforts.</td>
</tr>
<tr>
<td>IDH 1922</td>
<td>Honors Symposium II: Continuation of Honors Symposium I. Emphasis on understanding scholarly and creative efforts.</td>
</tr>
<tr>
<td>INP 3004</td>
<td>Industrial Psychology: PR: PSY 2013 and STA 2014. Analysis of the psychological principles underlying human behavior and performance in an industrial setting. Topics include selection, training, performance appraisal, job design, and employee motivation.</td>
</tr>
<tr>
<td>INP 3951</td>
<td>Industrial/Organizational Field Work PR: C.I. This course is offered as an opportunity for advanced undergraduate psychology majors to become involved in the application of I/O psychology to local organizations.</td>
</tr>
<tr>
<td>INP 4324</td>
<td>Organizational Psychology: PR: INP 3004. Analysis of the psychological principles underlying individual and group behavior in an organizational setting. Topics include group dynamics, leadership and participation, intergroup behavior, and organization development.</td>
</tr>
<tr>
<td>INR 3002</td>
<td>International Relations-Theory and Practice: Analysis of the fundamental principles and factors affecting interstate relations and their application to contemporary global developments.</td>
</tr>
<tr>
<td>INR 4035</td>
<td>International Political Economy: The international politics of regional and global economic interdependence, with emphasis upon North-South relations, the New International Economic Order, OPEC, and multinational corporations.</td>
</tr>
<tr>
<td>INR 4102</td>
<td>American Foreign Policy: Development of American foreign policy, with emphasis on the role and policies of the United States in the contemporary world.</td>
</tr>
<tr>
<td>INR 4114</td>
<td>American Defense Policy: Study of the evolution of American defense policy since World War II, including consideration of the social and political costs involved and means of control.</td>
</tr>
<tr>
<td>INR 4115</td>
<td>Strategic Weapons and Arms Control: Control of strategic weapons and their impact. Technological and policy aspects, including nuclear proliferation.</td>
</tr>
<tr>
<td>INR 4225</td>
<td>Contemporary International Politics of Asia: Examinations of the foreign policies of major and secondary powers in Asia, with particular attention to China and Japan.</td>
</tr>
<tr>
<td>INR 4243</td>
<td>The Vietnam War: Background of events leading to America's involvement in Indochina, the course of the Vietnam War, and the lessons which that war imparts.</td>
</tr>
<tr>
<td>INR 4274</td>
<td>International Politics of Latin America: Study of contemporary U.S.-Latin American relations, inter-American politics and organization, and the role of Latin America in the world.</td>
</tr>
<tr>
<td>INR 4275</td>
<td>International Politics of the Middle East: The external politics of the Middle East from a regional-global perspective, with particular attention to the region's impact upon the relations of major powers.</td>
</tr>
<tr>
<td>INR 4355</td>
<td>Coercion in International Politics: Examination of the role of coercive techniques among states in a nuclear age, ranging from nuclear strategy and deterrence to wars of national liberations and coups.</td>
</tr>
<tr>
<td>INR 4401</td>
<td>International Law I: Introduction to the nature, solution, and sources of international law and such subareas as recognition of states and governments, expropriation, nationality, and aliens.</td>
</tr>
<tr>
<td>INR 4402</td>
<td>International Law II: PR: INR 4401 or C.I. Examination of various subareas of international law, including maritime law, laws of the sea and seabed, air law, outer space, neutrality, and laws of war.</td>
</tr>
<tr>
<td>INR 4404</td>
<td>Space Law: Examination of the legal regime of outer space from both international and national perspectives, and the legal problems arising from human activity in space.</td>
</tr>
<tr>
<td>INR 4504</td>
<td>International Organizations: The study of the structure and workings of international organizations of cooperation, including the UN, its affiliates, and various regional organizations.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Name</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>ISM 4090</td>
<td>Seminar in Management Information Systems: PR: ISM 4212</td>
</tr>
<tr>
<td>ISM 4113</td>
<td>Information Systems Analysis and Design: PR: ISM 4212</td>
</tr>
<tr>
<td>ISM 4130</td>
<td>Implementing Information Systems: PR: ISM 4113</td>
</tr>
<tr>
<td>ISM 4212</td>
<td>Data Base Management Systems: PR: completion of or concurrent enrollment in ISM 3011 and COP 3120</td>
</tr>
<tr>
<td>ISM 5021</td>
<td>Introduction to Management Information Systems: PR:</td>
</tr>
<tr>
<td>ISS 4155</td>
<td>Science Fiction and the Social Sciences: A multi-media</td>
</tr>
<tr>
<td>ITA 1005</td>
<td>Italian Diction: This course is especially designed for</td>
</tr>
<tr>
<td>ITA 1120</td>
<td>Elementary Italian Language and Civilization I:</td>
</tr>
<tr>
<td>ITA 1121</td>
<td>Elementary Italian Language and Civilization II: PR:</td>
</tr>
<tr>
<td>ITA 1170</td>
<td>Elementary Italian Study Abroad:</td>
</tr>
<tr>
<td>ITA 2200</td>
<td>Intermediate Italian Language and Civilization I: PR:</td>
</tr>
<tr>
<td>ITA 2201</td>
<td>Intermediate Italian Language and Civilization II: PR:</td>
</tr>
<tr>
<td>ITA 2210</td>
<td>Intensive Italian Conversation: PR: One year of Italian</td>
</tr>
<tr>
<td>ITA 2270</td>
<td>Intermediate Italian Study Abroad: PR: Elementary Italian</td>
</tr>
<tr>
<td>ITA 3240</td>
<td>Italian Conversation: PR: ITA 2201 or equivalent.</td>
</tr>
<tr>
<td>ITA 3420</td>
<td>Italian Composition: PR: ITA 2201 or equivalent.</td>
</tr>
<tr>
<td>ITA 4500</td>
<td>Italian Civilization: PR: ITA 2201. A historical</td>
</tr>
<tr>
<td>ITW 3100</td>
<td>Survey of Italian Literature I: PR: ITA 2201.</td>
</tr>
<tr>
<td>ITW 3101</td>
<td>Survey of Italian Literature II: PR: ITA 2201.</td>
</tr>
<tr>
<td>ITW 3373</td>
<td>The Modern Italian Short Story: PR: ITA 2201.</td>
</tr>
<tr>
<td>JOU 3004</td>
<td>History of American Journalism: Development of mass</td>
</tr>
</tbody>
</table>

246
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOU 3100</td>
<td>News Reporting: PR: Grammar Proficiency Examination and departmental typing exam. Development of skills in newsgathering and writing for the mass media. Students must have minimum ability to type and pass the department language proficiency exam.</td>
<td></td>
</tr>
<tr>
<td>JOU 3101</td>
<td>Advanced Reporting: PR: Grammar Proficiency Examination and departmental typing examination and JOU 3100. Advanced information-gathering and development of newswriting skills.</td>
<td></td>
</tr>
<tr>
<td>JOU 3201</td>
<td>Editing I: PR: Grammar Proficiency Examination and JOU 3100. Editing copy, writing headlines, managing newsroom operations.</td>
<td></td>
</tr>
<tr>
<td>JOU 4104</td>
<td>Public Affairs Reporting: PR: Minimum grade of &quot;C&quot; in JOU 3100, Grammar Proficiency Examination, departmental typing exam, JOU 3101. Reporting on city, county and state government.</td>
<td></td>
</tr>
<tr>
<td>JOU 4300</td>
<td>Feature Writing: PR: Grammar Proficiency Examination, departmental typing exam, PUR 3100 and minimum grade of &quot;C&quot; in JOU 3100. Writing feature articles for newspapers and magazines.</td>
<td></td>
</tr>
<tr>
<td>JOU 4302</td>
<td>Editorial and Column Writing: PR: Grammar Proficiency Examination, departmental typing exam, and a minimum grade of &quot;C&quot; in JOU 3100. Building the editorial page, backgrounding and interpreting the news.</td>
<td></td>
</tr>
<tr>
<td>JOU 4306</td>
<td>Critical Writing: PR: Grammar Proficiency Examination, departmental typing exam, and a minimum grade of &quot;C&quot; in Jou 3100. Writing reviews of movies, plays, television programs, concerts, books, and other cultural works.</td>
<td></td>
</tr>
<tr>
<td>JOU 4310</td>
<td>Freelance Writing: PR: Grammar Proficiency Examination, departmental typing exam, and evidence of satisfactory writing skills. A study of the techniques and procedures of freelance writing, including the preparation of several manuscripts.</td>
<td></td>
</tr>
<tr>
<td>JST 3401</td>
<td>The Jewish People I: Introduction survey of the history and culture of the Jewish people from the beginnings of Judaism in the biblical era through the Graeco-Roman and rabbinic periods.</td>
<td></td>
</tr>
<tr>
<td>JST 3402</td>
<td>The Jewish People II: The life and history of the Jews in the medieval and modern worlds.</td>
<td></td>
</tr>
<tr>
<td>JST 3550</td>
<td>Introduction of Modernism into Judaism: The transition from traditional Judaism to modern Judaism in the 18th century, as epitomized by Moses Mendelssohn and writers of the Jewish Enlightenment (in translation).</td>
<td></td>
</tr>
<tr>
<td>JST 3751</td>
<td>Literature of the Holocaust: A study of the traumatic experience of the Holocaust in Europe as expressed and depicted in contemporary Jewish and Hebrew Literature.</td>
<td></td>
</tr>
<tr>
<td>JST 3810</td>
<td>The Jewish National Movement and Roots of Zionism: Roots of Zionism and Jewish nationalism and their relationship to modern anti-semitism, through analysis of European Jewish history and society.</td>
<td></td>
</tr>
<tr>
<td>JST 3820</td>
<td>Modern Hebrew Culture: The Development of the State of Israel: Political and ideological struggle for the establishment of the State of Israel, with emphasis on forces which shaped contemporary Israeli society and politics.</td>
<td></td>
</tr>
<tr>
<td>LAE 3335</td>
<td>English Instructional Analysis: PR: EDG 4321. Course objectives for a school curriculum and methods and materials which have special application for teaching English.</td>
<td></td>
</tr>
<tr>
<td>LAE 3414</td>
<td>Literature for Children: Phase I or C.I. General survey of books and materials; criteria for analysis and evaluation; types of books available considered in terms of interests, needs, and abilities of children.</td>
<td></td>
</tr>
<tr>
<td>LAE 4314</td>
<td>Language Arts in the Elementary School: PR: Phase I or C.I. Content, principles, materials, and techniques involved in teaching, speaking, listening, writing, and spelling in the elementary school; organizing for instruction.</td>
<td></td>
</tr>
<tr>
<td>LAE 4542</td>
<td>Teaching Language and Composition: PR: EDG 4321. Techniques and methods in teaching of dialects, semantics, the various grammars. A survey of composition and rhetorical methods of selected authors.</td>
<td></td>
</tr>
</tbody>
</table>
LAE 5367  AS 3(3,0)  English Composition and Literature for Teachers of Advanced Placement:
LAE 5372  AS 3(2,1)  Theory and Practice in Composition: PR: Senior standing or C.I. Intensive study of theories of composition, with practical experience in the writing laboratory and in composition classes.
LAE 5465  ED 3(3,0)  Literature for Adolescents: PR: Senior standing or C.I. Selecting and evaluating books for adolescents, with emphasis on the use of literature in the development of young people.
LAH 3130  AS 3(3,0)  Latin American History I: PR: EUH 2000 and 2001 or C.I. The Colonial period.
LAH 3200  AS 3(3,0)  Latin American History II: PR: EUH 2000 and 2001 or C.I. The National period.
LAH 3400  AS 3(3,0)  History of Mexico and Central America: PR: EUH 2000 and 2001 or C.I. A survey of Mexican and Central American history from Pre-Columbian times to the present.
LAH 3470  AS 3(3,0)  History of the Caribbean: PR: EUH 2000 and 2001 or C.I. History of Cuba, Puerto Rico, Dominican Republic, and Haiti from Pre-Colombian times to the present.
LEI 3140  ED 3(3,0)  Philosophy and Trends in Recreation: Provides a philosophical background to the public and private recreation movement in the U.S. Includes an analysis of the current trends in recreation.
LEI 3310  ED 3(3,0)  Recreation Leadership: A study of the various styles of leadership as they relate to directing people and programs in public and private recreation.
LEI 3434  ED 2(1,1)  Recreation and Intramurals: Principles and techniques of general and school recreation programs.
LEI 3437  ED 3(3,0)  Administration and Supervision of Recreational Programs: Includes methods, principles, and policies of administering recreational programs under varying conditions and to varying populations. Strategies for supervising personnel are included.
LEI 3601  ED 3(3,0)  Recreational Planning for Facilities and Equipment: Planning for facilities and equipment will be analyzed, including site selection, construction, purchasing, and maintenance. Multi-cultural considerations will be examined, and the needs of special populations will be taken into account.
LEI 3700  ED 3(3,0)  Recreational Programming for Special Populations: Includes a study of recreational programming for special populations, including the extreme age groups and the handicapped. Multi-cultural implications will also be considered.
LIN 2670  AS 3(3,0)  Grammar and Composition: A systematic study of grammar and mechanics to improve editing for clarity and accuracy in writing.
LIN 3640  HPS 3(3,0)  Psychology of Oral Communication: Psychological principles involved in the communicative process, with application to individuals and groups.
Foundations of Language: This course is designed to explore contributions to language from disciplines of Biology, Neurology, Psychology, and Sociology.

Foundations of Language: Students will have practical experience in analyzing children's language samples.


Phonetics: PR: ENC 1102. Study of the sounds of language from an articulatory perspective.

Modern English Grammar: PR: ENC 1102 and Sophomore standing. Emphasis upon the analysis and comparison of traditional, structural, and transformational grammar.

Sounds and Forms of Language: This course examines the sound systems (phonology) and word structure (morphology) of natural languages as two basic areas of linguistics.


Linguistics and Literature: PR: LIN 3010. Investigation of language study as an aid to understanding literature. Topics include analysis of figurative language, language as characterization, cohesion, sentence and discourse structure.

Normal Language Development: Students will study language development and develop skill in eliciting language samples, describing language use, and analyzing language samples through demonstrations and problem solving experience.

Language and Meaning: PR: ENC 1102 and Sophomore standing. A linguistic study of the nature of language, meaning, and the ways in which man uses language in various social, cultural, institutional, and professional settings.

Linguistics: PR: Senior or graduate standing or C.I. Modern linguistic theories and studies focusing on language acquisition and development, contemporary American English, semantics, and para-linguistics.


Language and Meaning: An examination of how language conveys meaning and the implications about the nature and structure of the mind.

Introduction to Media Services: Role and scope of media center. Major concepts, standards, trends, and media specialist functions emphasized.

Media for Children and Young Adults: Survey of media center materials for children and young adults; analysis and evaluation of print and non-print materials K-12.

Production of Materials for Media Center: PR: LIS 4428. Skill in producing teacher and student-made materials. Emphasizes graphic, photographic, and audio techniques for schools. Lab TBA.

Administration and Operation of the Media Center: Administrative principles applied to developing resources and services, including planning, decision making, personnel and financial management, evaluation, acquisition, processing, maintenance, and inventory.

School Media Services: PR: C.I. Planning activities and programs to assist teachers and students in utilizing the Media Center. Includes skills development, R/L/V guidance, promotion and inservice techniques. Lab TBA.


Interaction Techniques in Media Services: PR: C.I. Interpretation skills and communication processes applied to working with administrators, teachers, parents, and students in the media program.

Reference Sources and Services: PR: C.I. Development of skills in locating information and providing reference services.
Organization of Media and Information: PR: C.I. Principles of informational science and bibliography. Methods of organizing and non-print media, with instruction in cataloging and classification using standard bibliographic tools.

Computer Applications in Instructional Technology: Emphasis on the applications of the computer for the media specialist and instructional technologist.

World Literature I: PR: ENC 1102. Poetry, prose, and drama selected from ancient Hebrew, Greek, and Oriental literature and from that of Renaissance Europe.

World Literature II: PR: ENC 1102. Readings from Molière, Voltaire, Goethe, Pushkin, Balzac, Tolstoy, Ibsen, Mann, Kafka, Camus, and others.

World Literature II—Honors: Same as LIT 2120, with honors-level content.

Literature of Modern Man: PR: ENC 1102. Reading and discussion of types and forms of modern literature.

Introduction to Literary Analysis: PR: ENC 1102. Analysis of fiction, drama, and verse in terms of major elements: plot, conflict, characterization, viewpoint, rhetorical and poetic devices, figurative language, meter, rhyme, verse forms.

Continental European Fiction Since 1900: PR: ENC 1102. A selection of significant works of fiction written in various languages during the present century, read in translation.

Canadian and Commonwealth Literature: Fiction, poetry, and drama written in English in Canada and other Commonwealth nations including Australia and Caribbean and African nations with an English-speaking tradition.

Science Fiction: PR: ENC 1102. An investigation of science fiction as a literary form, together with selected readings.


Modern Drama As Literature: A study of important plays, playwrights, themes, movements, and styles in modern American, British, and European drama.

Fantasy: PR: ENC 1102. A survey of the literature of fantasy, with emphasis on such figures as C.S. Lewis.

Ethnic Literature in America: Contributions of linguistic and ethnic groups of non-English origin to the literature of the United States.

Literature of the Bible: PR: ENC 1102 or LIT 3000 or C.I. Literary forms in the Bible — narrative, poetic, and dramatic — and their reflection in modern literature.

Survey of Technical and Scientific Literature: PR: ENC 4293 or C.I. An analysis of the historical development of technical and scientific writing from the Renaissance to the present.

Studies in Contemporary Poetry: PR: ENC 4293 or C.I. An analysis of the historical development of technical and scientific writing from the Renaissance to the present.

Studies in Contemporary Fiction: PR: Senior standing or C.I. Fiction in the last 20 years in the United States and Britain.

Media and Popular Literature: PR: Senior standing or C.I. Study of the literary content of contemporary media and of popular fiction. Application to classroom teaching.

The Romantic Revolt (19th Century Literature): PR: Senior standing or C.I. The romantic revolt in poetry and prose; English, American and Continental literature from 1798 to 1832.

The Victorian Age: PR: Senior standing or C.I. Study of poets and essayists from 1837 to 1900, including Tennyson, the Brownings, Arnold, Hopkins, Carlyle, Mill; emphasizing Dickens, George Eliot, the Brontes, and Hardy.

Advanced Calculus II: PR: MAA 4226 or C.I. Continuation of MAA 4226.

Topics in Advanced Calculus: PR: MAC 3313 or C.I. Selected topics in multivariable calculus, including limits, continuity, Euler's theorem, the Jacobian, and double series; extension of single variable concepts, including uniform convergence and improper integrals.


Basic College Algebra: Recommended backgound: two years of high school algebra. Techniques of algebra; linear and quadratic equations; systems of equations; inequalities; graphs and functions, including exponential and logarithmic; permutations and combinations; applications. Does not satisfy G.E.P.

College Algebra: PR: Intermediate algebra or 2 years of high school algebra or C.I. Inequalities. High degree polynomials. Graphs, rational, logarithmic, and exponential functions. Systems of equations, matrices, determinants, induction. This course prepares students for higher-level mathematics courses.

College Trigonometry: PR: MAC 1102 or 2 years of high school algebra or C.I. The circle arc length, circular functions, identities, inverse functions, applications to simple harmonic motion, function of angles, complete development of triangle solving.

Concepts of Calculus: PR: MAC 1104 or C.I. The differential and integral calculus of rational, exponential and logarithmic functions, with applications to business analysis. Not open to students with credit in MAC 3253 or MAC 3311.

Applied Calculus I: PR: MAC 1104 and MAC 1114 or C.I. Differential and integral calculus. An introduction to differential equations and Laplace Transforms. Applications to engineering technology. Not open to students with credit in MAC 3233 or MAC 3311.

Applied Calculus II: PR: MAC 3253 or C.I. Continuation of MAC 3253.

Calculus with Analytic Geometry I: PR: MAC 1104 and MAC 1114 (College Algebra and Trigonometry) or equivalent or C.I. The differential and integral calculus of algebraic and elementary transcendental functions with geometric and physical applications. Topics from analytic geometry include coordinate systems, vectors, lines, conic sections, transformations of coordinates, and polar coordinates. During the 2nd and 3rd semesters the topics also include sequences and series, Taylor series, and the differential and integral calculus for functions of several variables.

Calculus with Analytic Geometry I (Honors): Differential and integral calculus, emphasizing understanding basic concepts and their applications. Students will complete projects on their own. For honors students from all disciplines.

Calculus with Analytic Geometry II: PR: MAC 3311 or C.I. Continuation of MAC 3311.

Calculus with Analytic Geometry II (Honors): Continuation of MAC 3311H.

Calculus with Analytic Geometry III: PR: MAC 3312 or C.I. Continuation of MAC 3312.

Calculus with Analytic Geometry III (Honors): Continuation of MAC 3312H.

Combinatorics and Graph Theory: PR: MAC 3312 and STA 3023. Counting principles, inclusion/exclusion principle, recurrence relations, generating functions, properties of graphs and digraphs, trees, path problems, coloring planarity, connectness matches and coverings, applications.

Combinatorics and Graph Theory II: PR: MAD 4203. Polya's theory of counting, Latin squares and rectangles, block designs, coding theory, networks, invariants and extremal graph theory, Ramsey theory, probabilistic methods, hypergraphs, applications.

MAE 3112: ED 4(3,1)

Instruction of Mathematics in the Elementary School: PR: Associate of Arts degree or C.I. Concepts, learning sequences, algorithms, error pattern analysis, and problem solving techniques appropriate for the elementary school teacher.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>PR/REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAE 3330</td>
<td>Mathematics Instructional Analysis: PR: EDG 4321. Study of course objectives for the high school curriculum and survey of methods and materials which have special application for teaching mathematics.</td>
<td></td>
</tr>
<tr>
<td>MAE 3810</td>
<td>Mathematics for Elementary School Teachers I: PR: Two years of high school mathematics and C.I. Algorithms for arithmetic operations. Number systems. Geometry. Open only to majors in elementary education.</td>
<td></td>
</tr>
<tr>
<td>MAE 3811</td>
<td>Mathematics for Elementary School Teachers II: PR: MAE 1810 and C.I. The system of real numbers, binary operations, functions, transformation geometry, probability, statistics, and number theory. Open only to majors in elementary education.</td>
<td></td>
</tr>
<tr>
<td>MAE 3817</td>
<td>Mathematics Topics for Elementary School Teachers: PR: One college mathematics course and C.I. An accelerated course covering the systems of whole numbers, integers, rational numbers, real numbers, binary operations, functions, transformation geometry, probability statistics, and number theory. Open only to majors in elementary education.</td>
<td></td>
</tr>
<tr>
<td>MAE 4326</td>
<td>How Children Learn Mathematics: PR: MAE 1810 and 2811, or MAE 3112; or C.I.; and admission to Phase II. Instructional strategies, learning activities, the use of manipulatives, lesson planning, evaluation of mathematical learning, and diagnostic techniques.</td>
<td></td>
</tr>
<tr>
<td>MAE 5318</td>
<td>Current Methods in Elementary School Mathematics: PR: Regular Certificate or C.I. Strategies of instruction of computation and concepts of number, geometry, and measurement; instructional materials. (Meets Elementary Education certification requirements.)</td>
<td></td>
</tr>
<tr>
<td>MAE 5325</td>
<td>Teaching Mathematics in the Middle/Junior High School: PR: 12 s.h. of mathematics, including at least College Algebra. Consideration of the curriculum and instructional techniques appropriate for students in Middle/Junior High School.</td>
<td></td>
</tr>
<tr>
<td>MAE 5356</td>
<td>Teaching General Mathematics in the Secondary School: PR: MAE 3330 or C.I. This course addresses specific techniques for developing general mathematics skills and concepts beginning in grade 6. Problem solving, motivation, and innovative methods are explored.</td>
<td></td>
</tr>
<tr>
<td>MAE 5395</td>
<td>Teaching Measurement in the Schools: Metric system, methods of developing different measurement skills and concepts, and curriculum changes needed to accommodate measurement.</td>
<td></td>
</tr>
<tr>
<td>MAE 5637</td>
<td>Laboratory Programs in Mathematics: PR: Regular Certificate or C.I. Design and development of special materials and projects for mathematics independent study. Emphasis on teaching and applying the metric system. (Meets certification requirements for secondary mathematics.)</td>
<td></td>
</tr>
<tr>
<td>MAN 3025</td>
<td>Management of Organizations: PR: Junior standing, ACG 2011 or 3023, ECO 2023, ECO 2013. Introduction to the theory and practice of managing formal organizations, including planning, organization theory, human behavior and control.</td>
<td></td>
</tr>
<tr>
<td>MAN 3301</td>
<td>Personnel Management: PR: Junior standing, MAN 3025 or C.I. Systematic analysis of personnel functions in organizations.</td>
<td></td>
</tr>
<tr>
<td>MAN 3504</td>
<td>Production/Operations Management: PR: Junior standing, STA 3023. Introduction to the management of systems for the creation, distribution, and maintenance of goods and services required for modern society.</td>
<td></td>
</tr>
<tr>
<td>MAN 3705</td>
<td>Business Concepts: PR: Junior standing. An introductory course in concepts, techniques, opportunities, decisions, and problems in American business. For non-business majors only.</td>
<td></td>
</tr>
<tr>
<td>MAN 4120</td>
<td>Business and Society: PR: MAR 3023, FIN 3403, MAN 3025. A study of the interrelationship between the institution of business and other institutions of our society.</td>
<td></td>
</tr>
<tr>
<td>MAN 4150</td>
<td>Human Relations in Management: PR: MAN 3025. The study of individual, interpersonal, group, and intergroup problems in business organizations through the use of cases and experimental exercises.</td>
<td></td>
</tr>
</tbody>
</table>
MAN 4310  
Personnel Management Issues: PR: Junior standing, MAN 3301. An application-oriented course to give students in the area experiences generally reserved for practitioners in the field of personnel and labor relations.

MAN 4350  
Training and Development: PR: MAN 3301. This course focuses on training and development activities as performed by organizational specialists. Theory, issues, practices and problems are discussed.

MAN 4401  
Labor Relations Management: PR: Junior standing, MAN 3301. The impact of employee organizations on labor relations, current problems, conflicts and trends; the development of managerial approaches to achieve labor-management cooperation.

MAN 4420  

MAN 4521  
Production Planning and Control: PR: MAN 3504. In depth study on long-range, intermediate-range and short-range planning and control methods as applied to a manufacturing organization.

MAN 4590  
Procurement Management: PR: MAN 3025 and MAN 3504. An elective course in procurement management. Designed to provide the student with fundamental concepts and processes involved in the procurement of goods and services required by modern society.

MAN 4595  
Automated Materials Planning: PR: MAN 3504. Application of production planning and control theories and Management Informations Systems concepts to an integrated, computerized, real-world production environment.

MAN 4600  
International Management: PR: GEB 4351 The course examines issues involved in multinational management of business firms, with special emphasis on comparative management.

MAN 4720  
Business Policies: PR: Senior standing, completion of core. The student is expected to utilize the subject matter in the business core and his major in analyzing business problems.

MAN 4854  
Management Science: PR: MAN 3025 and MAN 3504 and ECO 3411 and CGS 3000. Study of the application of quantitative models and use of simulation in organizational systems.

MAN 5051  
Management Concepts: PR: Acceptance in MBA program. Theory and practice of managing organizations to include planning, organizational theory, human behavior, and control.

MAN 5501  
Introduction to Production/Operations Management: PR: Acceptance into the graduate program and ECO 5415 or equivalent. Introduction to the fundamental concepts, processes, and institutions involved in the production of goods and services required by modern society.

MAP 3302  

MAP 4363  

MAP 4364  
Applied Boundary Value Problems II: PR: MAP 4363 or C.I. Legendre polynomials and Bessel functions. The theory of Sturm-Liouville. Separation of variables. Applications involving the wave equation, heat equation and equation of Laplace.

MAP 4411  
Laplace Transforms: PR: MAP 3302 or C.I. Laplace and Z transforms; solutions of ordinary and partial differential equations; application to circuit analysis and difference equations.

MAP 5407  
Special Functions: PR: MAP 3302 or C.I. Series and integral representations, generating functions, recurrence relations and orthogonality properties of the special functions. Emphasis on Bessel, Legendre and hypergeometric functions.

Marketing: PR: Junior standing. Study of functions, institutions, and basic problems in marketing of goods and services in our domestic economy and abroad.

Advertising and Sales Promotion Management: PR: MAR 3023. Analysis of the selection, use, and evaluation of advertising and sales promotion strategies and techniques directed at consumers, businesses, and channels of distribution.

Sales Management: PR: MAR 3023. An overview of the sales management process. Emphasis on sales program formulation and implementation.

Consumer Behavior: PR: MAR 3023. Analysis of the buying process, the psychological, social, and economic influences affecting consumer choice.

Marketing Research: PR: MAR 3023, ECO 3411. Study of research procedures and techniques for problem solving in marketing. Concepts are explored, and the incorporation of information resources into the management function is demonstrated.

Marketing Management: PR: MAR 3023 and any one additional MAR course or C.I. Operational framework exploring the analysis, planning, and control activities of marketing.

Contemporary Marketing Issues: PR: Senior standing, marketing major, C.I. Cultural, social, political, economic, and competitive developments and their effects upon marketing activities.

International Marketing: PR: MAR 3023, GEB 4351, or C.I. Investigates strategy, policy and the variables in international marketing decisions.

Marketing Channel Systems: PR: MAR 3023. Marketing functions and relationships within marketing channel systems, with primary focus on the needs for interorganizational cooperation and coordination between channel organizations.

Retailing Management: PR: MAR 3023. Analysis of the field of retailing. Emphasis on planning for profit through management, inventory control, etc.

Industrial Marketing: PR: MAR 3023. Marketing of goods and services between organizations, including commercial, governmental, institutional, and not-for-profit. Emphasis on the development, pricing, promotion, and distribution of industrial products.

Marketing Strategy: PR: Senior standing and marketing courses completed or C.I. Marketing problems are explored, with emphasis on strategy formulation and integrative marketing decision-making.

Product Management: PR: MAR 3023. Components of product management, including analysis, strategy formulation and implementation are examined.

Services Marketing: PR: MAR 3023. Examination of marketing in services industries, with particular emphasis on unique aspects of services marketing, the service marketing mix, and the implementation of service strategies.

Internship: PR: Permission of Dept. Chair. Provides qualified undergraduate marketing majors with educational experience not gained in class setting.

Marketing Concepts: PR: Acceptance into the graduate program. Study of functions, institutions, and basic marketing of goods in the U.S. economy.

Small Business Consulting: PR: ACG 2001, 2011, ECO 2023, 2013, MAN 3025, MAR 3023, or graduate status. Provides students opportunity to apply knowledge learned in classroom to real business situations. Open to undergraduate majors in the College of Business Administration with approval of the department chair.

Matrices: PR: MAC 3312 or C.I. Matrices, determinants, vector spaces in $\mathbb{R}^n$, linear independence, basis, solutions of systems, range of linear transformations, eigenvectors, Jordon Form, matrix functions, quadratic forms.
**Linear Algebra:** PR: MHF 2300 and MAS 3105 or C.I. Abstract vector spaces, linear transformations, isomorphisms, projections, innerproducts, the spectral theorem, Jordan Canonical Form. (Only offered spring semester).

**Introduction to Number Theory:** PR: MHF 2300 or C.I. The course will include the following topics: inductive reasoning, factorization, the division algorithm and congruences.

**Algebraic Structures:** PR: MHF 2300 or C.I. An introduction to groups, rings and fields.

**Matrix Theory and Applications:** PR: MAS 3113, STA 4163 or 4322, or C.I. Basic theory of determinants, inverses, generalized inverses, eigenvalues and eigenvectors; partitioned matrices; diagonalization and decomposition theorems; least squares; and applications.

**General Microbiology:** PR: A college course in chemistry and in basic biological sciences. Fundamentals of microbiology, including microbial structure and function, metabolism, growth, genetics, virology, environmental control, ecology, pathogenicity; and laboratory techniques.

**Pathogenic Microbiology:** PR: MCB 3013C or C.I. Microorganisms producing disease in man and other animals; means of transmission; protection against disease.

**Pathogenic Microbiology Lab:** CR: MCB 3203. Laboratory investigation of pathogenic microorganisms, with emphasis on isolation and identification of pathogenic microorganisms.

**Microbial Systematics and Diagnosis:** PR: MCB 3013C, MCB 3203. Microbial classification, rules of taxonomy, and nomenclature. Techniques for identifying non-pathogens and bacteria pathogenic to man.

**Microbial Metabolism:** PR: MCB 3013C and BCH 4054. Interrelationship between cellular structure function and genetic traits in microorganisms. The interaction between microorganisms and their nutritional environment.

**Environmental Microbiology:** PR: PCB 3043 and MCB 3013C. Interrelationships between the biological activities of microorganisms and their terrestrial and aquatic environments.

**Infectious Process:** PR: MCB 3013C or C.I. Discussion of current theories of the infectious process and the response of host cells and tissue to infection.

**Virology:** PR: MCB 3013C and BCH 4054. Nature of viruses and Rickettsiae, including their structure, propagation, isolation, and identification.

**Fundamentals of Meteorology and Climatology:** PR: MAC 1104 or C.I. Studies of the physical processes that determine the climate of a region. The methods of measurement and use of meteorological parameters.

**Finite Mathematics:** PR: Intermediate algebra or 2 years of high school algebra or C.I. Introduction to logical structure, sets, probability, arrays, games. This course is intended for students who are not planning to take further courses in mathematics.

**Logic and Proof in Mathematics:** PR: Two years of high school algebra and one year of geometry or C.I. Basic mathematical logic. Methods of proof in mathematics. Application of proofs to elementary mathematical structures.

**Boolean Algebra:** PR: MAC 3312 or C.I. Axiomatic development of Boolean algebra. The algebras of sets, logic and circuits as Boolean algebras.

**History of Mathematics:** PR: MAC 3312 or C.I. A chronological study of the evolution of mathematical thought from primitive counting through modern ideas of the 20th century. Recommended for prospective teachers in mathematics.

**Basic Military Science:** Organization of the Army and ROTC. Career opportunities, significance of military courtesy, discipline, customs, and traditions. Analysis of weapons and equipment of the U.S. Army.

**Fundamentals of Leadership Development:** Development of leadership abilities, including squad movement techniques. Fundamentals of Land Nav will be discussed.

**Leadership Development - I:** Development of leadership abilities through practical exercises. Includes platoon leadership assessment program, role of the NCO, land navigation, and conduct of briefings.
MIS 2300
Leadership Development - II: Development of leadership abilities. Includes first aid training, communications, the threat, offensive/defensive operations, patrolling, and troop leading procedures.

MIS 3301
Theory and practice in Advanced MLS. 4830C.

MIS 3410
Leadership Responsibilities: A description of the role and responsibility of the small unit leader. Includes principles of war, military instruction, land navigation, patrolling and offensive/defensive operations.

MIS 4421
Military Law: A study of military law, the Army’s maintenance management system, and a study of the obligations and responsibilities of a newly-commissioned officer.

MIS 4430
Advanced Military Science: Study of the decision-making process; staff organization, estimating process, training, scheduling, and staff studies. Analysis of administration, personnel and Army supply system.

MLS 3220C
Techniques In Clinical Microscopy: PR: Admission to the professional phase of the MLS program or C.I. Analysis of human urine and other body specimens, chemically and microscopically; interpretation of abnormal results and their correlation to disease included.

MLS 3305
Hematology: PR: Admission to the professional phase of the MLS program or C.I. Diagnostic procedures and morphologic interpretation; correlation of this data to disease.

MLS 4334C
Hemostasis: PR: Admission to the professional phase of the MLS program or C.I. Study of the hemostasis mechanisms; diagnostic procedures and correlation of data to pathological conditions.

MLS 4405
Clinical Pathogenic Microbiology: PR or CR: MCB 3203 and admission to the professional phase of the MLS program. Isolation and pathogenic bacteria and serological methods; interpretation of abnormal results, with correlation to disease.

MLS 4420C
Clinical Mycology: PR: Admission to the professional phase of the MLS program with C.I. Instruction and laboratory practice in the isolation and identification of fungi associated with mycotic infections of man.

MLS 4431C
Clinical Parasitology: PR: Admission to the professional phase of the MLS program or C.I. Instruction and laboratory practice in the examination and study of clinical material for the detection and identification of animal parasites.

MLS 4511
Immunodiagnostics: PR: PCB 3233. Theory and application of clinical serologic and immunologic diagnostic testing, stressing the utilization of monoclonal technology.

MLS 4550
Clinical Immunohematology: PR: Admission to the professional phase of the MLS program or C.I. Investigation of incompatible crossmatches; antibody identification, leukocyte antigens and identification procedures, problem solving.

MLS 4625C
Advanced Clinical Chemistry I: PR: Admission to the professional phase of the MLS program or C.I. Theory and practice in clinical chemistry techniques; carbohydrates, protein, electrophoresis, enzymes.

MLS 4630C
Advanced Clinical Chemistry II: PR: MLS 4625C. Autoanalyzer, flame photometry, blood gases, RIA.

MLS 4630C
Clinical Practice I: PR: Admission to the professional phase of MLS program or rotation in one or more of the following areas: Hematology, Chemistry, Microbiology, Blood Bank, Serology-Coagulation, Clinical Microscopy, Nuclear Medicine.

MLS 4831C
Clinical Practice II: PR: Admission to the professional phase of the MLS program or C.I. Continuation of MLS 4830C.

MLS 4832C
Clinical Practice III: PR: Admission to the professional phase of the MLS program or C.I. Continuation of MLS 4831C.

MLS 4833C
Clinical Practice IV: PR: Admission to the professional phase of the MLS program or C.I. Continuation of MLS 4832C.

MLS 4834C
Clinical Practice V: PR: Admission to the professional phase of the MLS program or C.I. Continuation of MLS 4833C.
**Fundamentals of Research for Health Science Professionals:** Concepts of developing a research protocol based on current theories and practices within the clinical area, including literature search, cost analysis, and grant preparation.

**Clinical Immunology:** PR: PCB 3233, MLS 4511 or C.I. Advanced theory and application of immunologic diagnostic testing, stressing the utilization of monoclonal technology.

**Introduction to the Mass Media:** A description of the various media, their roles, responsibilities, and functions.

**Mass Communication Law:** The legal rights and responsibilities of the mass media.

**Contemporary Media Issues:** Relationships between the mass media and society; examination of social and ethical issues and responsibilities of the media, including the media's relationship with government.

**Opinion and the Mass Media:** Role of the media in influencing public attitudes on both the domestic and international levels.

**Mass Media and Popular Culture:** An impact of mass media upon American culture past to present.

**Communication Internship:** PR: C.I. Internship in radio, television, film, journalism, public relations, advertising and speech involving practicum at selected communication organizations for one term.

**Introduction to Medical Records:** PR: Acceptance into upper-division limited access MRA program. Introduction to profession; POMR; release of information; record analysis.

**Medical Record Organization and Management:** PR: MRE 3000. Nomenclature/classification systems; health/vital statistics; computer abstracting; MRAs role in hospital/medical staff organization; accrediting/approving agencies; policy/procedure manuals; job descriptions; indexing.

**Pathophysiology:** PR: MRE 3000; HSC 4550. A study of the nature, causes, and treatment of specific diseases.

**Directed Practice I:** PR: Acceptance into upper-division limited access MRA program. Interdepartmental experience and introduction to medical record departments in selected health care facilities.

**Directed Practice II:** PR: MRE 3800, HSC 3640, HSC 3531. Quantitative and qualitative analysis; MPI; release of information; filing; admission/discharge processing performed in a health care facility.

**Coding Procedures:** PR: MRE 3432, HSC 3531, or C.I. Principles and mechanics of coding systems for health information retrieval, DRGs.

**Coding Procedures II:** PR: MRE 4202 or CI. Continuation of MRE 4202; HCPCS-CPT.

**Health Data Processing:** PR: MRE 4500; CGS 1060. Analysis and design of computerized systems for medical record data collection, retrieval, and interpretation. Hands-on experience.

**Medical Record Department Management:** PR: MRE 4500; MRE 4312. Analysis of management functions in health care setting; in-service education; equipment demonstrations; problem-solving techniques.

**Analysis of Medical Record Department Operations:** PR: MRE 3110; MAN 3025; MAN 3301. Personnel administration; budgeting; forms analysis, design and control; work distribution and simplification; other evaluation techniques. Principles of word processing and medical transcription.

**Health Care Delivery Systems:** PR: MRE 3110. Medical record standards and procedures for long-term care; ambulatory care; home health care; HMOs and psychiatric facilities. Principles of consulting. Labs and field trips.

**Health Legislation:** PR: MRE 4500. Risk management, certificate of need; legislative update for utilization review and quality assurance; new health legislation.

**Quality Assessment:** PR: MRE 3110. Utilization review; principles and mechanics of medical audit and quality assurance; risk management.
MRE 4830
Directed Practice III: PR: MRE 3110; MRE 4202; MRE 3810. Incomplete record control; coding; health/vital statistics; microfilm.

MRE 4832
Directed Practice IV: PR: MRE 3110; MRE 4312; MRE 4500; MRE 4830. Indexing abstracting; audit; quality assurance; U.R.; transcription; budget; management of activities in DP I, II, III; computer applications. Assignment to hospital and other health care facilities.

MRE 4835
Management Affiliation: PR: All other required courses. Assignment to a selected health care facility serving in an administrative capacity under the direction of a Registered Record Administrator; lab exercises; comprehensive exam.

MRE 4850
Medical Record Research: PR: MRE 4500, ENC 3210, COM 3110. Basic research topic design; completion of research project; oral presentations, grantsmanship.

MRE 5217
System Analysis and Design: Concepts of system analysis, planning, and design; criteria for assisting health information needs; computer system selection; project management allocation and control.

MRE 5218
Management of Health Information Systems: PR: ISM 5021. Administration of computer-based information systems; security; policy formulation; health data in decision-making, interpretation of health data.

MRE 5219

MRE 5858
Research Methods: PR: HSC 6911; graduate status or C.I. Research topic design using health information; research methodologies using statistical techniques; research designs as they relate to health care organizations.

MTG 4212
Modern Geometries: PR: MAC 3311 or C.I. Sets of axioms and finite geometries, groups of transformations, Euclidean motions of 2-space and 3-space, convexity in 2-space and 3-space. Euclidean geometry of polygon and circle, constructible numbers, constructions and non-Euclidean geometry.

MTG 4302
Introduction to Topology: PR: MHF 2300 or C.I. Metric spaces, topological spaces, limit points, continuity, compactness, and connectedness.

MUC 1101
Composition I: Creative work in small forms. Open to qualified non-music majors with C.I. May be repeated for credit.

MUC 3104
Composition II: PR: C.I. or by audition. Creative work in large and small forms in the area of choral, instrumental, and keyboard media. May be repeated for credit.

MUE 1440
String Techniques: Class instruction in beginning string playing techniques.

MUE 3450
Woodwind Techniques: Class instruction in beginning woodwind playing techniques. May be repeated for credit.

MUE 3470
Brass Techniques: Class instruction in beginning brass playing techniques. May be repeated for credit.

MUE 4311
Percussion Techniques: Class instruction in beginning percussion playing techniques.

MUE 4360
Secondary School Music Instructional Analysis: PR: MUE 4311 or C.I. Instructional planning, techniques and materials in middle school, junior high and senior high classrooms; consideration of general music education program; evaluation materials and procedures.

MUE 4480
Marching Band Techniques: PR: C.I. Principles of organizing and training marching bands; Planning, charting football shows, rehearsal problems. Guided observations. May be repeated for credit.
Trends in Elementary School Music Education: PR: MUE 3210 or equivalent, or C.I. Advanced study of instructional strategies and materials; integration of music education experiences with classroom activities; personal musical skill development; current research and new curricula.

Basic Conducting: Fundamental techniques and practice in conducting.

Choral Conducting: PR: MUG 3101. Fundamental principles of choral conducting and rehearsal techniques. May be repeated for credit.

Instrumental Conducting: PR: MUG 3101. Fundamental principles of instrumental conducting and rehearsal techniques. May be repeated for credit.

Advanced Conducting: PR: C.I. Study of advanced vocal or instrumental conducting techniques. Rehearsal procedures, selection of materials and program-building, interpretation of scores, study and performance of selected works.

History and Literature I: PR: MUT 2112. In-depth study of the development of Western musical styles from antiquity to present.

History and Literature II: PR: MUT 3116. Continuation of MUH 4211.

Review of Music History: PR: C.I. A review of music history from Ancient Greece to the present.


Seminar: Music Since Bach: PR: Satisfactory music history placement exam. Selected topics from the origins of Classicism through the 19th century. Emphasis on stylistic development and formal analysis.

Enjoyment of Music: Only non-music majors. Designed to develop an understanding of musical principles and techniques for listening to music.

Plano Literature I: PR: Major in Music or C.I. Survey of stringed keyboard literature from the 16th century to the present, with emphasis on technical, formal and performance problems.

Plano Literature II: PR: MUL 3400. Continuation of MUL 3400.

Song Literature I: PR: Major in Music or C.I. Survey of the development of the art song from the Baroque to the present, with emphasis on technical, formal and performance problems.

Song Literature II: PR: MUL 3600. Continuation of MUL 3600.

Marching Band: PR: Admission by audition. Preparation for appearance at football games and special occasions. May be repeated for credit.

Concert Band: Open to all students with audition. Study and performance of music for large ensembles. May be repeated for credit.

Wind Ensemble: Open to all students by audition. Study and performance of music for small ensembles. May be repeated for credit.

Community Orchestra: PR: C.I. Open to all students. Audition for wind and percussion players required. Repertoire from symphonic literature. May be repeated for credit.

University Choir: Open to all students by audition. Study and performance of large ensemble music. Possible tours. May be repeated for credit.

Madrigal Singers: Open to all students by audition. Extra rehearsals and Madrigal Dinners required. Tours. May be repeated for credit.

Chamber Chorus: Open to all students by audition. Study and performance of music for small ensembles. May be repeated for credit.

Oratorio Choir: Open to all students, faculty, and members of the community for performance of large works. May be repeated for credit.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUN 3483</td>
<td>String Ensemble: PR: C.I.</td>
<td>Open to all students. Study and performance of music for small ensembles. May be repeated for credit.</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUN 3423</td>
<td>Woodwind Ensemble: PR: C.I.</td>
<td>Open to all students. Study and performance of music for small ensembles. May be repeated for credit.</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUN 3433</td>
<td>Brass Ensemble: PR: C.I.</td>
<td>Open to all students. Study and performance of music for small ensembles. May be repeated for credit.</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUN 3443</td>
<td>Percussion Ensemble: PR: C.I.</td>
<td>Open to all students. Study and performance of music for small ensembles. May be repeated for credit.</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUN 3453</td>
<td>Plano Ensemble:</td>
<td>Open to Music Majors or C.I. Study and performance of music for small ensembles. May be repeated for credit.</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MUS 1010</td>
<td>Music Forum:</td>
<td>A series of special musical events required of music majors. Includes lectures and recitals by faculty, students, and guest artists.</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MUS 4401</td>
<td>Studio Teaching: PR: C.I.</td>
<td>Management of the music studio; responsibilities and techniques of private instruction for the studio teacher; principles of psychology of music. May be repeated for credit.</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MUS 4905</td>
<td>Directed Experience: PR: C.I. and Junior Standing. Special topics of study and/or research as determined by student/faculty consultation. May be repeated for credit.</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MUT 1111</td>
<td>Music Theory IA:</td>
<td>Open to all students. Writing, performance, analysis of and music of various stylistic periods.</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MUT 1112</td>
<td>Music Theory IB: PR: MUT 1111. Continuation of MUT 1111.</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MUT 1241</td>
<td>Ear Training and Sight Singing IA: Aural and visual/oral comprehension of elements of music--rhythm, melody, harmony, form. Intended to be taken with MUT 1111.</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MUT 1242</td>
<td>Ear Training and Sight Singing IB: PR: MUT 1241. Continuation of MUT 1241. Intended to be taken with MUT 1112.</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MUT 2116</td>
<td>Music Theory IIA: PR: MUT 1112. Continuation of MUT 1111-1112; writing, performance, and analysis of music of various stylistic periods.</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MUT 2117</td>
<td>Music Theory IIB: PR: MUT 2116. Continuation of MUT 2116.</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MUT 2246</td>
<td>Ear Training and Sight Singing IIA: PR: MUT 1242. Continuation of MUT 1242. Intended to be taken with MUT 2116.</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MUT 2247</td>
<td>Ear Training and Sight Singing IIB: PR: MUT 2246. Continuation of MUT 2246. Intended to be taken with MUT 2117.</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MUT 3248</td>
<td>Ear Training and Sight Singing III: PR: MUT 2247. Continuation of MUT 2247. Intended to be taken with MUT 3561.</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MUT 3311</td>
<td>Orchestration: PR: MUT 2117. Characteristics of orchestral instruments. Orchestral studies of selected works. Original transcriptions for small and large ensembles.</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MUT 3353</td>
<td>Jazz Skills I: PR: C.I. Elements of jazz improvisation. Emphasis on listening, harmony, basic arranging and jazz forms.</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MUT 3354</td>
<td>Jazz Skills II: PR: MUT 3353 or C.I. Continuation of Jazz Skills I.</td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
MUT 3561 AS 3(3,0)
Music Theory III: PR: MUT 2117. Continuation of MUT 2116-2117; writing, performance, and analysis of music of various stylistic periods.

MUT 4031 AS 1(1,0)
Review of Music Theory: PR: C.I. A comprehensive review of harmonic and analytic skills. May be repeated for credit.

MUT 4249 AS 2(2,0)
Review of Sight-Singing and Ear Training: An intensive review of aural skills. May be repeated for credit.

MUT 4344 AS 1(1,0)

MUT 5325 AS 2(2,0)

MVB 1211 AS 1(0,1)

MVB 1212 AS 1(0,1)
Secondary French Horn: PR: Consent of Music Chair. CR: Performing ensemble. Advanced instruction in French Horn. Intended for non-music majors. May be repeated for credit.

MVB 1213 AS 1(0,1)

MVB 1214 AS 1(0,1)

MVB 1215 AS 1(0,1)
Secondary Tuba: PR: Consent of Music Chair. CR: Performing ensemble. Advanced instruction in tuba. Intended for non-music majors. May be repeated for credit.

MVB 1411 AS 2(1,1)
Trumpet I: PR: Major in music or consent of chair; audition. May be repeated for credit.

MVB 1412 AS 2(1,1)
French Horn I: PR: Major in music or consent of chair; audition. May be repeated for credit.

MVB 1413 AS 2(1,1)
Trombone I: PR: Major in music or consent of chair; audition. May be repeated for credit.

MVB 1414 AS 2(1,1)
Baritone I: PR: Major in music or consent of chair; audition. May be repeated for credit.

MVB 1415 AS 2(1,1)
Tuba I: PR: Major in music or consent of chair; audition. May be repeated for credit.

MVB 2421 AS 2(1,1)
Trumpet II: PR: MVB 1411 and competence determined by faculty jury. Continuation of MVB 1411. May be repeated for credit.

MVB 2422 AS 2(1,1)
French Horn II: PR: MVB 1412 and competence determined by faculty jury. Continuation of MVB 1412. May be repeated for credit.

MVB 2423 AS 2(1,1)
Trombone II: PR: MVB 1413 and competence determined by faculty jury. Continuation of MVB 1413. May be repeated for credit.

MVB 2424 AS 2(1,1)
Baritone II: PR: MVB 1414 and competence determined by faculty jury. Continuation of MVB 1414. May be repeated for credit.

MVB 2425 AS 2(1,1)
Tuba II: PR: MVB 1415 and competence determined by faculty jury. Continuation of MVB 1415. May be repeated for credit.

MVB 3431 AS 2(1,1)
Trumpet III: PR: MVB 2421 and competence determined by faculty jury. Continuation of MVB 2421. May be repeated for credit.

MVB 3432 AS 2(1,1)
French Horn III: PR: MVB 2422 and competence determined by faculty jury. Continuation of MVB 2422. May be repeated for credit.

MVB 3433 AS 2(1,1)
Trombone III: PR: MVB 2423 and competence determined by faculty jury. Continuation of MVB 2423. May be repeated for credit.

MVB 3434 AS 2(1,1)
Baritone III: PR: MVB 2424 and competence determined by faculty jury. Continuation of MVB 2424. May be repeated for credit.
MVB 3435
Tuba III: PR: MVB 2425 and competence determined by faculty jury. Continuation of MVB 2425. May be repeated for credit.

MVB 4441
Trumpet IV: PR: MVB 3431 and competence determined by faculty jury. Continuation of MVB 3431. May be repeated for credit.

MVB 4442
French Horn IV: PR: MVB 3432 and competence determined by faculty jury. Continuation of MVB 3432. May be repeated for credit.

MVB 4443
Trombone IV: PR: MVB 3433 and competence determined by faculty jury. Continuation of MVB 3433. May be repeated for credit.

MVB 4444
Tuba IV: PR: MVB 3435 and competence determined by faculty jury. Continuation of MVB 3435. May be repeated for credit.

MVB 5451
Trumpet V: PR: C.I.

MVB 5452
French Horn V: PR: C.I.

MVB 5453
Trombone V: PR: C.I.

MVB 5454
Baritone V: PR: C.I.

MVB 5455
Tuba V: PR: C.I.

MVK 1111
Class Piano I: Class instruction for beginning piano students. Not open to music majors whose major performing medium is piano.

MVK 1121
Class Piano II: PR: MVK 1111 or C.I. Continuation of MVK 1111. Not open to music majors whose major performing medium is piano.

MVK 1131
Class Piano III: PR: MVK 1121 or C.I. Continuation of MVK 1121.

MVK 1141
Class Piano IV: PR: MVK 1131 or C.I. Continuation of MVK 1131.

MVK 1211

MVK 1213

MVK 1411
Piano I: PR: Major in music or consent of chairperson; audition. May be repeated for credit.

MVK 1413
Organ I: PR: Major in music or consent of chairperson; audition. May be repeated for credit.

MVK 2421
Piano II: PR: MVK 1411 and competence determined by faculty jury. Continuation of MVK 1411. May be repeated for credit.

MVK 2423
Organ II: PR: MVK 1413 and competence determined by faculty jury. Continuation of MVK 1413. May be repeated for credit.

MVK 3431
Piano III: PR: MVK 2421 and competence determined by faculty jury. Continuation of MVK 2421. May be repeated for credit.

MVK 3433
Organ III: PR: MVK 2423 and competence determined by faculty jury. Continuation of MVK 2423. May be repeated for credit.

MVK 4441
Piano IV: PR: MVK 3431 and competence determined by faculty jury. Continuation of MVK 3431. May be repeated for credit.

MVK 4443
Organ IV: PR: MVK 3433 and competence determined by faculty jury. Continuation of MVK 3433. May be repeated for credit.
MVK 4640  AS 1(1,0)
Piano Pedagogy I: PR: C.I. Methods, materials for teaching individuals and classes of children and adults beginning to intermediate levels; demonstration and observation of procedures. May be repeated for credit.
MVK 4641  AS 1(1,0)
Piano Pedagogy II: PR: C.I. Continuation of MVK 4640. Emphasis on intermediate through advanced levels. May be repeated for credit.
MVK 5451  AS 2(1,0)
Piano V: PR: C.I.
MVK 5453  AS 2(1,0)
Organ V: PR: C.I.
MVO 1214  AS 1(0,1)
MVO 3114  AS 3(2,1)
Recorder I: Open to non-music majors. Class instruction in beginning recorder playing.
MVO 3124  AS 2(1,1)
Recorder II: PR: C.I. Class instruction in advanced recorder solo and ensemble playing. Open to music students and non-music students who have taken MVO 3114.
MVO 5250  AS 1(1,0)
Advanced Secondary Instruction: PR: Graduate Standing and C.I. Advanced instructional techniques on a secondary instrument or in voice. May be repeated for credit.
MVP 1411  AS 2(1,1)
Percussion I: PR: Major in music or consent of chair; audition. May be repeated for credit.
MVP 2421  AS 2(1,1)
Percussion II: PR: MVP 1411 and competence determined by faculty jury. Continuation of MVP 1411. May be repeated for credit.
MVP 3431  AS 2(1,1)
Percussion III: PR: MVP 2421 and competence determined by faculty jury. Continuation of MVP 2421. May be repeated for credit.
MVP 4441  AS 2(1,1)
Percussion IV: PR: MVP 3431 and competence determined by faculty jury. Continuation of MVP 3431. May be repeated for credit.
MVP 5451  AS 2(1,0)
Percussion V: PR: C.I.
MVS 1211  AS 1(0,1)
MVS 1212  AS 1(0,1)
MVS 1213  AS 1(0,1)
MVS 1214  AS 1(0,1)
MVS 1215  AS 1(1,1)
Secondary Harp: Instruction in beginning harp playing.
MVS 1216  AS 1(0,1)
MVS 1411  AS 2(1,1)
Violin I: PR: Major in music or consent of chair; audition. May be repeated for credit.
MVS 1412  AS 2(1,1)
Violin II: PR: Major in music or consent of chair; audition. May be repeated for credit.
MVS 1413  AS 2(1,1)
Cello I: PR: Major in music or consent of chair; audition. May be repeated for credit.
MVS 1414  AS 2(1,1)
Bass I: PR: Major in music or consent of chair; audition. May be repeated for credit.
MVS 1415  AS 2(1,1)
Harp I: Major in music or consent of chair; audition. May be repeated for credit.
MVS 1416  AS 2(1,1)
Guitar I: PR: Major in music or consent of chair; audition. May be repeated for credit.
MVS 1876
Class Guitar I: Open only to non-music majors. Class instruction in beginning guitar playing.

MVS 2421
Violin II: PR: MVS 1411 and competence determined by faculty jury. Continuation of MVS 1411. May be repeated for credit.

MVS 2422
Viola II: PR: MVS 1412 and competence determined by faculty jury. Continuation of MVS 1412. May be repeated for credit.

MVS 2423
Cello II: PR: MVS 1413 and competence determined by faculty jury. Continuation of MVS 1413. May be repeated for credit.

MVS 2424
Bass II: PR: MVS 1414 and competence determined by faculty jury. Continuation of MVS 1414. May be repeated for credit.

MVS 2425
Harp II: PR: MVS 1415 and competence determined by faculty jury. Continuation of MVS 1415. May be repeated for credit.

MVS 2426
Guitar II: PR: MVS 1416 and competence determined by faculty jury. Continuation of MVS 1416. May be repeated for credit.

MVS 2826
Class Guitar II: Open to music students or non-music students who have taken Guitar I or C.I. Class instruction in advanced guitar solo and ensemble playing.

MVS 3431
Violin III: PR: MVS 2421 and competence determined by faculty jury. Continuation of MVS 2421. May be repeated for credit.

MVS 3432
Viola III: PR: MVS 2422 and competence determined by faculty jury. Continuation of MVS 2422. May be repeated for credit.

MVS 3433
Cello III: PR: MVS 2423 and competence determined by faculty jury. Continuation of MVS 2423. May be repeated for credit.

MVS 3434
Bass III: PR: MVS 2424 and competence determined by faculty jury. Continuation of MVS 2424. May be repeated for credit.

MVS 3435
Harp III: PR: MVS 2425 and competence determined by faculty jury. Continuation of MVS 2425. May be repeated for credit.

MVS 3436
Guitar III: PR: MVS 2426 and competence determined by faculty jury. Continuation of MVS 2426. May be repeated for credit.

MVS 4441
Violin IV: PR: MVS 3431 and competence determined by faculty jury. Continuation of MVS 3431. May be repeated for credit.

MVS 4442
Viola IV: PR: MVS 3432 and competence determined by faculty jury. Continuation of MVS 3432. May be repeated for credit.

MVS 4443
Cello IV: PR: MVS 3433 and competence determined by faculty jury. Continuation of MVS 3433. May be repeated for credit.

MVS 4444
Bass IV: PR: MVS 3434 and competence determined by faculty jury. Continuation of MVS 3434. May be repeated for credit.

MVS 4445
Harp IV: PR: MVS 3435 and competence determined by faculty jury. Continuation of MVS 3435. May be repeated for credit.

MVS 4446
Guitar IV: PR: MVS 3436 and competence determined by faculty jury. Continuation of MVS 3436. May be repeated for credit.

MVS 5451
Violin V: PR: C.I.

MVS 5452

MVS 5453

MVS 5454

Bass V: PR: C.I.
MVS 5455 AS 2(1,0)
Harp V: PR: C.I.
MVS 5456 AS 2(1,0)
Guitar V: PR: C.I.
MVV 1111 AS 1(0,1)
Class Voice: Class instruction in beginning voice. May be repeated for credit.
MVV 1211 AS 1(0,1)
MVV 1411 AS 2(1,1)
Voice I: PR: Major in music or consent of chair; audition. May be repeated for credit.
MVV 2421 AS 2(1,1)
Voice II: PR: MVV 1411 and competence determined by faculty jury. Continuation of MVV 1411. Major in music or consent of chair; audition. Private and class lessons. May be repeated for credit.
MVV 3431 AS 2(1,1)
Voice III: PR: MVV 2421 and competence determined by faculty jury. Continuation of MVV 2421. May be repeated for credit.
MVV 4441 AS 2(1,1)
Voice IV: PR: MVV 3431 and competence determined by faculty jury. Continuation of MVV 3431. May be repeated for credit.
MVV 4640 AS 1(1,0)
Voice Pedagogy I: PR: C.I. Methods, materials for vocalists; teachers, conductors; voice production; diagnosis of problems and correction; demonstration and observation of teaching; beginning to intermediate levels. May be repeated for credit.
MVV 4641 AS 1(1,0)
Voice Pedagogy II: PR: C.I. Continuation of MVV 4640. Intermediate to advanced levels. May be repeated for credit.
MVV 5451 AS 2(1,0)
Voice V: PR: C.I.
MVW 1211 AS 1(0,1)
MVW 1212 AS 1(0,1)
MVW 1213 AS 1(0,1)
MVW 1214 AS 1(0,1)
MVW 1215 AS 1(0,1)
MVW 1411 AS 2(1,1)
Flute I: PR: Major in music or consent of chair; audition. May be repeated for credit.
MVW 1412 AS 2(1,1)
Oboe I: PR: Major in music or consent of chair; audition. May be repeated for credit.
MVW 1413 AS 2(1,1)
Clarinet I: PR: Major in music or consent of chair; audition. May be repeated for credit.
MVW 1414 AS 2(1,1)
Bassoon I: PR: Major in music or consent of chair; audition. May be repeated for credit.
MVW 1415 AS 2(1,1)
Saxophone I: PR: Major in music or consent of chair; audition. May be repeated for credit.
MVW 2421 AS 2(1,1)
Flute II: PR: MVW 1411 and competence determined by faculty jury. Continuation of MVW 1411. May be repeated for credit.
MVW 2422 AS 2(1,1)
Oboe II: PR: MVW 1412 and competence determined by faculty jury. Continuation of MVW 1412. May be repeated for credit.
MVW 2423 AS 2(1,1)
Clarinet II: PR: MVW 1413 and competence determined by faculty jury. Continuation of MVW 1413. May be repeated for credit.
MVW 2424 AS 2(1,1)
Bassoon II: PR: MVW 1414 and competence determined by faculty jury. Continuation of MVW 1414. May be repeated for credit.
MVW 2425
Saxophone II: PR: MVW 1415 and competence determined by faculty jury. Continuation of MVW 1415. May be repeated for credit.

MVW 3431
Flute III: PR: MVW 2421 and competence determined by faculty jury. Continuation of MVW 2421. May be repeated for credit.

MVW 3432
Oboe III: PR: MVW 2422 and competence determined by faculty jury. Continuation of MVW 2422. May be repeated for credit.

MVW 3433
Clarinet III: PR: MVW 2423 and competence determined by faculty jury. Continuation of MVW 2423. May be repeated for credit.

MVW 3434
Bassoon III: PR: MVW 2424 and competence determined by faculty jury. Continuation of MVW 2424. May be repeated for credit.

MVW 3435
Saxophone III: PR: MVW 2425 and competence determined by faculty jury. Continuation of MVW 2425. May be repeated for credit.

MVW 4441
Flute IV: PR: MVW 3431 and competence determined by faculty jury. Continuation of MVW 3431. May be repeated for credit.

MVW 4442
Oboe IV: PR: MVW 3432 and competence determined by faculty jury. Continuation of MVW 3432. May be repeated for credit.

MVW 4443
Clarinet IV: PR: MVW 3433 and competence determined by faculty jury. Continuation of MVW 3433. May be repeated for credit.

MVW 4444
Bassoon IV: PR: MVW 3434 and competence determined by faculty jury. Continuation of MVW 3434. May be repeated for credit.

MVW 4445
Saxophone IV: PR: MVW 3435 and competence determined by faculty jury. Continuation of MVW 3435. May be repeated for credit.

MVW 5451
Flute V: PR: C.I.

MVW 5452
Oboe V: PR: C.I.

MVW 5453
Clarinet V: PR: C.I.

MVW 5454
Bassoon V: PR: C.I.

MVW 5455
Saxophone V: PR: C.I.

NUR 3066
Health Assessment: PR: PCB 3703C, ZOO 3733C or Florida RN License. Concepts of health assessment of clients.

NUR 3119
Introduction to Baccalaureate Nursing: Overview of baccalaureate nursing philosophy, objectives, conceptual framework, scope of practice, history, legal and ethical issues.

NUR 3166
Critical Inquiry: PR: NUR 3066, 3119, 3748C or Florida RN license. A study of approaches to problematic situations in nursing. Selected experiences in investigating, analyzing, and interpreting nursing research.

NUR 3709

NUR 3748C
Concepts Basic to Nursing Practice: PR: Admission to the nursing program and completion of prerequisites. Beginning principles and concepts of nursing theory and practice utilizing the nursing process in selected clinical settings.

NUR 3749C

NUR 3755C
Scientific Theories of Nursing II: PR: NUR 3749C, 3795C, 3166. CR: NUR 3796. Theories and practice applicable to the nurse’s role in care of the family from conception through delivery. Focus is on family system.
NUR 3795C

NUR 3796C

NUR 3905
Independent Study: Directed Study.

NUR 4196
Crisis Intervention: Crisis theory and techniques; recognition and intervention in crisis events. Applicable to all areas of nursing and all helping professions.

NUR 4297
Introduction to Cardiovascular Nursing: Nursing management of cardiac disorders as they affect adaptation of individuals and family.

NUR 4756C
Scientific Theories of Nursing V: PR: NUR 3755C, 3796C or 3709. Theories and principles of psychiatric/mental health nursing. Clinical application in selected settings.

NUR 4757C

NUR 4758C
Scientific Theories of Nursing VI: PR: NUR 3755C, 3796C or 3709. Theories and principles of public health nursing. Clinical applications in selected settings.

NUR 4797
Professional Development and Issues: PR: NUR 4756C & NUR 4758C or C.I. CR: NUR 4757C. Diagnoses of professional development and issues relating to the baccalaureate graduate entering professional nursing practice.

NUR 4905C
Nursing Independent Study: PR: NUR 4756C. An opportunity for in-depth study in an area of special interest to the student.

NUR 4906
Independent Study: Directed Study.

NUR 4941
Selected Nursing Practicum: PR: NUR 4756C and 4758C. An opportunity for an in-depth clinical study in an area of special interest to the student.

OCE 1012
Oceanography and Space: Fundamentals of oceanography and space, with emphasis on the engineering aspects and uses.

OST 3782
Office Technology: PR: C.I. Basic operation and function of technological media in modern business offices, including word processing equipment.

OST 4335
Business Correspondence: Originating written business correspondence to include letters, memoranda, and business forms. (Typewriting skill recommended.)

PAD 3003
Public Administration: An examination of the basic environment, culture, and organization of public administration in the United States.

PAD 4034
The Administration of Public Policy: Problems of values, interests, and objectives and their impact on the administration of public programs, stressing the interplay between social values, policies and administration.

PAD 4104
Administrative Theory: A review of the behavioral aspects of the administrative process, its impact on organizational goal achievement and on supervisory strategies. Some social and structural pathologies affecting administrative practice.

PAD 4110
Intergovernmental Administration: Various approaches to studying and explaining the American Intergovernmental system. Emphasis on interorganizational activities, i.e., negotiation, cooperation, and coordination within the legal setting.

PAD 4131
Public Sector Project Management: Various approaches to managing projects, including using scheduling techniques such as GANTT, CPM, and PERT, as well as team building, facilitating, and leadership skills.

PAD 4204
Fiscal Management: PR: C.I. Analysis of methods of securing public funds, the process of budgetmaking, and techniques of management used in managing public funds.
Public Personnel Administration: The history, operating components, structural characteristics, and increasing impact of laws and related sanctions on personnel practices of public agencies.

Survey Research in Public Administration: Introduction to the concepts, design, methodology, computer applications, and data analysis in applied research in the public sector.

Public Administration Internship: PR: C.I. Internship in municipal, county, state, or federal government, including assignments in such fields as personnel, planning, budget, and fiscal, procurement, and public safety.

Ethics and Values in Public Administration: Examination of ethics in the public sector. Public concerns, past patterns, and individual/social aspects of ethical behavior are explored.

Introduction to Urban Planning: Issues of urbanization, regional development, land use and comprehensive planning, environmental planning, and social planning.

Urban Design: Planning techniques such as planned unit developments, capital improvements planning, and growth management, and planning methods, including needs assessment and graphic design.

Land Use and Planning Law: Review of national and local aspects of the legal underpinnings of urban planning aspects such as zoning, growth management, and environmental regulation.

Labor Relations in the Public Sector: Current trends and developments in employment relations in the public sector, especially employee organization, negotiations, and the collective bargaining process.

Dispute Resolution in the Public Sector: An examination of the skills needed to resolve disputes in the public sector through facilitation, mediation, and other alternative methods.

Local Government Operations: Operational Functions of municipal and county governments and the role of the chief executive officer.

Administrative Practice in the Public Sector: The application of various theoretical concepts to the "real world" of public administration. Policy formulation and execution are examined through the case study mode.

Cell Physiology: PR: 8 hours in biological sciences and CHM 3210 or CHM 2205. Basic physiological processes, cellular organization, exchange of materials, conversion of energy, irritability, and contractibility.

Principles of Ecology: 8 hours in biological sciences. Elements of ecosystems, biogeochemical cycling, environmental factor interactions, population dynamics, and community development.

Principles of Ecology Laboratory: CR: PCB 3043. Field and laboratory investigations of natural ecosystems, with emphasis on current methodology in ecology.

Genetics: PR: BSC 201OC. Basic principles of heredity as applied to prokaryotes and eukaryotes.

Genetics Laboratory: CR: PCB 3063. Introduction to laboratory techniques of genetics.

Immunology: PR: BSC 201OC. Basic principles of immune reactions, antigen antibody interactions, cell mediated immunity, tumor immunology, and immune therapy.

Immunology Laboratory: CR: PCB 3233. Introduction to laboratory techniques in immunology.


Human Physiology: PR: BSC 201OC or equivalent. The physiology and interrelationships of organ systems of the human body.

Limnology I: PR: PCB 3043 or C.I. Introduction to limnology and methods for freshwater ecology, with respect to physical, chemical and biological parameters.

Limnology II: PR: PCB 4302C or C.I. Primary and secondary productivity and interaction among factors such as nutrients, pollutants, temperature radiation, turbidity, and seasons.

Animal Physiology: PR: PCB 3023 or C.I. Functions of body processes occurring in animals, with emphasis on vertebrate physiology.
PCB 5045  Conservation Biology: PR: PCB 3043 and PCB 3063. Scientific basis of conservation; conservation of ecosystems, populations, exploited species, and endangered species. Weekend field trips are required.


PCB 5235  Immunopathology: PR: PCB 3233. In-depth overview of diseases due to deficiencies or over-reactivity of the immune system.

PCB 5235L  Immunopathology Laboratory: CR: PCB 5235. Use of modern immunological diagnostic laboratory procedures related to the immune system.

PCB 5675C  Evolutionary Biology: PR: PCB 3043 and PCB 3063 or C.I. Review of concepts in evolutionary biology. Emphasis on evolution at and below the species level; consideration of genetic and ecological factors in divergence and speciation.

PCB 5806  Endocrinology: PR: PCB 4723 and BCH 4053 or C.I. Mechanisms of action of hormones; interrelationship between the nervous and endocrine systems.

PCO 4203  Interviewing and Counseling: PR: PSY 2013, PPE 3003. A review of various interviewing and counseling theories and techniques as well as practical experience in interviewing and counseling procedures.

PEL 2021  Racket Sports: Study of performance and application of advanced skills, rules, and etiquette of the sports of racketball and badminton. Physiological and social values accruing from this lifetime sport.

PEL 2121  Beginning Golf: Performance and application of basic skills, rules, and etiquette. Physiological and social values accruing from this lifetime sport.

PEL 2122  Intermediate Golf: PR: PEL 2121 or equivalent competency. A study of performance and application of intermediate skills, rules, and etiquette. Physiological and social values accruing from this lifetime sport.

PEL 2320  Basic Volleyball and Softball: The analysis of offensive and defensive alignment, techniques, and strategies.

PEL 2341  Beginning Tennis: Performance and application of basic skills, rules, and etiquette. Physiological and social values accruing from this lifetime sport.

PEL 2342  Advanced Tennis: PR: PEL 2341 or equivalent competency. A study of performance and application of advanced skills, rules, and etiquette. Physiological and social values accruing from this lifetime sport.

PEL 2640  Basic Football and Basketball: The analysis of offensive and defensive alignment, techniques, and strategies.

PEM 2101  Body Development: An in-depth study of individual physical (musculo-skeletal, neuromuscular, cardio-respiratory) fitness. Emphasis on individual diagnosis, principles, procedures, and conduct of related exercise programs.

PEM 2104  Personal Fitness: Study of personal fitness concepts, with opportunities to develop individual optimal level of fitness and an improved lifestyle through high-level wellness.

PEM 2131  Strength Resistance Training: Study of fitness and strength development through resistance exercise.

PEM 2171  Aerobic Dancing: Appropriate rhythmical muscle toning movements that develop aerobic fitness; concepts taught include warm-up, flexibility, stretching, cool down, and heart rate.

PEM 2351  Cycling: Study of the techniques and physiological benefits of the lifetime sport of cycling. This course is activity oriented and requires access to any model bicycle.

PEN 1121  Elementary Swimming: For non-swimmers and beginning swimmers. Development and study of technique in the basic skills of water safety and swimming.

PEN 2101  Aquatics: PR: PEN 2122 or equivalent competency. Development and study of techniques and principles of aquatic swimming activities -- safety, strokes, fitness, water polo, synchronized swimming, skin diving, springboard diving, canoeing, and family instruction methods.

PEN 2113  Life Saving: Instruction, training, and certification in basic life-saving swimming skills.
PEN 2122
Advanced Swimming: PR: PEN 1121 or equivalent competency. Development and study of advanced techniques, endurance in basic water safety and swimming skills; intermediate technique and endurance in a wide variety of ancillary skills.

PEO 3005
Advanced Sports Analysis: Advanced analysis of sports for the purpose of teaching and coaching.

PEO 3011
Instructional Analysis in Team Sports: PR: Sophomore standing. Analysis of team sports for purposes of teaching and coaching. Includes techniques, conditioning, and strategy.

PEO 3031
Instructional Sports Activities: Analysis of individual sports for purposes of teaching and coaching. Includes techniques, conditioning, and strategy.

PEP 2201
Gymnastics: Analysis of gymnastics, including techniques, conditioning and strategy.

PEP 3204
Instructional Analysis of Gymnastics: Analysis of gymnastics including techniques of teaching at the elementary, middle and high school levels; conditioning and strategy.

PEQ 2115
Water Safety Instruction: PR: PEN 2113 or equivalent competency. Methods of teaching water safety. Includes practical application and certification.

PEQ 3101
Instructional Analysis in Aquatics: PR: Sophomore standing or C.I. Analysis of aquatic activities for purposes of teaching and coaching. Includes techniques, conditioning, and strategy.

PET 3012
Physical Education Professional Development: (Unsatisfactory/Satisfactory grading). The development in the profession of physical education, and action participation in current activities.

PET 3041
Games for the Elementary School Physical Education Program: The understanding, designing, and teaching of low-organizational game-activities for the elementary school child.

PET 3210
Sports Psychology: A review of principles of psychology related to the enhancement of satisfaction and performance in sports.

PET 3453
Coaching and Officiating: Theory and methods of coaching and officiating techniques.

PET 3461C
Teaching Physical Education in the Elementary School: PR: Admission to Junior Block or C.I. Organization, practice, and conduct of elementary school physical education, with emphasis on teaching methods.

PET 3463C
Physical Education in Secondary School: PR: Admission to Junior Block, or C.I. Study of course objectives for the secondary school curriculum and survey of methods and materials having special application for teaching Physical Education.

PET 4035C
Motor Development and Learning: PR: PE Junior standing. An analysis of the theories and factors influencing the motor development of children and the learning of gross and fine motor skills.

PET 4310C
Anatomic and Mechanical Kinesiology: Anatomic and mechanical principles involved in producing skilled human movement; applications.

PET 4312
Biomechanics: Anatomic and mechanical principles involved in producing skilled human movement; applications.

PET 4351
Physiology and Human Performance: Physiological factors that contribute to performance, with emphasis on energetics, gas transport, pulmonary mechanisms, nutrition assessment, training and performance strategies.

PET 4382
Fitness Assessment and Exercise Intervention: Aerobic function and coronary risk factors -- testing, interpretations, and exercise strategies.

PET 4401
Organization and Administration of Typical and Atypical Physical Education Program: Administering and organizing physical education programs for instruction of typical and atypical students within the total school physical education program.

PET 4601
Critical concern regarding traditional PHI 201 OH AS 3(3,0)

Introduction

Possible-worlds analysis. By Contemporary PHI 201 OH AS 3(3,0)

PHI 1100 AS 3(3,0)

Introduction to Philosophy: Same as PHI 2010 with honors-level content.
**PHI 3011**
**Philosophical Reasoning:** A study of reasoning in philosophy: the role of inconsistency, infinite regress arguments, modeling, and system building, discovery procedures, diagonalization, and contrast and paradigm case arguments.

**PHI 3130**
**Formal Logic I:** A study of sentence and predicate logics, with introduction to modal, epistemic, deontic, multi-valued, and indeterminate logics.

**PHI 3131**
**Formal Logic II:** PR: PHI 3130. Systematic study of propositional and first-order predicate logic; logistic systems and axiomatic methods; problems of metatheory, including consistency, completeness, and decidability.

**PHI 3600**
**Ethics:** An examination of the nature of moral problems, judgements and principles, with an emphasis on recent formulations in ethical theory.

**PHI 3630**
**Practical Ethical Dilemmas:** Probes practical ethical problems arising out of advancement and complexities in modern professional life. Considers one or more of the following: medicine, business, technology, law.

**PHI 3700**
**Philosophy of Religion:** An examination of basic ideas, beliefs, attitudes, and functions of religion, with emphasis upon questions of conceptual meaning and cognitive justification.

**PHI 3800**
**Aesthetics:** An investigation into the nature of human artistic experience, with special reference to questions of form, perception, and style.

**PHI 3803**
**Philosophy and Creativity:** A companion course to PHI 3800, Aesthetics. Examines the empirical and metaphysical claims made for creativity; attempts to account for intuition, genius, and intelligence.

**PHI 4220**
**Philosophy of Language:** PR: PHI 2010 and 2130. Develops philosophically illuminating descriptions of certain general features of language, such as reference, truth meaning, and necessity.

**PHI 4380**
**Epistemology:** PR: Philosophy Major or C.I. Contemporary epistemology, especially theories of justification, radical skepticism, analysis of knowledge, holism, naturalized epistemology, cognitive science, and the possible death of epistemology.

**PHI 4400**
**Philosophy of Science:** An examination of the conceptual foundations and methodology of modern science.

**PHI 4500**
**Metaphysics:** PR: Philosophy major or C.I. Topics include appearance and reality, actions and events, necessity and possibility, identity, nature of persons, mind-body dualism, causality, and free will and determinism.

**PHM 3100**
**Freedom, Justice and Human Rights:** Philosophical analysis and evaluation of selected issues arising from the interaction of the individual, society, and the state; particular attention to topics such as freedom, equality, justice, and rights.

**PHM 3350**
**Fundamentals of Marxism:** A study of the basic principles of Marxism, formulated and developed by Marx, Engels, and Lenin.

**PHP 3786**
**Existentialism:** Study of existentialist analysis and criticisms of the human situations as found in the writings of such philosophers as Kierkegaard, Nietzsche, Heidegger, Sartre, and Camus.

**PHP 4788**
**Contemporary Marxism:** An examination of some major issues and perspectives in current Marxist philosophy and social theory.

**PHY 3014C**
**Physics for Teachers I:** PR: C.I. "Hands-on" lecture-laboratory course. Statics, simple machines, density, solar energy, heat, weather, waves, optical reflections, naked eye astronomy.

**PHY 3048**
**Physics for Engineers and Scientists I:** PR: MAC 3311, PHY 2053C or high school physics. Mechanics, properties of matter, fluids, thermodynamics.

**PHY 3048L**
**Physics Laboratory for Engineers and Scientists I:** CR: PHY 3048. Laboratory experiments covering selected topics in physics related to PHY 3048.

**PHY 3048H**
**Honors Physics for Engineers and Scientists I:** PR: MAC 3311, PHY 3053C or High School Physics, and selection in the Univ. Honors program. Same as PHY 3048 with honors-level content.
Physics for Engineers and Scientists II: PR: PHY 3048, MAC 3312. Optics, light, sound, electricity, magnetism, alternating current.

PHY 3049L
Physics Laboratory for Engineers and Scientists II: CR: PHY 3049. Laboratory experiments covering selected topics in physics related to PHY 3049.

PHY 3049H
Honors Physics for Engineers and Scientists II: PR: PHY 3048H, MAC 3312. Same as PHY 3049 with honors-level content.

PHY 3053C
College Physics I: PR: MAC 1104 or MGF 1203. Kinematics, Newton’s Law, circular motion, torque, center of gravity, work, energy, power, machines, waves, sound, heat, thermodynamics, latent heat, conduction, convection, radiation.

PHY 3054C
College Physics II: PR: PHY 2053C or one year of high school physics. Fluids, Bernoulli, viscosity, kinetic theory, electricity, magnetism, induction, generators, motors, DC-AC circuits, instrumentation, semiconductors, geometrical and physical optics, X-rays, radioactivity, dosimetry.

PHY 3101
Modern Physics: PR: PHY 3049 or C.I. Thermal radiation, quanta, photoelectric effect, Compton effect, Bohr theory, de Broglie, Schrodinger equation, barrier and square well potentials, applications to atomic, molecular, solid state and nuclear physics.

PHY 3221

PHY 3323

PHY 3464
Physical Basis of Music: PR: MUT 1112 or C.I. Lectures, demonstrations, and student practicum; covers topics in wave motion, acoustics of musical instruments, musical scales, timbre, architectural acoustics, human ear, sound reproduction.

PHY 3503
Thermodynamics: PR: PHY 3049 and MAP 3302 or C.I. Introduction to equilibrium thermodynamics. Equations of state, enthalpy, entropy, internal energy, free energy, phase transitions.

PHY 3722C

PHY 3752C

PHY 3802L
Intermediate Physics Laboratory: PR: PHY 3101 or C.I. Laboratory work in basic measurements of physical constants; experiments in electronics, modern physics, nuclear physics, optics, and solid state physics. May be repeated for credit.

PHY 4222

PHY 4324
Electricity & Magnetism II: Dielectrics, magnetic materials, electromagnetic waves, reflection, complex impedance, static solutions to Laplace’s Equation, radiation from an accelerated charge & antennae, special relativity.

PHY 4424
Optics: PR: PHY 3101 and PHY 3320. Wave optics, absorption, stimulated emission, lasers, transforms, coherence, holography.

PHY 4604
Wave Mechanics: PR: MAP 3302 and PHY 3101. Basic concepts of Schrodinger wave mechanics, the quantum theory. Forms of wave function under boundary conditions. Application to the one electron atom and many particle systems.

PHY 4803L

PHY 4942C
Practicum in Physics: PR: C.I. Physics laboratories and demonstrations, and the study of recent research on the learning of physics.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 5100</td>
<td>Topics in Contemporary Physics for Teachers</td>
<td>PR: C.I. The study of recent findings in a selected area such as particle physics, surface physics, planetary atmospheres, lasers, geophysics, etc.</td>
</tr>
<tr>
<td>PHY 5200C</td>
<td>Newtonian Mechanics for Teachers</td>
<td>PR: C.I. A lab, lecture, demonstration course studying selected topics in classical mechanics.</td>
</tr>
<tr>
<td>PHY 5300C</td>
<td>Electricity for Teachers</td>
<td>PR: C.I. Circuits, multimeters, oscilloscopes, circuit elements.</td>
</tr>
<tr>
<td>PHY 5346</td>
<td>Electrodynamics I</td>
<td>PR: PHY 3320, MAP 3302, or C.I. Boundary value problems in electrostatics and magnetostatics. Maxwell equations. EM fields in matter, wave generation and propagation; wave guides, resonant cavities.</td>
</tr>
<tr>
<td>PHY 5401C</td>
<td>Optics for Teachers</td>
<td>PR: C.I. Geometrical and physical optics, spectrometers and lasers.</td>
</tr>
<tr>
<td>PHY 5431</td>
<td>Optical Properties of Materials</td>
<td>PR: PHY 4101, MAP 3302, PHY 4424. Normal modes (dipole and Raman active); microscopic theory of absorption, dispersion, and refraction; wave propagation, crystal optics; scattering mechanisms; optical activity.</td>
</tr>
<tr>
<td>PHY 5446</td>
<td>Laser Principles</td>
<td>PR: PHY 3101, MAP 3302, PHY 4424. Classical introduction to the basic principles of laser gain media, properties of resonators and modes, description of specific laser systems.</td>
</tr>
<tr>
<td>PHY 5500C</td>
<td>Thermal Physics for Teachers</td>
<td>PR: C.I. Engines, heat pumps, kinetic theory, phase changes, radiation, weather.</td>
</tr>
<tr>
<td>PHY 5606</td>
<td>Quantum Mechanics I</td>
<td>PR: PHY 4045 or C.I. Basic postulates of quantum mechanics, operators, eigenvalues, parity, potential wells, harmonic oscillator, time dependent and time independent Schrodinger equation, matrix formulation, time independent perturbation theory.</td>
</tr>
<tr>
<td>PHZ 3151</td>
<td>Computer Methods in Physics</td>
<td>PR: PHY 3048 and COP 1200 or C.I. Nonanalytical problems in physics and astronomy solved by approximation with computer assistance.</td>
</tr>
<tr>
<td>PHZ 3271</td>
<td>Geophysics</td>
<td>PR: PHY 3049 and MAP 3302. Introduction to the methods and techniques used in applied geophysics. Seismic wave propagation, flow through porous media, electromagnetic remote sensing gravitation.</td>
</tr>
<tr>
<td>PHZ 5150C</td>
<td>Computer Methods in Physics for Teachers</td>
<td>PR: C.I. Trajectories with air resistance, trajectories in rotating space colonies, refraction of waves in continuous media, luminosity patterns, temperature profiles.</td>
</tr>
<tr>
<td>PHZ 5301C</td>
<td>Nuclear Physics for Teachers</td>
<td>PR: C.I. The interaction of ionizing radiation with matter, alpha, beta, gamma decay, fission, fusion, neutron activation, half lives, and equilibrium.</td>
</tr>
<tr>
<td>PHZ 5304</td>
<td>Nuclear Physics</td>
<td>PR: PHY 4604. Nuclear forces, structure, models, reactions, radioactivity, fission, fusion, strange particles.</td>
</tr>
</tbody>
</table>
PHZ 5505 AS 3(3,0)
Plasma Physics: PR: PHY 4220, PHY 3320, or C.I. Introduction to theory and experimental basis of both weakly and highly ionized plasmas. Instabilities, plasma waves, nonlinear effects, controlled thermonuclear fusion.

PHZ 5600 AS 1(1,0)
Special Relativity for Teachers: PR: C.I. Length contraction, time dilation, simultaneity, conservation of mass-energy, conservation of momentum, Compton scattering.

PHZ 5800C AS 1(0,5,1.5)
Wave Motion for Teachers: PR: C.I. Water waves, waves on strings, sound and vibrations.

PLA 3013 HPS 3(3,0)
Law and the Legal System: A survey course designed to familiarize the student with the American legal system, ethical considerations, terminology, legal reasoning, and the role of the legal assistant.

PLA 3105 HPS 3(3,0)
Legal Research: PR: PLA 3013 or C.I. A study of the various research tools used in legal investigation and the methods used to conduct legal research.

PLA 3105 HPS 3(3,0)
Legal Writing: PR: PLA 3105. A study of legal writing format and technique and the preparation of memoranda and other legal documents, using research skills learned in PLA 3105.

PLA 3203 HPS 3(3,0)
Civil Practice and Procedure: PR: PLA 3013 or C.I. The student becomes familiar with the Florida civil procedure before trial and acquires the ability to prepare basic pleadings.

PLA 3273 HPS 3(3,0)
The Law of Torts: PR: PLA 3013 or C.I. Theories governing liability for civil injuries not arising from contractual obligations; systems and procedures used in preparation, trial and appeal of Torts cases.

PLA 3300 HPS 3(3,0)
Criminal Procedure: PR: PLA 3013 or CCJ 3020 or C.I. Rules of criminal procedure, with emphasis on Florida rules, including right to counsel, bail, search and seizure, arrest, identification, trial, and post-trial proceedings.

PLA 3504 HPS 3(3,0)
Property and Real Estate Law: PR: PLA 3013. Study of the law of real and personal property; real estate transactions and conveyances; closing procedures and title problems.

PLA 4003 HPS 1(1,0)
Careers in Legal Studies: PR: Major in Legal Studies or C.I. Applications of Legal Studies. Students will explore options in legal studies, professional development, and ethics.

PLA 4263 HPS 3(3,0)
Evidence: PR: PLA 3013 and 3203 or C.I. An examination of statutes and cases that define rules of evidence for trial courts. Primary emphasis is on the Florida Evidence Code.

PLA 4406 HPS 3(3,0)
The Law of Contracts: Study of the basic law of contracts as developed in Anglo-American law and as changed by modern statutes, including the Uniform Commercial Code. Florida contract law will be emphasized.

PLA 4483 HPS 3(3,0)
Florida Partnerships and Corporations: Statutory requirements of Florida partnerships and corporations; creation and dissolution of business organizations, responsibilities of officers and basic rights of stockholders.

PLA 4483 HPS 3(3,0)
Administrative Law: PR: PLA 3013 or PAD 3003. The law regarding governmental agencies with emphasis on the administrative process, Administrative Procedure Acts and special problems of state administrative law.

PLA 4584 HPS 3(3,0)
Land Use and Environmental Law: PR: PLA 3013, 3504. Study of the law relating to private and public restraints on land use, including planning, zoning, subdivision and building regulations, with emphasis on recent interpretations by judiciary for environmental protection.

PLA 4585 HPS 3(3,0)
Landlord and Tenant Law: PR: PLA 3013, LEA 3504. Study of the basic law regarding landlord and tenant relationship, both commercial and residential, as it applies to the practitioner.

PLA 4603 HPS 3(3,0)
Estates and Trusts: PR: PLA 3013, 3504. A study of wills and trusts, and applicable legal principles of administration of estates through the processes of the Probate Court.

PLA 4623 HPS 3(3,0)
Estate Administration: PR: PLA 4603. Study of the laws and procedures applicable to administration of estates.

PLA 4763 HPS 3(3,0)
Law Office Practices: PR: PLA 3013. Organization, operation and management of law office. Interviewing techniques and practical application of work that is done in a law office.

PLA 4803 HPS 3(3,0)
Domestic Relations Law: PR: PLA 3013, 3504. Role of the legal assistant in all phases of family and juvenile law. Fundamental procedures and principles applied by the courts to family problems.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLA 4813</td>
<td>Juvenile Law and Procedure: PR: PLA 3013 or C.I.</td>
<td>Examines both the substantive and procedural law for juvenile delinquency and dependency. Emphasis on Florida law and comparison with other jurisdictions.</td>
</tr>
<tr>
<td>HPS 3(3,0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HPS 3(1,2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLA 5937</td>
<td>Seminar in Contemporary Legal Problems: PR:</td>
<td>Analysis of current trends in legislation and court decisions and their significance to American society.</td>
</tr>
<tr>
<td>HPS 3(1,2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 3(3,0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POS 2041H</td>
<td>Honors American National Government. Same as</td>
<td>POS 2041 with honors-level content.</td>
</tr>
<tr>
<td>AS 3(3,0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS 3(3,0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POS 3173</td>
<td>Southern Politics: PR: POS 2041 or C.I. Study</td>
<td>Southern politics past and present. Emphasis on factors affecting changes in the region and the states. Southern and national relationship examined.</td>
</tr>
<tr>
<td>AS 3(3,0)</td>
<td>of southern politics past and present. Emphasis</td>
<td></td>
</tr>
<tr>
<td>POS 3233</td>
<td>Public Opinion: A substantive and theoretical</td>
<td>Study of public opinion, with emphasis on opinion formation, opinion measurement, policy linkages. May include field experiences in polling.</td>
</tr>
<tr>
<td>AS 3(3,0)</td>
<td>study of public opinion, with emphasis on opinion</td>
<td></td>
</tr>
<tr>
<td>POS 3235</td>
<td>Mass Media and Politics: PR: POS 2041 or C.I.</td>
<td>Influence of media on campaigns, public officials, public opinion, the definition of political news, and selected public policies.</td>
</tr>
<tr>
<td>AS 3(3,0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POS 3253</td>
<td>Contemporary Revolution and Political Violence:</td>
<td>Theories and cases of revolutionary change and political violence in the contemporary world.</td>
</tr>
<tr>
<td>AS 3(3,0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POS 3273</td>
<td>Voting and Elections: Theoretical and substantive</td>
<td>Theoretical and substantive inquiry into U.S. electoral system; includes focus on voter behavior as well as national and state electoral systems.</td>
</tr>
<tr>
<td>AS 3(3,0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POS 3413</td>
<td>The American Presidency: PR: POS 2041 or C.I.</td>
<td>Examination of historical and contemporary role of the presidency, including the presidential selection process and the office's evolution in status, powers, administrative responsibilities, leadership, and decision-making.</td>
</tr>
<tr>
<td>AS 3(3,0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POS 3424</td>
<td>Congress &amp; the Legislative Process: PR: POS</td>
<td>Examination of the Congress as an institution undergoing dynamic change; emphasis upon recruitment of legislators, institutional and informal rules, the committee system, legislative processes.</td>
</tr>
<tr>
<td>AS 3(3,0)</td>
<td>2041 or C.I. Examinations of the Congress as an</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POS 3443</td>
<td>Political Parties &amp; Processes: PR: POS 2041 or</td>
<td>In-depth study of the American political party system in the context of changing American politics; topics include development, organization, reforms, legislative and executive roles.</td>
</tr>
<tr>
<td>AS 3(3,0)</td>
<td>C.I.</td>
<td></td>
</tr>
<tr>
<td>POS 3703</td>
<td>Scope and Methods of Political Science:</td>
<td>Introduction to the scope and methodology of political analysis. Extensive examination of the discipline, research design and methodology.</td>
</tr>
<tr>
<td>AS 3(3,0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POS 4142</td>
<td>Metropolitan Politics: Analysis of political</td>
<td>Analysis of political patterns, processes, and issues in American communities. Intergovernmental relations and structural and political arrangements in the existing and emerging metropolitan areas.</td>
</tr>
<tr>
<td>AS 3(3,0)</td>
<td>patterns, processes, and issues in American</td>
<td></td>
</tr>
<tr>
<td>POS 4206</td>
<td>Political Psychology: The psychological analysis</td>
<td>The psychological analysis of political behavior, with emphasis on the individual rather than the political system; includes political attitudes and communication, leadership, and personality influences on politics.</td>
</tr>
<tr>
<td>AS 3(3,0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POS 4246</td>
<td>Political Socialization: PR: POS 2041 or C.I.</td>
<td>Analysis of recruitment and socialization processes. Identification of the agents and processes of political socialization in national and cross-cultural contexts.</td>
</tr>
<tr>
<td>AS 3(3,0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POS 4252</td>
<td>Politics of the Future: Exploration of possible</td>
<td>Exploration of possible political processes of the future by examining both visions of the future and specific problem areas such as ecological and technological challenges.</td>
</tr>
<tr>
<td>AS 3(3,0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POS 4265</td>
<td>Power and Policy in the U.S.: PR: POS 2041 or</td>
<td>Analysis of the bases of political power in the U.S. In-depth study of socio-economic political linkages in the policy-making process.</td>
</tr>
<tr>
<td>AS 3(3,0)</td>
<td>C.I.</td>
<td></td>
</tr>
<tr>
<td>POS 4284</td>
<td>Judicial Process &amp; Policies: Study of the formal</td>
<td>Study of the formal and informal judicial process. Legal culture, bureaucratic model, judicial recruitment and outputs, comparative judicial behavior.</td>
</tr>
<tr>
<td>AS 3(3,0)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

276
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 4412</td>
<td>Presidential Campaigning: PR: C.I. Introduces the process of candidate selection,</td>
<td>Introduces the process of candidate selection, convention behavior, actual campaign process and the transition of power.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POS 4445</td>
<td>Comparative Political Parties: The study of political party systems and processes.</td>
<td>The study of political party systems and processes. The course may include U.S., Canada, and other political systems.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POS 4604</td>
<td>American Constitutional Law II: PR: POS 2041 or C.I. Development of civil liberties and</td>
<td>Development of civil liberties and civil rights in the American federal system.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>civil rights in the American federal system.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POS 4622</td>
<td>Politics and Civil Rights: Examination of development and issues of civil rights in the</td>
<td>Examination of development and issues of civil rights in the second reconstruction. Course emphasis process and analysis of policy.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POS 4941</td>
<td>Political Science Internship: PR: C.I. Internship working with the national, state,</td>
<td>Internship working with the national, state, county or municipal government. Assignments with selected civic organization, elected or appointed official.</td>
</tr>
<tr>
<td></td>
<td>country or municipal government. Assignments with selected civic organization, elected</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or appointed official.</td>
<td></td>
</tr>
<tr>
<td>POS 5127</td>
<td>Issues In State Public Policy: PR: C.I. Analysis of policy issues occurring in the</td>
<td>Analysis of policy issues occurring in the American states, with attention given to a single state and comparative studies.</td>
</tr>
<tr>
<td></td>
<td>American states, with attention given to a single state and comparative studies.</td>
<td></td>
</tr>
<tr>
<td>POS 5157</td>
<td>Issues In Urban Public Policy: PR: C.I. Study of characteristic policy issues which arise</td>
<td>Study of characteristic policy issues which arise in urban political systems, and of various public responses to those issues.</td>
</tr>
<tr>
<td></td>
<td>in urban political systems, and of various public responses to those issues.</td>
<td></td>
</tr>
<tr>
<td>POS 5746</td>
<td>Quantitative Methods in Political Research: PR: C.I. Methods of model building and</td>
<td>Methods of model building and research design, including conceptualization and measurement of political variables; techniques of data collection and quantitative analysis and computer usage.</td>
</tr>
<tr>
<td></td>
<td>research design, including conceptualization and measurement of political variables;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>techniques of data collection and quantitative analysis and computer usage.</td>
<td></td>
</tr>
<tr>
<td>POT 3204</td>
<td>American Political Thought: From its sources to the 20th century, including liberalism,</td>
<td>From its sources to the 20th century, including liberalism, puritanism, the Federalist, the rise of industrialism, resulting social movements, modern variations.</td>
</tr>
<tr>
<td></td>
<td>puritanism, the Federalist, the rise of industrialism, resulting social movements,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>modern variations.</td>
<td></td>
</tr>
<tr>
<td>POT 3302</td>
<td>Modern Political Ideologies: A study of modern ideologies since the French Revolution</td>
<td>A study of modern ideologies since the French Revolution including liberalism, conservatism, capitalism, nationalism, fascism and anarchism.</td>
</tr>
<tr>
<td></td>
<td>including liberalism, conservatism, capitalism, nationalism, fascism and anarchism.</td>
<td></td>
</tr>
<tr>
<td>POT 4003</td>
<td>Political Theory: PR: POS 2041 or C.I. Examination of various normative approaches to the</td>
<td>Examination of various normative approaches to the study of political science, stressing contemporary developments in the field.</td>
</tr>
<tr>
<td></td>
<td>study of political science, stressing contemporary developments in the field.</td>
<td></td>
</tr>
<tr>
<td>POT 4045</td>
<td>Ancient, Medieval and Early Modern Political Philosophy: Study of the development of</td>
<td>Study of the development of political and social ideas in western thought from early Greece through the 17th century.</td>
</tr>
<tr>
<td></td>
<td>political and social ideas in western thought from early Greece through the 17th century.</td>
<td></td>
</tr>
<tr>
<td>POT 4054</td>
<td>Modern Political Philosophy: Study of the development of political and social ideas from</td>
<td>Study of the development of political and social ideas from the 18th century to the present. May be taken independently of POT 4045 (Ancient, Medieval and Early Modern Political Philosophy).</td>
</tr>
<tr>
<td></td>
<td>the 18th century to the present. May be taken independently of POT 4045 (Ancient,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medieval and Early Modern Political Philosophy).</td>
<td></td>
</tr>
<tr>
<td>POT 4314</td>
<td>Contemporary Democratic Theory: PR: POS 2041 or C.I. Study of democratic theories,</td>
<td>Study of democratic theories, emphasizing liberal democracy and its critics, elitist theories, participatory democracy, citizen participation, and relevance of empirical research to democratic theory.</td>
</tr>
<tr>
<td></td>
<td>emphasizing liberal democracy and its critics, elitist theories, participatory democracy,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>citizen participation, and relevance of empirical research to democratic theory.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>personality characteristics.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>emphasizing the relationship between the nervous system and behavior.</td>
<td></td>
</tr>
<tr>
<td>PSB 3442</td>
<td>Drugs and Behavior: PR: PSY 2013. Effects of certain drugs upon the nervous system,</td>
<td>Effects of certain drugs upon the nervous system, behavior, and society. Causes of drug abuse and impact on mental health.</td>
</tr>
<tr>
<td></td>
<td>behavior, and society. Causes of drug abuse and impact on mental health.</td>
<td></td>
</tr>
<tr>
<td>PSB 4013C</td>
<td>Introduction to Neuropsychology: PR: PSB 3002. Study of brain function, with particular</td>
<td>Study of brain function, with particular emphasis on human behavior. Lecture/Lab.</td>
</tr>
<tr>
<td></td>
<td>emphasis on human behavior. Lecture/Lab.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>instrumentation, research and clinical application of biofeedback. Training in use of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>biofeedback equipment. Lec./Lab.</td>
<td></td>
</tr>
<tr>
<td>PSB 5005</td>
<td>Physiological Psychology: PR: PSY 2013 or C.I. An advanced survey of the physiological</td>
<td>An advanced survey of the physiological basis of behavior, emphasizing the relationship between the nervous system and behavior.</td>
</tr>
<tr>
<td></td>
<td>basis of behavior.</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Title</td>
<td>Prerequisites</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>PSC 1512</td>
<td>Physical Science: PR: MAC 1104 or MGF 1203. Fundamental laws of mechanics, heat, waves, electricity, magnetism; chemical processes and equations, properties of gases, liquids, solids, solutions. Mathematical analysis and logic applied to conclusions, inferences.</td>
<td></td>
</tr>
<tr>
<td>PSC 1512L</td>
<td>Physical Science Lab: CR: PSC 1512. Experiments to apply the scientific method to observation and analysis in mechanics, heat, light, electricity and magnetism, chemical and physical transformations.</td>
<td></td>
</tr>
<tr>
<td>PSY 2013</td>
<td>General Psychology: An introductory survey of the basic principles, theories, and methods of contemporary psychology.</td>
<td></td>
</tr>
<tr>
<td>PSY 2013H</td>
<td>Honors General Psychology: Same as PSY 2013 with honors-level content.</td>
<td></td>
</tr>
<tr>
<td>PSY 2023</td>
<td>Careers in Psychology: PR: PSY 2013. An examination of various career opportunities in Psychology, including educational entry requirements, and related professional issues. Graded &quot;S&quot; or &quot;U.&quot;</td>
<td></td>
</tr>
<tr>
<td>PSY 3204</td>
<td>Statistical Methods in Psychology: PR: STA 2014 and PSY 3214. Standard scores, confidence intervals, sampling distributions, hypothesis testing, correlation and regression as applied to research in psychology.</td>
<td></td>
</tr>
<tr>
<td>PSY 3302</td>
<td>Psychological Measurement: PR: PSY 2013 and STA 2014 or 3023. A study of the theory underlying psychological tests and measurements procedures, including reliability, validity, and item analysis.</td>
<td></td>
</tr>
<tr>
<td>PSY 3303</td>
<td>Applied Testing: PR: PSY 3302: A critical review of the substantive and psychometric properties of selected psychological tests; procedures for the construction of psychological instruments.</td>
<td></td>
</tr>
<tr>
<td>PSY 3624</td>
<td>Parapsychology: PR: PSY 2013. An examination of the history and development of research on paranormal phenomena, with special emphasis on recent developments in extrasensory perception and psychokinesis.</td>
<td></td>
</tr>
<tr>
<td>PSY 3951</td>
<td>Undergraduate Field Work: PR: C.I. Placement in a community agency for supervised experience in applications of psychology to community problems.</td>
<td></td>
</tr>
<tr>
<td>PSY 4215</td>
<td>Advanced Research Methods in Psychology: PR: STA 2014, PSY 3214, PSY 3204. Design, analysis, and interpretation of complex research projects in psychology.</td>
<td></td>
</tr>
<tr>
<td>PSY 4604</td>
<td>History and Systems of Psychology: PR: EXP 3404 and PPE 3003. Historical development of psychology, with emphasis on classical theoretical positions.</td>
<td></td>
</tr>
<tr>
<td>PUP 3204</td>
<td>Environmental Politics: An examination of politics and policy-making concerning issues of conservation, pollution and development of land, air, and water resources.</td>
<td></td>
</tr>
<tr>
<td>PUP 3314</td>
<td>Minorities in American Politics: Historical and contemporary role of minority groups in the American political process, including an examination of their electoral significance and relevant legislative, executive, and judicial policies.</td>
<td></td>
</tr>
<tr>
<td>PUP 4003</td>
<td>American Public Policy: PR: POS 2041 or C.I. Policy formation, implementation and evaluation, with a focus upon contemporary American problems, including the malapportionment of societal power and social conflict.</td>
<td></td>
</tr>
<tr>
<td>PUP 4009</td>
<td>Topics in Public Policy: Intensive analysis of a current policy problem. Sample topics include education, growth management, housing, affirmative action, welfare, and transportation. May be repeated once.</td>
<td></td>
</tr>
<tr>
<td>PUP 4323</td>
<td>Women and Politics: An examination of demands for change in the social, political, and economic status of women and the policy response of the system.</td>
<td></td>
</tr>
<tr>
<td>PUP 4503</td>
<td>Government &amp; Science: PR: C.I. Examination of interface between science and government. Focus is upon governmental support for science, social accountability, and role of the scientist-policy maker in comparative context.</td>
<td></td>
</tr>
<tr>
<td>PUP 4510</td>
<td>Space Policy: An examination of the politics and policy-making involved with the US space program in the context of domestic demands and other international space programs.</td>
<td></td>
</tr>
</tbody>
</table>
PUP 4602 AS 3(3,0)
Politics of Health: PR: C.I. Analysis of public health policies. Primary focus upon political processes, policymakers, and interest group interventions, including consumers and policy outcomes. Comparative health policies.

PUP 5058 AS 3(3,0)

PUP 5058 AS 3(3,0)
Issues in International Public Policy: PR: C.I. Analysis of domestic and foreign inputs influencing foreign policy formulation and execution, with extended analysis devoted to executive structures and decision-making behavior.

PUR 3100 AS 3(2,1)
Writing for Public Relations: PR: Grammar Proficiency Examination, and typing test. Development of skills in writing for public relations.

PUR 4000 AS 3(3,0)
Public Relations: Principles and practice of Public Relations including techniques, research, tools, publicity, and management.

PUR 4800 AS 3(3,0)
Public Relations Campaigns: PR: PUR 4000 or C.I. Planning and execution of public relations campaigns for profit and non-profit organizations.

RAT 3001 HPS 3(3,0)

RAT 3241 HPS 3(3,0)
Clinical Radiobiology: Application of the principles and theories of radiobiology to the clinical practice of radiation therapy

RAT 3242 HPS 2(2,0)
Oncologic Pathology: PR: Acceptance to program. Study of neoplastic diseases, including causative factors, characteristics, histologic grading, staging and treatment.

RAT 3614 HPS 2(2,0)
Radiation Therapy Physics I: PR: Acceptance to program. Study of radiation production, properties, interactions, measurement, and protection.

RAT 4027 HPS 3(3,0)
Radiation Oncology I: Methods of radiation therapy treatment of malignant conditions of the skin, oral cavity, pharynx, sinuses, thyroid, digestive and respiratory systems.

RAT 4028 HPS 3(3,0)
Radiation Oncology II: Methods of treatment of malignant conditions of the nervous system, eye, reproductive system, urinary system, connective tissue, and lympho-reticular system.

RAT 4618C HPS 4(3,3)
Radiation Therapy Physics II: PR: RAT 3614. Study of radiation protection techniques, design considerations, modes and characteristics of decay, handling of radionuclides and clinical dosimetry.

RAT 4619C HPS 4(3,3)
Radiation Therapy Physics III: PR RAT 3614. Study of treatment planning principles and techniques, including multiple beam therapy, rotation therapy, arc therapy, and irregular field techniques.

RED 3012 ED 3(3,0)
Basic Foundations of Reading: PR: Junior Standing or C.I. Introduction to reading: principles, procedures, and current practices. Study of specific techniques and materials for word attack and comprehension.

RED 4519 ED 3(3,1)
Diagnostic and Corrective Reading Strategies: PR: RED 3012 or C.I. and admission to Phase II. An investigation of the needs of individual learners in reading instruction. Organization and techniques for promoting optimum reading growth. Concurrent school experiences required.

RED 5147 ED 3(3,0)
Developmental Reading: Principles, procedures, organization, and current practices in the elementary reading program. Materials and methods of instruction.

RED 5514 ED 3(3,1)
Classroom Diagnosis and Development of Reading Proficiencies: PR: RED 5147 or equivalent. Classroom diagnosis and corrective teaching in reading; instructional materials. Case study required.

REE 3043 BA 3(3,0)
Fundamentals of Real Estate: PR: Junior standing. Emphasis placed upon the application of basic tools of economics, finance, and marketing to solve private and public sector real estate problems.

REE 4103 BA 3(3,0)

REE 4204 BA 3(3,0)
Real Estate Finance: PR: FIN 3403. Focus on the fundamentals of real estate finance utilizing tools of financial and economic analysis.

279
Real Estate Investment Analysis: PR: FIN 3403. Focus on real estate decision-making in the private sector utilizing tools of financial and economic analysis.

World Religions: Basic features and historical background on Confucianism, Taoism, Hinduism, Buddhism, Judaism, Christianity, and Islam.

The Hebrew and Christian Heritage: The Old and New Testaments as religious documents; their socio-political context in the Ancient Near East.

Hinduism: A study of Hindu religious ideas and scriptures; the Vedas, the Upanishads, the Bhagavad Gita, and later works.

Religions of China and Japan: A study of basic concepts of Shinto, Taoism, Confucianism, Buddhism, and Zen.

Islam: An inquiry into the foundations and development of Islamic thought from earliest times to modern times in various parts of the world.

The Prophets: Ancient and Modern: Ancient prophets (e.g. Moses, Buddha, Jesus, Mohammed) as originators of new faiths, the role of men like Ghandi and Mao as prophets in the modern world.

Studies in Christianity: An inquiry into the foundations and development of Christian thought in various parts of the world.

Studies in Judaism: An inquiry into the foundations and development of Jewish thought in various parts of the world.

Mysticism: The models and aims of the mystic, both Eastern and Western, as seen in art, music, and literature.

World Myths and Their Meaning: A comparative study of myths from various cultures; common themes and their archetypal meaning.

Modern Theology: Explores the revolution in religious thought prompted by Kierkegaard, Tillich, Barth, Niebuhr, and Bonhoeffer, and the secular trends suggested by Nietzsche, Altizer, Cox, and Hamilton.

Introduction to Respiratory Therapy: PR: Admission to the professional upper-division Respiratory Therapy Program. Fundamental respiratory principles and practices will be studied. Introduction to the profession and basic methods are covered. Lecture and lab.

Mechanical Ventilation: PR: RET 3026C. Function and use of mechanical ventilators, patient evaluation methods. All forms of ventilatory support will be studied. Lecture and laboratory.

Respiratory Disease Assessment: PR: RET 3026C. Physical examination of the chest, demonstrating equipment use, methods and theory. Chest radiography will be extensively covered. Lecture and demonstration.


Pediatric Respiratory care: PR: C.I. The study of childhood respiratory diseases, congenital problems, infections, metabolis disorders, and AIDS.


Clinical Practice II: PR: C.I. Patient care with advanced respiratory equipment. Tracheostomy care. Introduction to cardiopulmonary resuscitation. Introduction to critical care units. Advanced life support techniques and equipment.


### Radiographic Procedures
**I:** PR: RTE 3528C or C.I. Provides fundamental knowledge of radiographic positioning, equipment manipulation, and quality evaluation of radiographic studies of the chest, abdomen, routine contrast studies, and the upper extremity.

**II:** PR: RTE 3528C or C.I. Continuation of radiographic positioning, equipment manipulation, and quality evaluation of radiographic studies of the shoulder, bony thorax, lower extremity, vertebral column, cranium, and facial bones.

**Special Radiographic Procedures:** PR: RTE 3549C or C.I. An introduction to special imaging techniques in radiology, including vascular and nonvascular procedures.

### Physics of Image Production
PR: College Physics II. Physics of diagnostic radiology, including radiation production, physical principles of generator operation, and characteristics of electromagnetic radiation.

### Clinical Education I
PR: RTE 3123C or C.I. Supervised clinical practice in radiographic procedures, radiation protection, patient care, equipment.

### Clinical Education II
PR: RTE 3806 or C.I. Supervised clinical practice in performing radiographic or radiation therapy procedures, with emphasis on competency evaluation of clinical practices.

### Clinical Education III
PR: RTE 3816 or C.I. Supervised clinical practice in radiographic or radiation therapy procedures, with emphasis on competency evaluation of clinical practices.

### Radiation Monitoring Practicum: Application of health physics principles through on the job experience at medical, governmental and/or industrial facilities under the direct supervision of a qualified expert.

### Pathophysiology
PR: C.I. The study of radiologic science in the diagnosis and treatment of disease.

### Methods in Radiology Management
Concepts of radiology department management, including principles, personnel management, evaluation and improvement techniques, budgeting, financial considerations and legal aspects, and JCAH quality assurance specifications.

### Radiological Administrative Practice
A directed practice in the management of a radiology department, with application of theory and methodology.

### Directed Study in Clinical Education
PR: EVT 3371 or EDG 4321 or C.I. Directed activity in classroom instruction in radiologic technology.

### Radiobiology
PR: RTE 3387C. A study of the effects of ionizing radiation on biologic systems. The responses at the cellular and total organism level are investigated.

### Advanced Imaging Modalities
PR: RTE 3564 and CGS 1060 or C.I. A study of the physical principles and applications of computer tomography, digital imaging, ultrasound, magnetic resonance imaging, and other specialized modalities.

### Quality Assurance
PR: RTE 3387C or C.I. Quality control evaluation of radiographic, fluoroscopic and tomographic imaging systems. Implementation procedures, equipment selection criteria, and processing quality control are also addressed.

### Anatomy for the Medical Imager
A study of the normal anatomical structures and interrelationships of structures as demonstrated in a radiographic and cross-sectional imaging reference.

### Clinical Education V
PR: RTE 4876 or C.I. Advanced clinical practice in diagnostic radiography, radiation therapy, nuclear medicine, special procedures, and other diagnostic imaging.

### Clinical Education IV
PR: C.I. Supervised clinical practice; emphasis on competency evaluation of routine radiographic examinations or radiation therapy procedures.

### Clinical Externship in Specialized Imaging
PR: ARRT Eligibility. Provide the necessary clinical skills to produce diagnostic images using methods incorporated with computerized scanning and angiographic studies.

### Foundations of Broadcasting
Nature of the media, the mechanics of operation, history, economics, programming, and internal and external control.
RTV 3200
Broadcast Techniques: PR: RTV 3000. Introduction to audio production and multi-camera video production. Instruction in audio mixers, microphones, and tape recorders and TV studio production equipment (cameras, switchers, etc.)

RTV 3210
Radio Production: PR: RTV 3200 or C.I. The production of music (live and recorded), talk, interview, discussion, sports, and documentary, including performance (talent and announcing) and direction.

RTV 3223
Lighting for Video: PR: RTV 3200. Basic lighting techniques for both studio and location, single and multiple-camera video production.

RTV 3231
Broadcast Announcing and Performance: PR: RTV 3200 or C.I. A study of communication problems on camera and microphone. Development of performance skills in announcing, interviewing, narrating, and reporting. Lab TBA.

RTV 3260
Electronic Field Production/Video Editing: PR: RTV 3000. Introduction to non-studio video instruction, including electronic field production and electronic news gathering. Utilization of portable video equipment and control track videotape editing equipment.

RTV 3270
Broadcast Newswriting: PR: Grammar Proficiency Examination and departmental typing exam. The study and practice of writing news for radio and television.

RTV 3301
Advanced Broadcast Newswriting: PR: RTV 3300. The writing of in-depth news items, including documentaries, features, and investigative materials.

RTV 3501
Broadcast Copywriting: PR: Grammar Proficiency Examination and departmental typing exam. Preparation of written commercial copy for radio and television and public service.

RTV 3810
Broadcast Promotion: PR: RTV 3200. Examination of techniques that stations use to keep listeners and viewers and to attract new ones. Use of advertising and merchandising.

RTV 3942
Television Practicum: PR: RTV 3200 and C.I. Primarily an activity course. Student will serve in some position of responsibility for UCF Weekly News or other TV activity. Can be repeated.

RTV 4206
Television Directing: PR: RTV 3200 and RTV 3260. Preparation and direction of programs, with emphasis on dramatic values of composition.

RTV 4270
Radio Production and Programming: PR: RTV 3200 or C.I. The study and production of current radio formats and their effects on today’s radio listener.

RTV 4402
Broadcast Criticism: PR: RTV 3000 for RTV majors. Evaluation and criticism of past and present radio and television programs, policies, and critics. Concentration on the problem of criteria development.

RTV 4403
Radio, Television and Society: PR: RTV 3000 for RTV majors. A study of the impact of electronic media upon the habits, customs, and thinking of our times. Considerations of internal media problems.

RTV 4404
International Broadcasting: Comparative analysis of national broadcast systems. World broadcasting as a social, political, and economic force.

RTV 4600
Non-Commercial Broadcasting: The uses of the electronic mass media for the dissemination of non-commercial programming. Public broadcasting and educational uses of the media.

RTV 4700
Regulation of Broadcasting: PR: RTV 3000. Federal, state, local and self-regulatory agencies and practices which govern electronic media.

RTV 4800
Broadcast Management: PR: RTV 4700. Consideration of broadcast management problems in station operations at the local, regional, and national levels.

RUS 1120
Elementary Russian Language and Civilization I: Designed to initiate the student to the major language skills: listening, speaking, reading, and writing.

RUS 1121
Elementary Russian Language and Civilization II: PR: RUS 1120 or equivalent. Continuation of RUS 1120.

RUS 2210
Intensive Russian Conversation: PR: One year of Russian or equivalent. Practical use of the language, leading toward fluency and correctness in speaking.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUS 2230</td>
<td>Intermediate Russian Language and Civilization I</td>
<td>PR: RUS 1121 or equivalent. Designed to continue development of language skills at the intermediate level, together with a review of grammar, idiomatic expressions, extensive reading, and study of Russian culture.</td>
</tr>
<tr>
<td>RUS 2231</td>
<td>Intermediate Russian Language and Civilization II</td>
<td>PR: RUS 2230 or equivalent. Continuation of RUS 2230, with emphasis on Russian civilization.</td>
</tr>
<tr>
<td>RUS 3240</td>
<td>Russian Conversation</td>
<td>PR: RUS 2231 or equivalent. Development of skills in conversation and comprehension through practice. This course may be repeated for credit. When repeated, credit will apply to general electives only.</td>
</tr>
<tr>
<td>RUS 3420</td>
<td>Russian Composition</td>
<td>PR: RUS 2231 or equivalent. Development of skills in composition. This course may be repeated for credit. When repeated, credit will apply to general electives only.</td>
</tr>
<tr>
<td>RUS 4411</td>
<td>Advanced Russian Conversation</td>
<td>PR: RUS 3240. An advanced conversation course on directed topics from various domains of public life and disciplines.</td>
</tr>
<tr>
<td>RUS 4421</td>
<td>Advanced Russian Composition</td>
<td>PR: RUS 3420. An in-depth study of stylistic and grammatical mechanisms of Russian literary styles.</td>
</tr>
<tr>
<td>RUW 3100</td>
<td>Survey of Russian Literature I</td>
<td>PR: RUS 2231. A survey course of the major Russian writers and poets from Pushkin to Turgeniev.</td>
</tr>
<tr>
<td>RUW 3101</td>
<td>Survey of Russian Literature II</td>
<td>PR: RUS 2231. A survey course of the major Russian writers and poets from Dostoyevsky to the present.</td>
</tr>
<tr>
<td>RUW 3370</td>
<td>The Russian Short Story</td>
<td>PR: RUS 2231. Masterpieces of the Russian short story from Pushkin to Bulgakov.</td>
</tr>
<tr>
<td>RUW 4330</td>
<td>Russian Poetry</td>
<td>PR: RUS 2231. A survey of Russian poetry from Zhukovsky to the present.</td>
</tr>
<tr>
<td>RUW 4481</td>
<td>Soviet Underground and Emigré Literature</td>
<td>PR: RUS 2231. A study of Soviet underground and dissident literature from Zamyatin to the present.</td>
</tr>
<tr>
<td>SCE 3310</td>
<td>Teaching Science in Elementary School</td>
<td>PR: Junior standing or C.I. Selected concepts; organizing for instruction; techniques; evaluation procedures.</td>
</tr>
<tr>
<td>SCE 3330</td>
<td>Science Instructional Analysis</td>
<td>PR: EDG 4321 or C.I. Course objectives for a school curriculum and methods and materials.</td>
</tr>
<tr>
<td>SCE 5238</td>
<td>Inquiry In the Sciences</td>
<td>PR: Graduate standing or science certification. Teaching science by inquiry in the secondary school and development of inquiry lessons.</td>
</tr>
<tr>
<td>SED 3335</td>
<td>Speech Instruction Analysis</td>
<td>PR: EDG 4321 or C.I. Study of instructional programs in speech; objectives, materials, techniques, organization for instruction, evaluation procedures, current research.</td>
</tr>
<tr>
<td>SLS 2311</td>
<td>Overview of Selected Medical Careers</td>
<td>Introduction to medical careers in medicine, dentistry, veterinary medicine, osteopathic medicine, optometry, chiropractic medicine, podiatry, and pharmacy. Graded &quot;S&quot; or &quot;U.&quot;</td>
</tr>
<tr>
<td>SOP 3004</td>
<td>Social Psychology</td>
<td>PR: PSY 2013. Effects of social situations and social variables on the behavior of individuals.</td>
</tr>
<tr>
<td>SOP 3724</td>
<td>The Psychology of Racial Prejudice</td>
<td>PR: PSY 2013. Examination of literature relating to prejudice toward ethnic groups; effects of racism on individuals, development and maintenance of prejudice, and possible ways to reduce prejudice.</td>
</tr>
<tr>
<td>SOP 3742</td>
<td>Psychology of Women</td>
<td>PR: PSY 2013. Examination of the psychological impact of changing sex roles on women in modern society. Topics include childrearing, working women, and sex differences in personality and cognition.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>SOW 3104</td>
<td>Assessing Human Development: Skill development in assessing “person-in-environment” throughout the life cycle. Study of the interaction of bio-psychosocial, cultural, and systemic influences on human functioning.</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>SOW 3110</td>
<td>Assessing Individual Behavior: The development of social work skills in assessing individuals functioning at various life stages from major theoretical perspectives.</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>SOW 3111</td>
<td>Assessing Human Systems: Development of skills in assessing families, groups, organizations, and communities, their impact on human functioning, and their potential for providing social support.</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>SOW 3203</td>
<td>Social Welfare and Community Resources: Study of social welfare, programs and services, including socio-cultural, political, economic, and historical forces affecting changes in societal responses to human needs.</td>
<td>3(2,1)</td>
</tr>
<tr>
<td>SOW 3232</td>
<td>Social Welfare Policies and Issues: PR: SOW 3203 or equivalent. Development of skills needed to critically analyze social welfare goals, structures, and practices. Proposes improvements in societal resource systems.</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>SOW 3300</td>
<td>Generalist Practice in Social Work: Study of social work functions, knowledge, values, and skills. Development of ability to use a generalist model of practice.</td>
<td>3(2,1)</td>
</tr>
<tr>
<td>SOW 3352</td>
<td>Interpersonal Skills in Social Work Practice: Study and practice of interviewing, group leadership, written communication, and oral presentations, in consensual as well as conflictual contexts of social work.</td>
<td>3(1,2)</td>
</tr>
<tr>
<td>SOW 3401</td>
<td>Social Work Research: Study of quantitative and qualitative methods of building knowledge for social work and the ethical use of research in professional practice.</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>SOW 4341</td>
<td>Micro-Level Roles and Interventions in Social Work: PR: SOW 3300, SOW 3352. Study and simulated practice of roles and tasks in systemic problem solving with individuals, families, and supportive and remedial groups.</td>
<td>3(1,2)</td>
</tr>
<tr>
<td>SOW 4343</td>
<td>Macro-Level Roles and Interventions in Social Work: PR: SOW 3300, SOW 3352. Study and simulated practice of roles and tasks in systemic problem solving to obtain and improve social welfare resources within organizations and communities.</td>
<td>3(1,2)</td>
</tr>
<tr>
<td>SOW 4381</td>
<td>Agency Management: Basic administrative practice, including planning, staffing, delegating, managing and developing personnel, monitoring services, budgeting, and fund raising.</td>
<td>3(1,2)</td>
</tr>
<tr>
<td>SOW 4431</td>
<td>Evaluating Social Work Practice and Service Programs: PR: SOW 3403, SOW 3000. The study of systematic data collection and of measurement of change in individuals, families, groups, programs, and communities.</td>
<td>3(2,1)</td>
</tr>
<tr>
<td>SOW 4510</td>
<td>Field Education: PR: Completion of required courses in major: CR: SOW 4522, SOW 4620. Supervised learning experiences in agencies which relate social work practice to theory, involving 420 clock hours in the field.</td>
<td>9(0,9)</td>
</tr>
<tr>
<td>SOW 4522</td>
<td>Field Education Seminar: PR: Completion of required courses in major: CR: SOW 4510, SOW 4620. Weekly seminar to examine the field experience and to relate theory with practice situations.</td>
<td>3(2,1)</td>
</tr>
<tr>
<td>SOW 4602</td>
<td>Social Work in Health Settings: Study of social work roles, interventions, and issues related to helping patients in health settings.</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>SOW 4620</td>
<td>Social Work with Minorities: PR: SOW 4341, SOW 4343, or C.I. Study of oppressed groups and relevant social work interventions; skill development in work with, and in behalf of, people of minority groups.</td>
<td>3(2,1)</td>
</tr>
<tr>
<td>SOW 4644</td>
<td>Social Services for the Elderly: Development of interventive skills for obtaining, providing, and improving social services in behalf of elderly persons and their families.</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>SOW 4654</td>
<td>Children's Services: Study of societal responses to children's needs. Development of skills for preventing family breakdown, placing children in alternative care, and reuniting children with their families.</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>SPA 3000</td>
<td>Detection and Prevention of Speech and Hearing Problems: An elective course for non-majors. Live and videotaped demonstrations of speech and hearing cases. Specific suggestions for prevention.</td>
<td>3(3,0)</td>
</tr>
</tbody>
</table>
Introduction to Communicative Disorders: Etiology, symptoms, and methods of diagnosing and treating communicative disorders. For beginning and prospective majors in communicative disorders.

Clinical Observation and Practice: PR: SPA 3550, C.I. Observation and supervised participation in speech pathology and audiology in the university clinic and local clinics.

Physiological Bases of Speech and Hearing: PR: SPA 3002. An introduction to the anatomical, physiological, and physical elements underlying the communication process.

Basic Phonetics: Physiological descriptions and visual notation of speech patterns and regional dialects.

Basic Phonetics Laboratory: Students will have practical experiences in transcription of normal and deviant speech.

Introduction to Signed English and Culture of the Deaf. Vocabulary and grammar through introductory level. Conceptual basis of ASL discussed.


Clinical Methods in Communicative Disorders Laboratory: Students will have practical experience in analysis of live and videotaped diagnosis and therapy sessions.

Fundamentals of Speech and Hearing Science: Lectures and demonstrations in basic acoustics and speech acoustics.

Audiology I: Introduction to physics of sound, anatomy of hearing mechanism, pure tone audiometry, hearing aids, problems of the hearing handicapped. Clinical skills development will be required.

Audiology II: PR: SPA 4030. An overview of medical aspects of hearing loss, electrophysiological audiometry, and other differential diagnostic testing.


Communicative Disorders: Articulation Laboratory: Students will have practical experience in diagnosis and treatment in articulation disorders.


Nonorganic Speech Disorders Laboratory: Students will have practical experience in diagnosis and treatment in nonorganic speech disorders.


Organic Speech Disorders Laboratory: Students will have practical experience in observations of organic speech disorders.

Audiology II: PR: SPA 4032. An overview of medical aspects of hearing loss, electrophysiological audiometry, and other differential diagnostic testing.


Introduction to American Sign Language: Development of ASL vocabulary and grammar. Deaf culture, literature, research examined.

Intermediate American Sign Language: Expansion of ASL vocabulary with increased development of knowledge concerning deaf culture.
Intermediate American Sign Language: Conversation. Emphasis on refining fluency receptively and expressively. Practicum with the deaf community.


Communicative Disorders: Language Laboratory: Students will have practical experience in diagnosis and treatment in language disorders.

Augmentative Communications Systems: PR: LIN 3710, SPA 4032. Students will learn the rudiments of nonverbal communication systems, for example, Bliss, Rebus, Manual Sign, Language Boards, and finger spelling.

Practicum in Communicative Disorders.

Survey of Communicative Disorders: A survey of speech, language, and hearing disorders for habilitative personnel and other interested professionals.

Physiological Acoustics: PR: SPA 4032; Graduate status or C.I. Lectures, readings, and experiments pertaining to the subjective reception of sound.

Fluency Disorders: PR: Graduate status or C.I. Identification and evaluation of disorders of rhythm. Emphasis will be on methods of intervention in disorders of fluency.

Fluency Disorders Laboratory: PR: Graduate status or C.I. Practical application of clinical skills in fluency disorders.

Differential Diagnosis of Auditory Disorders: PR: SPA 4032; Graduate status or C.I. Clinical techniques in pure tone speech, acoustic impedance, and electrohyologic response audiometry.

Aural Habilitation/Rehabilitation: PR: Graduate status or C.I. Principles and procedures involved in speech and language acquisition management, utilization of residual hearing, speech reading, and the use of hearing aids.

Differential Diagnostic in Speech and Language: PR: SPA 6204, 6403, 6211, 5805. Administration and interpretation of evaluation techniques, including standardized tests, will be presented. Emphasis on techniques allowing for differential diagnosis of speech and language disorders.

Differential Diagnosis in Speech and Language Laboratory: PR: SPA 6204, 6403, 6211, 5805. Assignment to diagnostic teams to apply the diagnostic techniques presented in SPA 5553. Experiences include test administration, interviewing, writing diagnostic reports, and oral presentations.

Therapeutic Communication: PR: Graduate status or C.I. Practical interviewing and counseling in the area of communicative disorders.

Administration and Management of Communicative Disorders Programs: PR: SPA 3002. Methods and techniques for organization and administration of speech-language and hearing disorders in public school, hospital, rehabilitation center, and private practice facilities.

Research in Communicative Disorders: PR: STA 4163, graduate status or C.I. Introduces the student to empirical research in the area of communicative disorders. Emphasis is on hypothesis testing, methodology, analysis, and interpretation of results.

Fundamentals of Oral Communication: Use of the body and voice; participation in various speaking situations; planning, organizing, and delivering public speeches.

Honors Fundamentals of Oral Communication: PR: University Honors Program. Same as SPC 1600 with honors-level content.

Interpersonal Communication: Nature of the communication process; variables affecting the process and the individuals involved. Analysis of communication models, interactant behavior, situational cues, verbal and non-verbal messages.

Parliamentary Procedures: Principles and rules governing participation and leadership in the conduct of formal business meetings.
Group Interaction and Decision-Making: A study of small group processes. Attention is given to problem solving, leadership emergence, conformity behavior, and group member role responsibilities.

Leadership Through Oral Communication: A theoretical and practical investigation of leadership in oral communication situations, principles of parliamentary law, and approaches to problem solving.

Argumentation and Debate: PR: SPC 1600 or C.I. Study and practice in the preparation and delivery of argumentative speeches emphasizing argument, evidence, and organization.

Advanced Public Speaking: PR: SPC 1600 or C.I. Advanced training in selecting and organizing materials for various types of speeches. Practice in thinking and speaking before audiences.

Nonverbal Communication: Review of current behavioral research in such areas as proxemics, kinesics, physical characteristics, tactile communication, and paralanguage. Lectures are supplemented by frequent nonverbal exercises.

Studies in Listening: Analysis of current trends, professional literature, and resource materials bearing upon the teaching of listening. Practice in listening; preparing listening experiences; oral and written reports.

Group Dynamics: A study of human behavior in group situations.

Attitudes and Communication: PR: Grammar Proficiency Examination. A survey of the immediate and direct ways in which persuasive communications and social groups come to influence attitudes.

Rhetoric of Social and Political Action: PR: Junior standing. A critical investigation of social and political speaking within contemporary American society, including agitative rhetoric of political dissent.

Evolution of Communication Theory: General Survey: Major communication trends from classical era to the present. Comparison of Aristotelian and non-Aristotelian rhetorics. Contributions of principal figures will be discussed.

Elementary Spanish Language and Civilization I: Designed to initiate the student to the major language skills: listening, speaking, reading, and writing.

Elementary Spanish Language and Civilization II: PR: SPN 1120 or equivalent. Continuation of SPN 1120.

Elementary Spanish Study Abroad: Elementary Spanish language and civilization taught in the native environment.

Business Spanish I: Spanish language and culture for beginning Spanish language students from a business professional perspective. Emphasis on communicative skills in a professional setting. (Does not fulfill University foreign language requirement.)

Business Spanish II: Spanish language and culture for beginning Spanish language students who have already begun Spanish language studies. Does not fulfill foreign language requirement.

Intermediate Spanish Language and Civilization I: PR: SPN 1121 or equivalent. Designed to continue development of language skills at the intermediate level.

Intermediate Spanish Language and Civilization II: PR: SPN 2230 or equivalent. Continuation of SPN 2230, with emphasis on Spanish civilization.

Intermediate Spanish Study Abroad: PR: Elementary Spanish. Designed to continue development of language skills at the intermediate level taught in the native environment.

Business Spanish III: Continuation of Business Spanish II. (Does not fulfill University foreign language requirement.)

Business Spanish IV: Continuation of Business Spanish III. (Does not fulfill University foreign language requirement.)
SPN 3241  AS 3(3,0)
Spanish Conversation: PR: SPN 2231 or equivalent. Development of skills in conversation and comprehension through practice. This course may be repeated for credit. When repeated, credit will apply to general electives only.

SPN 3420  AS 3(3,0)
Spanish Composition: PR: SPN 2231 or equivalent. Development of skills in composition. This course may be repeated for credit. When repeated, credit will apply to general electives only.

SPN 4410  AS 3(3,0)
Advanced Spanish Conversation: PR: SPN 3241. Advanced conversation on directed topics from various disciplines: literature, art, psychology, philosophy, music, business, and the sciences.

SPN 4420  AS 3(3,0)
Advanced Spanish Composition: PR: SPN 3420. Readings and written imitations of modern literary styles in the form of themes, sketches, poems, and original stories.

SPN 4450  AS 3(3,0)
Stylistics: PR: SPN 3420 or equivalent. An intense study of textural criticism. An examination of the relationship between language and literature, explications and linguistic analysis of literary texts.

SPN 4510  AS 3(3,0)
Spanish Civilization and Culture: PR: SPN 3241 or SPN 3420. A study of Spanish civilization and culture from Pre-Roman times to the present. Conducted in Spanish.

SPN 4520  AS 3(3,0)
Latin American Civilization and Culture: PR: SPN 3241 or SPN 3420. An overview of the currents in Latin American culture and civilization from the Pre-Columbian period to the present. Conducted in Spanish.

SPN 4800  AS 3(3,0)
Spanish-American Syntax: The course examines the Spanish language from its beginning to the present, with special emphasis as it is written and spoken in Latin America and the U.S.

SPW 3100  AS 3(3,0)
Survey of Spanish Literature I: PR: SPN 2231 or equivalent. Main literary currents and works from the Middle Ages through the Eighteenth century.

SPW 3101  AS 3(3,0)
Survey of Spanish Literature II: PR: SPN 2231 or equivalent. Main literary currents and works of the Nineteenth century to the present.

SPW 3130  AS 3(3,0)
Survey of Latin-American Literature I: PR: SPN 2231 or equivalent. Main literary currents and works from the colonial period to the Nineteenth Century Romanticism.

SPW 3131  AS 3(3,0)
Survey of Latin-American Literature II: PR: SPN 2231 or equivalent. Main literary currents and works of the Nineteenth century from the Realism to the present.

SPW 3370  AS 3(3,0)
Spanish Short Story: PR: SPN 2231 or equivalent. A study of representative 19th and 20th-century Spanish short stories and their authors.

SPW 4310  AS 3(3,0)

SPW 4460  AS 3(3,0)
Nineteenth Century Spanish Literature: PR: SPW 3101. A study of the representative authors and works in Spanish Romanticism, Realism, and Naturalism.

SPW 4480  AS 3(3,0)
Twentieth Century Spanish Literature: PR: SPW 3101. A study of the representative authors and works in drama and the novel.

SPW 4600  AS 3(3,0)

SPW 4601  AS 3(3,0)
Cervantes II: PR: SPW 3100. Don Quixote (Part II).

SPW 4720  AS 3(3,0)

SPW 4770  AS 3(3,0)
Caribbean Spanish Literature: An overview of the literature of the Spanish-speaking Caribbean countries from colonial time to the present.

SSE 3312  ED 4(4,0)
Teaching Social Science in the Elementary School: PR: Admission to Phase II or C.I. Selected themes, problems, and concepts; organizing for instruction; techniques; evaluation procedures.

SSE 3333  ED 4(3,2)
Social Science Instructional Analysis: PR: EDG 4321 or C.I. Study of instructional programs in social sciences; objectives; materials; techniques; organization of instruction; evaluation procedures; current research.

289
Advanced Inquiry in the Social Studies: PR: Basic Teacher Certificate or C.I. Teaching by inquiry in the new social studies with a development of inquiry episodes.


Statistical Methods I: PR: MAC 1104 or MGF 1203. First methods course introducing probability and statistical inference, including estimation, hypothesis testing, binomial and normal distributions, sample size.

Honors Statistical Methods I: PR: Honors Program Student; Calculus desired but not necessary. Same as STA 3023 with honors-level content.

Probability and Statistics for Engineers: PR: MAC 3312 and computer programming. Axioms of probability; combinatorial and geometrical probability; probability distributions; measures of location and dispersion; sampling and sampling distributions; estimation and tests of hypotheses; engineering applications.

Statistical Problem Solving: PR: STA 4164. Course presents approaches to solving a wide variety of statistics problems. Emphasizes assumptions, parametric and nonparametric approaches to problems in all areas of statistics.

Computer Processing of Statistical Data: PR: STA 4163 and knowledge of a programming language. Use of packages such as SAS, BMD, SPSS for data validation, description and analysis of data, regression and analysis of variance and covariance.

Statistical Methods II: PR: STA 3023 or STA 3032. Methods of analyzing data, statistical models, estimation, tests of hypotheses, regression and correlation, an introduction to analysis of variance, chi-square, and nonparametric methods.

Statistical Methods III: PR: STA 4163. A continuation of STA 4163, including further study of regression, analysis of variance and covariance and multiple comparisons.

Biostatistical Methods: CR: STA 4163. Introduction to the application of statistical principles and methods to problems in medical, biological, and health sciences.


Statistical Theory I: PR: STA 3023 or STA 3032; CR: MAC 3313. Probability axioms, discrete and continuous sample spaces, conditional probability, independence, one-dimensional random variables, moment generating functions, transformations, jointly distributed random variables.


Nonparametric Statistical Methods: PR: STA 3023 or STA 3032. Distribution-free tests on location and dispersion, goodness of fit tests, tests of independence, measures of association, nonparametric analysis of variance.

Statistical Quality Control: PR: STA 3023 or STA 3032. Statistical concepts and methods applied to the control of quality of manufactured products.

Probability and Statistics for Engineers: PR: STA 3032 or equivalent. Theory and applications of discrete and continuous random variables, hypothesis tests, confidence intervals, regression analysis and correlation.


Statistical Analysis: PR: STA 3023; not open to students who have completed STA 4164. Data analysis; statistical models; estimation; tests of hypotheses; analysis of variance, covariance, and multiple comparisons; regression and nonparametric methods.
STA 5505 Categorical Data Methods: PR: STA 4163 or STA 5206. Considers discrete probability distributions, contingency tables, measures of association, and advanced methods, including loglinear modeling, logistic regression, McNemar's Test, Mantel-Haenszel test.


SUR 3101C Surveying: PR: MAC 3311 and Junior standing. Theory and field practice in surveying measurements and the reduction and adjustment of field data.

SYA 3110 The Development of Social Thought: PR: SYG 2000. An overview of theories concerning the nature of man as a "social being." The nature of society from the beginnings of the scientific study of man's life to World War II.

SYA 3120 Modern Sociological Thought: PR SYG 2000. A study of major European and American contributors to modern sociology since World War II.


SYA 3400 Research Methods and Statistics: PR: SYG 2000 and one other sociology course.

SYA 4350 Social Research Practicum: PR: SYA 4450 and C.I. Application of advanced research designs and data analysis techniques to assigned projects, with an emphasis on data management.

SYA 4450 Data analysis: PR SYA 3300 and STA 2014. Advanced social research design and analytical skills. Emphasis on social data management, various modes of social data analysis, interpretation, integration, presentation, and report writing.


SYD 3700 Race and Ethnic Minorities in the United States: Theoretical analysis of the emergence, maintenance, and disruption of patterns of racial and ethnic stratification.

SYD 3800 Sex Roles in Modern Society: The traditional and changing roles of women and men viewed in a sociological perspective.

SYD 4020 Population: Concerned with the study of human population, its distribution, composition, and change.

SYD 4680 Soviet Sociology: Analysis of relations of various Soviet institutions such as education, religion, and the Communist party to society; class structure and social problems.

SYG 2000 General Sociology: Introduction to the sociological perspective and the scientific study of sociological concepts, theories, processes, and methods used in understanding contemporary human behavior in group interaction.

SYG 2000H Honors General Sociology: Same as SYG 2000, with honors-level content.

SYG 3010 Social Problems: Analysis of major social problems such as mental disorders, sexual deviance, racial discrimination, poverty, community disorderization, and violence.


SYO 3360 Social Organization and Human Relations: Analysis of business, government, and industrial organizations. Topics include organizational theory, social systems, social structure, effects of technology, motivation, leadership, decision-making, and human relations.
THE TAX and methods of determining decision-making, and vice versa. Organizational influences and interpersonal behavior on attitude formation and change, and in social change.

The Family: PR: SYG 2000. The family viewed functionally as a distinct social and cultural complex in the contemporary United States. Topics include: mate selection, marriage, adjustment, parenthood, post marriage.

Sociology of Education: PR: SYG 2000. This course examines the sociological dimensions of the educational institutions, including the impact of the social structure on learning and the role of education in social change.

Political Sociology: Sociological analysis of political and parapolitical groups; socioeconomic variable of voting behavior, power elites; societies and systems of government.

Medical Sociology: Analysis of patient beliefs and behavior, health practitioners, the social organization of hospitals and health services, contemporary problems in the delivery of health care.

Collective Behavior: PR: SYG 2000. Analysis of relatively unstructured social situations, such as mobs, crowds, etc. as well as more structured forms of collective behavior such as social movements.


Sociology of Deviant Behavior: An examination of the nature, types, and societal reactions to deviant behavior; special emphasis on the process of stigmatization and the emergence of deviant subcultures.

Criminology: Chief causes of anti-social behavior and current methods of prevention and reform. Effects of heredity and environment, prevalence of delinquency and crime, penal institutions.

Juvenile Delinquency: Types of delinquency behavior found among juveniles; possible causes and ways society attempts to treat the various forms of delinquency.

Sociology and Law: The relationship between law and society, including the functions of law in its organization, social and economic consequences, jury selection, and modem trends.

Sociology of Alcoholism: Introduction to the nature of alcoholism and review of its impact on society.

Sociology of Popular Music: This course examines the role of popular music in the process of social change and in reflecting American culture. Consideration is given to the nature of the popular music business.

Sociology and Sport: Utilization of sociological concepts and theories to investigate sport as a social institution. Includes subjects of racism, sexism, drug abuse, violence, and current issues of sport.


Sociology of Drug Abuse: Analysis of the socio-culture elements of the drug culture.

Sociology of Aging: Sociological aspects of aging in America.

Personal Income Tax: A study of federal income tax designated to convey basic tax concepts and skills related to the individual taxpayer. Not open to accounting majors.

Federal Income Tax I: PR: Junior standing and ACG 3103 with a grade of "C" or better or C.I. Concepts and methods of determining taxable income of individuals, and selected topics.

Federal Income Tax II: PR: ACG 4123, TAX 4001 and meet school admission requirements. Concepts and methods of determining taxable income for partnerships and corporations, and selected topics.

THE 1020

THE 1020H AS 3(2,1)
Theatre Survey—Honors: An honors-level over-view of the art and craft of the theatre.

THE 2071 AS 3(2,2)
Cinema Survey: A broad cultural approach to the study of cinema.

THE 2925 AS 2(0,10)
Theatre Practicum I: Open to all students interested in participating in productions of University Theatre. May be repeated for credit. Primarily an activity course.

THE 3112 AS 3(3,0)
Theatre History I: PR: None. Development of theatre art from the earliest times through the seventeenth century.

THE 3113 AS 3(3,0)
Theatre History II: PR: None. Development of theatre art from the seventeenth century to the twentieth century.

THE 3251 AS 3(2,2)
History of the Motion Picture: Development of the film industry; its social and economic impact. Major films and trends in context.

THE 3260 AS 3(2,2)

THE 3305 AS 3(3,0)
Drama Analysis: A study of a method of analysis for dramatic scripts and an intensive examination of selected modern and period play scripts.

THE 3370 AS 3(3,0)
Modern Drama: Drama from Ibsen to Theatre of the Absurd, with reference to developing production styles and dramatic movements.

THE 3925 AS 2(0,10)
Theatre Practicum II: PR: THE 2925 and C.I. Primarily an activity course. Student will serve in some position of responsibility in production. May be repeated for credit.

THE 4072 AS 3(3,0)
Principles of Motion Picture Art: PR: THE 3251 or C.I. Aesthetic consideration of the motion picture as art. May be repeated for credit.

THE 4073 AS 3(2,2)
Film Production: PR: C.I. Professional 16mm film production, scripting, production, sound, and editing of theatre department ensemble films. May be repeated twice.

THE 4760C AS 3(3,0)
Theatre for the Schools: PR: None. Designed to aid the student in teaching theatre. Philosophy, methodology, objectives, planning, evaluative techniques, and production procedures relative to performance.

THE 4800 AS 3(2,2)
Children's Theatre: An introduction to the bases of theatre production for young people. Production of children's theatre, play selection, costumes, management, and touring.

TPA 2204 AS 3(2,2)
Technical Theatre Production II: PR: None. A continuation of TPA 2210 (Service on crew as required).

TPA 2210 AS 3(2,2)
Technical Theatre Production I: PR: None. History, theory, and practice of technical theatre production. Service or crew as required.

TPA 3060 AS 3(2,2)
Scene Design I: PR: THE 1020, TPA 2210 or C.I. Study of and practice of scene design; perspective drawing, fundamentals of design, and techniques of scene painting.

TPA 3081 AS 3(3,0)
Scene Painting: PR: TPA 3060 or C.I. Study of the art and craft of painting for the theatre. Research into period designs and execution of examples of a variety of styles.

TPA 3220 AS 3(2,2)
Stage Lighting: PR: THE 1020 and TPA 2210 or C.I. Study of stage lighting techniques, practices, and equipment. (Service on light crew as required).

TPA 3221 AS 3(2,2)
Lighting Design: PR: TPA 3220. Continuation of Stage Lighting with emphasis on theory, style, and individual lighting design projects.

TPA 3230 AS 3(2,2)
Theatrical Costume Construction and Technique: A continuation of THE 3260, in which emphasis is placed on design and construction, planning, and execution of costumes. (Service on crew as required.)

TPA 3250 AS 3(2,2)
Make-up Technique: Analysis and design of stage make-up.

TPA 3400 AS 3(3,0)
Theatre Management: Study of the development, organization, management, funding, and promotion of theatre programs.

TPA 4061 AS 3(2,2)
Advanced Design: PR: TPA 3060, 3221 or THE 3260. Continuation of design series, with emphasis on planning and executing scenery, lighting, and/or costume designs.
TPP 2110 Acting I: Emphasis on movement, motivation, voice, characterizational techniques, makeup, and other basic requirements for acting.

TPP 2700

Stage Diction: The role of the voice in the art of acting through practice in vocal characterization.

TPP 3111

Acting II: PR: TPP 2110 or C.I. Continuation of TPP 2110. May be repeated for credit.

TPP 3130

Classical Mime: PR: TPP 2110 or C.I. Introduction to the art of mime, with an emphasis on mask work and illusion.

TPP 3310

Directing I: PR: TPP.2110 or C.I. Fundamental principles of theatrical directing. Each student to direct short scenes and a one-act play for laboratory presentation and critique.

TPP 4150

Scene Study and Character Development: PR: C.I. The study, development and training of performance skills, with an emphasis on scene study and character development.

TPP 4220

Audition Techniques: Preparation of audition material for musical, dinner, outdoor, and repertory theatres, as well as graduate schools. Emphasis on resumes and unions.

TPP 4260


TPP 4311

Directing II: PR: C.I. Techniques of period styles directing. Cuttings from Greek theatre, Shakespeare, Restoration, Experimental, and Musical theatre will be presented and criticized in a laboratory format.

TTE 4004

Transportation Engineering: PR: EGN 3613 and STA 3032. Investigation of all forms of transportation—highway, rail, water, air. Systems approach to planning, design, construction, operation, and administration of transportation networks.

TTE 4601 EN 3(3,0)

Urban Systems Design. PR: TTE 4004. Project course on design of transportation and urban systems using engineering design methodologies.

TTE 5205 EN 3(3,0)

Traffic Engineering: PR: STA 3032. Study of operator and vehicle characteristics, and design for street capacity, signals, signs, and markings.

TTE 5805 EN 3(3,0)

Geometric Designs of Transportation Systems: PR: TTE 4004. Study of geometric and construction design elements in the engineering of transportation systems.

TTE 5835 EN 3(3,0)

Pavement Design: PR: CEG 4101C. Pavement types, wheel loads, stresses in pavement components, design factors such as traffic configurations, environment, and economy.

URP 4026 AS 4(4,0)

Community Planning and Development: Contemporary planning concepts, roles of the planning practitioner, and the influence of the political, economic, and social environments on public and quasi-public agencies.

VIC 3000 AS 3(3,0)

Visual Communication: A study of the visual system of man and the influences of the visual media on modern society.

ZOO 1020 AS 2(2,0)

Biology of Man: An introduction to man as a member of the animal kingdom; his taxonomy, anatomy, growth, reproduction, development, heredity, evolution, behavior, diseases, and population growth.

ZOO 2010C AS 4(2,4)

General Zoology: PR: High school biology or C.I. Introduction to zoology; structure, function and representative groups; current concepts in zoological sciences.

ZOO 3303C AS 4(2,6)

Vertebrate Zoology: PR: 6 hours of zoology or C.I. Evolution and classification followed by an introduction to vertebrate ecology, natural history, and behavior.

ZOO 3713C AS 5(3,6)

Comparative Vertebrate Anatomy: PR: ZOO 2010C. The vertebrate animals, relationship of organs and systems, and their phylogenetic significance.

ZOO 3733C AS 4(3,3)

Human Anatomy: PR: BSC 2010C or equivalent. Structure of the human body. Not open to students in ZOO 3713C or equivalent.

ZOO 4203C AS 4(3,3)

Invertebrate Zoology: PR: 8 hours of biology or C.I. Taxonomy, anatomy and ecology of the invertebrate animals.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>PR/AS</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZOO 4753C</td>
<td>Vertebrate Histology</td>
<td>BSC 2010C and ZOO 2010C</td>
<td>Microanatomical detail plus appropriate developmental and functional considerations of major cell types, primary tissues, organs, and organ systems. Survey of modern animal-tissue microtechnique.</td>
</tr>
<tr>
<td>ZOO 4880C</td>
<td>Fisheries Management</td>
<td>ZOO 2010C or C.I.</td>
<td>Fisheries Management of freshwater environments to include identification, sampling methods, farming and hatchery operations, propagation and population estimates.</td>
</tr>
<tr>
<td>ZOO 5456C</td>
<td>Ichthyology</td>
<td>ZOO 3303C or C.I.</td>
<td>Introduction to the biology of the fishes, their classification, evolution, and life histories.</td>
</tr>
<tr>
<td>ZOO 5463C</td>
<td>Herpetology</td>
<td>6 hours of zoology or C.I.</td>
<td>Introduction to the biology of the amphibians and reptiles, their classification, evolution, and life histories.</td>
</tr>
<tr>
<td>ZOO 5475C</td>
<td>Ornithology</td>
<td>6 hours of zoology or C.I.</td>
<td>Introduction to the biology of birds, their classification, evolution, and life histories.</td>
</tr>
<tr>
<td>ZOO 5483C</td>
<td>Mammalogy</td>
<td>6 hours of zoology or C.I.</td>
<td>Introduction to the biology of mammals, their classification, evolution, and life histories.</td>
</tr>
<tr>
<td>ZOO 5483C</td>
<td>Essentials of Neuroanatomy</td>
<td>Human/Comparative Anatomy, Human/Animal Physiology or C.I.</td>
<td>Fundamental concepts of both morphological and functional organization of the nervous system. Primary emphasis on human structure.</td>
</tr>
<tr>
<td>ZOO 5745C</td>
<td>Zoogeography</td>
<td>8 hours of zoology or C.I.</td>
<td>Principles and concepts concerning regional patterns of animal distributions of the world, both past and present.</td>
</tr>
</tbody>
</table>
FACULTY

The date indicates the first year of employment at the University of Central Florida.

ABBOTT, DAVID W., Professor of Psychology
   (1968), B.A., M.S., Ph.D. (University of Massachusetts)

ABEL, EILEEN M., Assistant Professor of Social Work
   (1978), A.B., M.S.W. (University of Maryland)

ABRAMOWITZ, BENJAMIN L., Visiting Instructor of Management

ACIERNO, LOUIS J., Professor of Cardiopulmonary Sciences
   (1981), B.S., M.D. (Georgetown University)

ADAMS, LASCELLES, Visiting Instructor of Computer Science
   (1985), B.S., M.B.A., M.S. (University of Central Florida)

ADICKS, RICHARD R., Professor of English
   (1968), B.A.E., M.A., Ph.D. (Tulane University)

ALSAKA, Y. A., Assistant Professor of Engineering
   (1986), B.S., M.S., Ph.D. (University of Florida)

ALTMAN, STEVEN, President of the University and Professor of Management

ANDERSON, B. BETTY, Professor of Education
   (1968), B.A., M.A., Ed.D. (University of Maryland)

ANDERSON, HENRY R., Director, School of Accounting and Professor of Accounting

ANDERSON, LOREN A., Associate Professor of Engineering
   (1982), B.S., M.S., Ph.D. (University of Dayton), P.E. (Florida and Ohio)

ANDERSON, SUSAN, Assistant Professor of Communication

ANDREWS, LARRY C., Professor of Mathematics
   (1972), B.S., M.S., Ph.D. (Michigan State University)

ANTHONY, JOBY M., Associate Professor of Mathematics
   (1970), B.S., M.A.M., Ph.D. (North Carolina State University)

AZIMI, CYRUS, Visiting Instructor of Psychology
   (1985), B.S., M.A., Ph.D. (Florida State University)

BAILY, REBECCA A., Assistant Professor of Education
   (1988), B.S., M.A., Ph.D. (Florida State University)

BAKER, GRAEME L., Professor of Chemistry
   (1966), B.S., M.S., Ph.D. (Montana State University)
BALADO, CARL, Assistant Professor of Education  

BANDY, DALTON D., Professor of Accounting  
(1985), B.S., M.B.A., Ph.D. (The University of Texas at Austin), C.P.A.

BARNES, BETH, Associate Professor of English  
(1975), B.A., M.A., Ph.D. (University of North Carolina at Chapel Hill)

BARR, CAROL J., Assistant Professor of Medical Record Administration  
(1986), B.S., M.A. (University of Central Florida)

BARRON, ANN E., Visiting Assistant Professor  
(1989), B.S.Ed., M.A. (University of Central Florida)

BARSCH, KARL-HEINRICH, Associate Professor of Foreign Languages  
(1977), B.A., M.A., Ph.D. (University of Colorado)

BASS, MICHAEL, Vice President of Research and Professor of Engineering Science  
(1987) B.S., M.S., Ph.D. (University of Michigan)

BASSIOUNI, MOSTAFA, Assistant Professor of Computer Science  
(1981), B.S., M.S., Ph.D. (Pennsylvania State University)

BAUER, CHRISTIAN S., JR., Chair, Department of Computer Engineering and Professor of Engineering  
(1970), B.S.I.E., M.S.E., Ph.D. (University of Florida), P.E. (Florida)

BAUMBACH, DONNA J., Associate Professor of Education  
(1978), B.S., M.S., Ed.D. (Indiana University)

BEADLE, JAMES S., Associate Professor of Education  
(1968), B.S., M.S., Ph.D. (Michigan State University)

BECK, BARRY F., Director, Florida Sinkhole Research Institute  
(1983), B.S., M.S., Ph.D. (Rice University), P. Geol. (Georgia)

BECK, JAMES K., Acting Chair, Mechanical Engineering and Aerospace Sciences and Associate Professor of Engineering  
(1970), B.S.A.E., M.S.E. (University of Central Florida), P.E. (Florida)

BECKER, DONALD C., Assistant Professor of Criminal Justice  
(1976), B.A., M.Ed. (Wayne State University)

BECKER, STEPHEN, Distinguished Lecturer in English  
(1986), B.A. (Harvard College)

BELKERDID, MADJID A., Associate Professor of Engineering  
(1979), B.S.E., M.S.E., Ph.D. (University of Central Florida), P.E. (Florida)

BELL, MARTHA SCOTT, Assistant Professor of Education  

BENSON, CYNTHIA, Visiting Instructor of Political Science  
(1985), B.S., M.A. (Ohio University)

BERGNER, JOHN F., JR., Professor of Health Sciences  
(1975), B.S., M.S.P.H., Ph.D., M.P.H. (University of North Carolina)

BERRINGER, ORVILLE M., Preprofessional Coordinator and Professor of Biological Sciences  
(1981), B.S., M.S., Ph.D. (University of Oregon)

BERRY, WALDRON, Professor of Management  

BIEGEL, JOHN E., Professor of Engineering  
(1982), B.S.I.E., M.S.E.S., Ph.D. (Syracuse University), P.E. (Florida and New Mexico)

BIRAIMAH, KAREN L., Assistant Professor of Education  

BISHOP, PATRICIA J., Associate Professor of Engineering  
(1978), B.S.E., M.S.M.E., Ph.D. (Purdue University), P.E. (Florida)

BLAU, BURTON I., Associate Professor of Psychology  
(1972), B.A., M.A., Ph.D. (Southern Illinois University)

BLEDSOE, CAROL C., Instructor in Communication  
(1970), B.S., M.A. (University of Oklahoma)

BLEDSOE, ROBERT L., Professor of Political Science  
(1968), A.B., M.A., Ph.D. (University of Florida)
BLOCK, DAVID L., Director, Florida Solar Energy Center and Professor of Engineering
(1968), B.S., M.S., Ph.D. (Virginia Polytechnic Institute), P.E. (Florida)

BLUME, DELORYS M., Associate Professor of Education

BOGUMIL, WALTER A., JR., Associate Professor of Management
(1972), B.S., M.B.A., Ph.D. (University of Georgia)

BOJACK, JOCELYN C., Visiting Instructor of Marketing
(1988), B.B.A., M.B.A. (Delta State University)

BOLEMON, JAY S., Associate Professor of Physics
(1968), B.S., Ph.D. (University of South Carolina)

BOLTE, JOHN R., Vice President, Administration and Finance and Professor of Physics
(1968), B.A., M.A., M.S., Ph.D. (State University of Iowa)

BOREMAN, GLENN D., Associate Professor of Religion
(1984), B.S., M.S., Ph.D. (University of Arizona), P.E. (Florida)

BOSTON, RALPH C., Director of Community College Relations
(1967), B.S., Ed.M. (University of Buffalo)

BOYTE, JUDITH P., Director, Office of Academic Support and Information Services
(1984), B.A., M.P.A. (University of Central Florida)

BOZEMAN, WILLIAM C., Professor of Religion

BRADLEY, A. VAL, Distinguished Lecturer of Management
(1987), B.A., (Bucknell University)

BRAIN, PRISCILLA V., Instructor in English
(1984), B.A., M.A. (University of Central Florida)

BRAUN, BRADLEY M., Assistant Professor of Economics
(1986), B.S., M.A., Ph.D. (Tulane University)

BRAY, DENNIS W., Assistant Professor of Military Science
(1989), B.S. (Arizona State University)

BRENAN, DAVID C., Assistant Professor of Legal Studies
(1983), B.S., J.D. (University of Florida)

BRENAN, JOHN J., Professor of Physics
(1968), B.S., M.S., Ph.D. (Georgia Institute of Technology)

BRIGHAM, ROBERT C., Professor of Mathematics and Computer Science
(1970), B.S., M.S., Ph.D. (New York University)

BROPHY, JAMES C., Associate Professor of Psychology
(1969), B.A., Ph.D. (Vanderbilt University)

BROWN, HAROLD K., Assistant Professor of Engineering
(1985), B.S., M.S., Ph.D. (Ohio State University)

BROWN, WILLIAM R., Professor of Sociology
(1972), B.S., M.S., Ph.D. (Purdue University)

BROWNE-KRIMSLEY, VALERIE A., Coordinator and Visiting Assistant Professor - Brevard Campus

BRUMBAUGH, DOUGLAS K., Professor of Education
(1969), B.S., M.Ed., Ed.D. (University of Georgia)

BUCHANAN, RAYMOND W., Professor of Communication
(1970), B.A., M.A., Ph.D. (Louisiana State University)

BUCHOFF, RITA B., Instructor of Education

BURNETTE, CHARLES D., Instructor in Management
(1978), B.S., M.B.A. (Northwest Missouri State University)

Burr, D. E. SCOTT, Assistant Professor of Psychology
(1972), B.A., M.A., Ph.D. (University of Colorado)

BURROUGHS, WAYNE A., Professor of Psychology
(1969), B.A., M.A., Ph.D. (University of Tennessee)

BUTLER, JOHN F., Assistant Professor of Communication
(1971), B.A., M.A., Ph.D. (University of Florida)
BYERS, WILLIAM S., Professor of Engineering Technology

CALDWELL, DENISE C., Assistant Professor of Physics
(1985), B.S., M.A., M.Ph., Ph.D. (Columbia University)

CALLARMAN, MARY HELEN, Director of Academic Support, Undergraduate Studies

CALLARMAN, WILLIAM G., Associate Professor of Management

CAMP, DONNA J., Assistant Professor of Education

CARON, RICHARD M., Assistant Professor of Mathematics
(1972), B.A., Ph.D. (Louisiana State University)

CARROLL, WAYNE E., Associate Professor of Engineering
(1971), B.S.A., M.S., Ph.D. (Virginia Polytechnic Institute), P.E. (Florida)

CARROLL, WILLIAM F., Professor of Engineering
(1985), B.S., M.S., Ph.D. (University of Illinois), P.E. (California, Florida and Illinois)

CERUTI, ROBERT E., Chair, Department of Aerospace and Professor of Aerospace Studies
(1986) B.A., M.P.A. (Golden Gate University, San Francisco)

CERVONE, ANTHONY V., Professor of Foreign Languages
(1968), B.A., Ph.D. (St. Louis University)

CHAI, BRUCE, Professor of Physics
(1989), B.S., Ph.D. (Yale University)

CHARBA, JULIUS F., Associate Professor of Biological Sciences
(1969), B.S., M.S., Ph.D. (Washington State University)

CHASE, ARLEN F., Assistant Professor of Anthropology
(1984), B.A., Ph.D. (University of Pennsylvania)

CHASE, DIANE Z., Assistant Professor of Anthropology
(1984), B.A., Ph.D. (University of Pennsylvania)

CHAVDA, JAGDISH J., Associate Professor of Art
(1972), B.F.A., M.F.A. (Michigan State University)

CHENEY, JOHN M., Associate Professor of Finance

CHOW, LEE, Assistant Professor of Physics
(1983), B.S., Ph.D. (Clark University)

CHOWDHURY, ATAUR R., Assistant Professor of Physics
(1985), B.S., M.S., Ph.D. (Clark University)

CHRISTODOULOU, CHRISTOS G., Assistant Professor of Engineering
(1984), B.S., M.S., Ph.D. (North Carolina State University)

CHUDEREWICZ, RUSSELL P., Visiting Instructor of Economics
(1989), B.S. (Slippery Rock University)

CHURTON, MICHAEL W., Chair, Department of Exceptional Education and Physical Education and Professor of Education
(1988), B.S., M.Ed., Ed.D., (University of Southern Mississippi)

CLARK, EUGENE A., Assistant Professor of Education
(1969), Ph.B., M.A. (University of Central Florida)

CLARK, LAURA, Visiting Assistant Professor of Medical Records
(1988), M.P.A. (Golden Gate University)

CLARKE, WENTWORTH, Professor of Education
(1970), B.S., M.S., Ed.D. (University of Nebraska)

CLAUSEN, CHRIS A., III, Professor of Chemistry
(1969), B.S. Ph.D. (Louisiana State University)

CLAYTON, RONNIE J., Chair, Department of Finance and Associate Professor of Finance
(1988), B.S., M.A., Ph.D., (University of Georgia)

CLELAND, TROY S., Associate Professor of Education
(1969), B.S., M.S., Ph.D. (Florida State University)

CLEVELAND, PAUL A., Visiting Assistant Professor of Economics
(1989), B.S., M.S., Ph.D. (Texas A&M University)
COLBOURN, TREVOR, Professor of History

COLBY, PETER W., Associate Professor of Public Administration
(1985), B.A., Ph.D. (Brandeis University)

COLEMAN, DANIEL R., Director of Institutional Research and Assistant Professor of Education
(1972), B.S., M.S., Ph.D. (Florida State University)

CONGDON, KRISTIN G., William and Alice M. Jenkins Endowed Chair in Community Arts and Associate Professor of Art
(1989) B.A., M.S., Ph.D. (University of Oregon)

CONN, DANIEL J., Professor of Military Science
(1986), B.A., M.S. (Florida Institute of Technology)

CONN, JEFFREY, Visiting Lecturer of Physics
(1985), B.S., M.A. (Wayne State University)

COOK, IDA J., Associate Professor of Sociology
(1976), B.A., M.S., Ph.D. (North Carolina State University)

CROOK, KATHY S., Assistant Professor of Legal Studies
(1983), B.A., J.D. (University of Florida)

COOPER, C. DAVID, Associate Professor of Engineering
(1980), B.S., M.S., Ph.D. (Florida, Texas)

CORE, HERMAN E., Assistant Professor of Cardiopulmonary Sciences
(1985), B.S., M.S. (Southwest Texas State University)

CORNELL, RICHARD A., Associate Professor of Education

CORNELT, JEFFREY W. Assistant Professor of Education
(1989) B.S., M.Ed., Ph.D. (Ohio State University)

COTTRELL, LARRY K., Associate Professor of Computer Science
(1976), B.S., M.S., Ph.D. (Purdue University)

COWGILL, ROBERT G., Associate Dean, College of Education and Professor of Education
(1969), B.S., M.S., Ph.D. (Indiana State University)

CREPEAU, RICHARD C., Professor of History
(1972), B.S., M.A., Ph.D. (Florida State University)

CRITTENDEN, DANIEL J., Assistant Professor of Cardiopulmonary Sciences
(1982), B.A., M.S., Ph.D. (University of North Dakota)

CUNNINGHAM, GLENN N., Professor of Chemistry
(1969), B.S., M.S., Ph.D. (North Carolina State University)

CUTCHINS, CONSTANCE E., Instructor in Statistics
(1985), B.A., M.A. (Pennsylvania State University)

Daly, TIMOTHY P., Assistant Professor of Education
(1989) B.S., M.A., Ph.D. (University of Alabama)

DANSE, STEPHEN P., Lecturer of Accounting
(1982), B.S., M.B.A., Ph.D. (University of Georgia), C.P.A.

DANKO-MCGHEE, KATHERINE E., Assistant Professor of Education
(1989) B.A., M.A., Ph.D. (Ohio State University)

DAVIS, DUANE L., Acting Chair, Department of Marketing and Associate Professor of Marketing

DAVIS, ROBERT H., Associate Professor of Communication
(1977), B.A., M.A., Ph.D. (Ohio State University)

DAVIS-ERIKSEN, MARIANNE J., Coordinator and Visiting Assistant Professor of Nursing-Daytona Beach Campus
(1989) M.S.N. (SUNY at Stony Brook)

DAY, A. EDWARD, Associate Professor of Economics
(1983), B.A., M.A., M.S., Ph.D. (Purdue University)

DEANE, PAUL D., Assistant Professor of English
(1986), B.A., M.A., Ph.D. (University of Chicago)
DEBNATH, LOKENATH, Chair, Department of Mathematics and Professor of Mathematics
(1983), B.S., M.S., Ph.D., D.I.C., Ph.D. (University of London)

DEBO, JOHN C., Assistant Professor of Engineering Technology
(1979), B.S.E.E., M.Ed., M.S.E. (University of Central Florida), P.E.
(Florida)

DEES, DAVID R., Assistant Dean, Undergraduate Studies and Associate Professor of Sociology
(1972), B.A., M.A., Ph.D. (University of Notre Dame)

DENNING, RICHARD G., Chair, Department of Engineering Technology and Professor of Engineering Technology
(1976), B.M.E., M.S., Ed.D. (University of Georgia), P.E. (Florida, Georgia)

DEO, NARSINGH, Professor of Computer Science, Millican Chair
(1986), B.S.c., B.S.c., M.S., Ph.D. (Northwestern University)

DERAMO, ANTHONY D., Assistant Chair, Electrical Engineering; Instructor of Engineering
(1989), B.S., M.S. (Drexel University)

DESAI, VIMAL H., Assistant Professor of Engineering
(1984), B.S., M.S., Ph.D. (The Johns Hopkins University), P.E. (Florida)

DIXON, GEORGE J., Assistant Professor of Engineering
(1989) B.S., B.S., M.S., Ph.D. (University of South Florida)

DIXON, JOSEPH H. JR., Associate Professor of Engineering Technology
(1983), B.S., M.S. (Iowa State University), P.E. (Florida and five other states)

DONNELLY, JEROME J., Associate Professor of English
(1970), A.B., M.A., Ph.D. (University of Michigan)

DORNER, JOYCE E., Assistant Professor of Nursing
(1980), R.N., M.S.N. (University of Florida)

DOUGLASS, SHARON E., Assistant Professor of Cardiopulmonary Sciences
(1980), B.S., M.S. (University of New York at Buffalo)

DRISCOll, JAMES R., Associate Professor of Computer Science
(1976), B.S., M.S., Ph.D. (University of Kansas)

DUFFEY, JEFFERSON S., Assistant Professor of Criminal Justice
(1971), A.B., M.P.A. (Florida Atlantic University)

DUTTON, ARTHUR M., Professor of Statistics
(1968), B.S., Ph.D. (Iowa State University)

DUTTON, RONALD D., Professor of Computer Science
(1972), B.S., M.S., Ph.D. (Washington State University)

DZIUBAN, CHARLES D., Professor of Education
(1970), B.S., M.Ed., Ph.D. (University of Wisconsin)

EDWARDS, M. JO, Chair and Associate Professor of Health Sciences
(1976), RT (ARRT), B.S., M.Ed., Ed.D. (University of Florida)

EDWARDS, THOMAS J., III, Director, Radiologic Sciences and Assistant Professor of Radiologic Sciences
(1980) RT (ARRT), B.S., B.S.R.T., M.A. (St. Joseph’s University)

EHRHART, LLEWELLYN M., Professor of Biological Sciences
(1969), A.B., Ph.D. (Cornell University)

ELDREDGE, LEON E., Professor of Nursing, Brevard Campus
(1978), R.N., M.A., Ed.D. (University of Arkansas)

ELIAS, LUIS R., Professor of Physics

ELLIS, LESLIE L., Professor of Biological Sciences
(1968), B.S., M.S., Ph.D. (University of Oklahoma)

ELSHEIMER, SETH R., Assistant Professor of Chemistry
(1985), B.S., Ph.D. (University of Florida)

301
ELSHENNAWY, AHMAD K. M., Assistant Professor of Engineering (1986), B.S., M.S., M.Eng., Ph.D. (Pennsylvania State University)

ENGERT, C. BARTH, Assistant to the Dean, Office of Undergraduate Studies (1968), B.A., M.A. (Columbia University)

ENO, BURTON E., Professor of Engineering (1979), B.S., M.S., Ph.D. (Cornell University), P.E. (Florida)


ESLER, WILLIAM K., Professor of Education (1968), B.A.Ed., M.A.Ed., Ph.D. (Kent State University)

EUBANK, LEE E., Professor of Music (1973), B.M., M.M., Ph.D. (Indiana University)

EUBANKS, CLIFFORD L., Professor of Management (1975), B.S., M.B.A., Ph.D. (University of Arkansas)

EVANS, JOHN L., Associate Professor of History (1972), B.A., M.A., Ph.D. (University of North Carolina)

EVES, HOWARD W., Distinguished Visiting Professor of Mathematics (1985), B.A., M.A., Ph.D. (Oregon State University)

EYFELLS, JOHANN K., Professor of Art (1969), B. Arch., M.F.A. (University of Florida)

FABIANIC, DAVID A., Chair, Department of Sociology and Anthropology and Professor of Sociology (1985), B.A., M.S., Ph.D. (University of Iowa)

FANDT, PATRICIA M., Assistant Professor of Management (1986), B.S., M.B.A., Ph.D. (Texas A&M University)

FARINA, ANNA C., Instructor in Music (1980), B.M., M.E. (University of Central Florida)

FARSAD, BEHSHID, Assistant Professor of Hospitality Management (1986), B.S., M.S. (Iowa State University)

FEDLER, FREDERIC E., Professor of Communication (1971), B.S., M.A., Ph.D. (University of Minnesota)

FERNANDO, LLOYD W. JR., Associate Professor of Management (1983), B.S., M.S., B.A. (The George Washington University)

FERNANDEZ, JOSE B., Professor of History and Professor of Foreign Languages (1981), B.A., M.A., Ph.D. (Florida State University)

FETSCHER, ELMAR B., Associate Professor of History (1971), B.A., M.Ed., M.A., Ph.D. (University of Georgia)

FINE, TERRI S. Assistant Professor of Political Science (1989), B.A., M.A., Ph.D. (University of Connecticut)

FISHER, RANDY D., Associate Professor of Psychology (1971), B.A., Ph.D. (Vanderbilt University)

FISK, RAYMOND P., Visiting Associate Professor of Marketing (1989), B.S., M.B.A., Ph.D. (Arizona State University)

FLICK, ROBERT G., Professor of Humanities (1968), B.S., M.A., Ph.D. (University of Florida)

FRANKLIN, LEROY A., Associate Professor of Statistics (1981), A.B., M.A., M.A., Ph.D. (Indiana University)

FREDERICK, TERRY J., Professor of Computer Science (1975), B.S., M.S., Ph.D. (University of Wisconsin)

FRITZ, RICHARD G., Associate Professor of Economics (1979), B.A., M.S., Ph.D. (Georgetown University)

FULLER, DONALD A., Associate Professor of Marketing (1972), B.SIM, M.B.A., Ph.D. (Georgia State University)

GARDNER, JERRY Y., Associate Professor of Music (1980), B.M., M.M. (Boston University)

GATT, PHILIP Instructor of Engineering (1984), B.S.E., M.S.E. (University of Central Florida), E.I. (Florida)
GAUDNEK, WALTER, Professor of Art
(1970), Diploma, M.A., Ph.D. (New York University)

GAY, DAVID, Assistant Professor of Sociology
(1989), B.A., M.A., Ph.D. (Duke University)

GEORGE, THOMAS E. III, Instructor of English
(1986), B.A., M.A. (University of Central Florida)

GEORGIOPOULOS, MICHAEL, Assistant Professor of Engineering
(1986), Dipl.E., M.S., Ph.D. (University of Connecticut)

GENNARO, ROBERT N., Associate Professor of Biological Sciences
(1969), B.S., M.S., Ph.D. (Texas A&M University)

GERBER, HOMER C., Associate Professor of Computer Science
(1968), B.S., M.A., Ph.D. (Florida State University)

GERGLEY, GERALD R., Associate Professor of Education
(1970), Ed.B., Ed.M. (State University of New York)

GIBBS, W. ERNEST, Assistant Professor of Economics
(1987), B.S., M.B.A., M.A., Ph.D. (Rutgers University)

GILLET, PETER L., Professor of Marketing
(1979), B.A., B.S.C., M.B.A., Ph.D. (Michigan State University)

GILSON, RICHARD, Professor of Psychology
(1985), B.S., M.S., Ph.D. (Princeton University)

GOLDWATER, Paul M., Assistant Professor of Accounting
(1989), B.C., B.S., Ph.D. (Louisiana State University-Baton Rouge)

GOMEZ, FERNANDO J., Assistant Professor of Computer Science
(1981), B.A., M.A., M.A., Ph.D. (Ohio State University)

GONZALEZ, AVELINO J., Associate Professor of Engineering
(1986), B.S.E.E., M.S.E.E., Ph.D. (University of Pittsburgh), PE (Florida)

GOODMAN, STEPHEN H., Associate Professor of Management
(1984), B.S., M.B.A., Ph.D. (Pennsylvania State University)

GRAHAM, SHARON S., Associate Professor of Finance

GRASTY, WILLIAM K., Associate Professor of Communication
(1968), B.S., M.A., Ph.D. (University of Texas)

GREEN, CHERYL E., Assistant Professor of Social Work
(1978), B.A., M.S.W., Ph.D. (Clark Atlanta University)

GREENHAW, THOMAS D., Assistant Professor of History
(1969), B.A., M.A., Ph.D. (Auburn University)

GREGG, NEWTON D., Assistant Professor of Engineering Technology
(1984), B.A., B.S.C.E., M.S. (Southern Methodist University), P.E. (Florida and Texas)

GROGAN, AUSTIN L., Assistant Professor of Engineering
(1988), B.S., M.S., Ph.D. (University of Florida)

GUARDIA, NILDA P., Associate Professor of Nursing
(1983), B.S.N., Dr. P.H. (University of Texas)

GUENTHER, KARL, Associate Professor of Engineering Science
(1987) B.S., Ph.D. (University of Innsbruck)

GUEST-HOUSTON, SANDRA S., Assistant Professor of Psychology
(1977), B.A., M.S., Ph.D. (Auburn University)

GUHA, RATAN K., Associate Professor of Computer Science
(1980), B.S., M.S., Ph.D. (University of Texas)

GUINNERS, FREDD S., Associate Professor of Engineering
(1980), B.S., M.S., Ph.D. (University of New Mexico), P.E. (Florida)

GUPTON, JOHN T., III, Professor of Chemistry
(1978), B.S., M.S., Ph.D. (Georgia Institute of Technology)

GURNEY, DAVID W., Associate Professor of Education
(1970), B.A., M.A., Ph.D. (Florida State University)

HAGAN, DAVID J. Assistant Professor of Physics
(1987), B.S., Ph.D. (Heriot Watt University)

HAGEDOORN, A. HENRY J., Associate Professor of Engineering
(1972), B.S., M.S., Ph.D. (Cornell University), P.E. (Florida)

HAGEN, DEBORAH, Instructor in Computer Science
(1988), B.A., M.S. (University of Missouri)
HAHN, JAMES S., Associate Director, Small Business Development Center and Instructor of Marketing
(1983), B.S., M.B.A. (Fairleigh-Dickinson University)

HAILE, GWEN M., Instructor of English
(1984), B.A., M.A. (University of Central Florida)

HALL, HARRY O., Professor of Education

HALL, WILLIAM J., Assistant Professor of Communication
(1977), B.I.E., M.A. (Purdue University)

HAMPSON, MICHAEL D., Assistant Professor of Chemistry
(1981), B.S., Ph.D. (Texas Tech University)

HANDBERG, ROGER B., JR., Associate Dean of Graduate Studies and Professor of Political Science
(1972), B.A., Ph.D. (University of North Carolina)

HARDEN, RICHARD C., Professor of Engineering
(1967), B.M.E., B.E.E., M.S.E., Ph.D. (University of Florida) PE (Florida)

HARPER, HARVEY H., Instructor of Engineering
(1978), B.S., M.S., Ph.D. (University of Central Florida), P.E. (Florida)

HARRIS, MICHAEL G., Assistant Professor of Engineering
(1978), B.S., M.S., D.Sc. (George Washington University), P.E. (Florida)

HARROW, THOMAS L., Associate Professor of Education
(1970), B.S., M.Ed., Ph.D. (Florida State University)

HARTIG, J. PAUL, Professor of Engineering
(1968), B.S., B.S.C.E., S.M., Ph.D. (University of Florida), P.E. (Florida)

HEAD, CLARENCE M., Associate Professor of Engineering
(1978), B.S., M.S., Ph.D. (University of Georgia), P.E. (Florida, Georgia)

HEWITT, DONA LEA, Professor of Communicative Disorders
(1981), B.A., M.A., Ph.D. (University of Washington)

HEINONEN, OLLE, Assistant Professor of Physics
(1989), B.S., Ph.D. (Case Western Reserve University)

HEINSOHN, BARBARA F., Assistant Professor of Medical Laboratory Sciences
(1979), B.S., M.T. (ASCP), M.A. (Central Michigan University)

HEINZER, MARTIN N., Associate Professor of Mathematics
(1969), B.S., M.S., Ph.D. (Florida State University)

HEMSCHEMeyer, JUDITH, Assistant Professor of English
(1982), B.A., M.A. (University of Wisconsin)

HENNING, LINDA, Assistant Professor of Nursing
(1989), M.A. (New York University)

HENRY, RODNEY L., Instructor of Engineering
(1984), B.S., M.S. (University of Tennessee), P.E. (Florida)

HERNANDEZ, DAVID E., Professor of Education
(1968), B.S., M.S., Ed.D. (Florida State University)

HERTEL, GEORGE R., Professor of Chemistry
(1968), B.S., M.S., Ph.D. (Johns Hopkins University)

HIETT, SHARON LEE, Associate Professor of Education

HIGGINBOTHAM, PATRICIA E., Interim Chair Exceptional and Physical Education and Associate Professor of Education
(1972), B.S., M.S., Ed.D. (University of Alabama)

HIGGINS-YOUNG, CHRISTINE, Instructor in English
(1979) B.A., M.A. (University of Central Florida)

HILL, HELEN Y., Counselor/Advisor, College of Business Administration
(1989), B.S.B.A. (University of Central Florida)

HOFFMAN, LORRIE L., Director of the Institute of Statistics & Assistant Professor of Statistics
(1988) B.S., M.S., Ph.D. (University of Iowa)

HOFLER, RICHARD A., Associate Professor of Economics
(1989), B.S., Ph.D. (University of North Carolina-Chapel Hill)

304
HOGLIN, JOHN G., Professor of Communication  
(1974), B.A., M.A., Ph.D. (Wayne State University)

HOLLAND, KATHIE K., Assistant Director, Small Business Development Center and Instructor of Marketing  
(1985), B.S.B.A., M.B.A. (University of Central Florida)

HOLT, LARRY C., Assistant Professor of Education  
(1988), B.S., Ed.D., (University of Cincinnati)

HOLTEN, N. GARY, Chair and Associate Professor of Criminal Justice and Legal Studies  
(1972), B.A., M.A., Ph.D. (University of Massachusetts)

HOOVER, BASIL, Associate Professor of Education  

HOPKINS, MARTHA H., Associate Professor of Education  
(1983), B.A., M.Ed., Ph.D. (Florida State University)

HORVATH, DAVID B., Visiting Assistant Professor of Nursing  
(1989), M.A. (New York University)

HOSLER, E. RAMON, Professor of Engineering  
(1978), B.Ch.E., M.S., Ph.D. (University of Illinois), P.E. (Florida)

HOSNI, DJEHANE, Associate Professor of Economics  
(1977), B.A., M.A., Ph.D. (University of Arkansas)

HOSNI, YASSER A., Professor of Engineering  
(1976), B.S.(M.E.), M.S., Ph.D. (University of Arkansas), P.E. (Florida)

HOTALING, EDWARD R., JR., Chair and Interim Associate Professor of Music  
(1969), B.M., Ph.D. (Northwestern University)

HSUEH, L. PAUL, Assistant Professor of Finance  
(1989), B.A., M.B.A., Ph.D. (University of Tennessee)

HUGHES, CHARLES E., Professor of Computer Science  
(1960), B.A., M.S., Ph.D. (Pennsylvania State University)

HUNT, MARILYN F., Instructor in Accounting  
(1971), B.S., M.A. (University of Missouri), C.P.A.

HURST, JOHN W., Assistant Professor of Mathematics  
(1968), B.S., M.M. (University of South Carolina)

HUSEMAN, RICHARD C., Dean, College of Business Administration and Professor of Management  
(1990), B.A., M.A., Ph.D. (University of Illinois)

HUTCHINSON, CYNTHIA J., Instructor of Education  
(1989), B.S., M.A., Ed.D. (Florida Atlantic University)

HYNES, MICHAEL C., Professor of Education  
(1971), B.S.Ed., M.Ed., Ph.D. (Kent State University)

IKPA, VIVIAN WATFORD, Assistant Professor of Education  
(1989), B.S., M.S., Ph.D. (University of Maryland)

INGRAM, DAVID B., Associate Professor of Communicative Disorders  
(1970), B.A., M.A., Ph.D. (State University of New York at Buffalo)

ISNER, DALE W., Associate Professor of Computer Science  
(1982), B.S., Ph.D. (University of Pittsburgh)

JACKSON, EDSON, Instructor of Engineering  
(1981), Dipl.I.S., B.E., M.S.M., M.S. (University of Central Florida), P.E. (Florida)

JAFFE, GLORIA W., Assistant Professor of English  
(1981), B.A., M.A.T. (Rollins College)

JARVIS, LANCE P., Associate Professor of Marketing  

JEFFREY, PAUL, Assistant Professor of Communication  
(1988), B.A., M.A. (University of Missouri)

JENKINS, DAVID R., Chair, Department of Civil Engineering and Environmental Sciences and Professor of Engineering  

JENSEN, BERNARD, Associate Professor of Psychology  
(1985), B.S., M.A., Ph.D. (Southern Illinois University)

JOELS, A. ROSE, Professor of Education  
JOHNSON, FRANCES L., Assistant Professor of Communication  
(1971), A.B., M.A. (University of Kentucky)

JOHNSON, ROGER W., Assistant Director, South Orlando Campus and Associate Professor of Engineering  

JOHNSON, WALTER L., Associate Professor of Accounting  
(1979), B.S., M.B.A., Ph.D. (University of Texas, Austin), C.P.A.

JOHNSON, WILLIAM H., Dean, College of Education and Professor of Education  
(1986), B.S., M.Ed., Ph.D. (Kent State University)

JOHNSON-FREESE, JOAN, Associate Professor of Political Science  
(1981), B.A., M.A., Ph.D. (Kent State University)

JONES, DANIEL R., Assistant Professor of English  
(1984), B.A., M.A., Ph.D. (Florida State University)

JONES, DAVID E., Associate Professor of Anthropology  
(1972), B.A., M.A., Ph.D. (University of Oklahoma)

JONES, DONALD E., Assistant Professor of Philosophy  
(1972), B.A., M.A., Ph.D. (University of Oklahoma)

JONES, FOARD F., Visiting Instructor of Management  
(1989), B.S.B.A., M.B.A. (Appalachian State University)

JONES, HALSEY R., JR., Chair, Department of Management and Professor of Management  
(1982), B.A., M.S., Ph.D. (Pennsylvania State University)

JONES, JUDY R., Coordinator, Small Business Development Center and Instructor  
(1988), B.S. (The University of Wisconsin-Milwaukee)

JONES, ROY C., JR., Assistant Professor of Mathematics  
(1969), B.S., M.S., Ph.D. (Western Reserve University)

JUDD, ANDREW J., Assistant Professor of Accounting  

JUDKINS, B. L., Associate Professor of Nursing  

JUGE, FRANK E., Associate Vice President for Academic Affairs and Professor of Chemistry  
(1968), B.S., Ph.D. (University of Arkansas)

JURIE, JAY D., Assistant Professor of Public Administration  

KALLINA, EDMUND F., JR., Associate Professor of History  
(1970), B.A., M.A., Ph.D. (Northwestern University)

KAMINSKY, EDDIE, Instructor of Business Law  
(1985), A.B., LL.B. (University of Georgia)

KAMRAD, DENNIS R., Director, Liberal Studies Program  
(1972), B.A., M.A.Ed. (Rollins College)

KAPLAN, JEFFREY S., Visiting Assistant Professor of Education  

KASPARIS, TAKIS, Assistant Professor of Engineering  
(1989) B.E.E., M.E.E., Ph.D. (City University of New York)

KASSIM, HUSAIN, Associate Professor of Philosophy and Religion  
(1970), B.A., M.A., I.L.L.B., Ph.D. (University of Bonn)

KAZEMPOUR, KAZEM, Assistant Professor of Statistics  
(1987), B.S., M.S., Ph.D. (Colorado State University)

KAZMERSKI, KENNETH J., Chair, Department of Social Work and Associate Professor of Social Work  
(1979), B.A., M.S.W., D.S.W. (City University of New York)

KELLER, KATHERINE Z., Assistant Professor of English  
(1984), B.A., M.A., Ph.D. (University of Toronto)

KELLIHER, CHARLES F., Visiting Assistant Professor of Accounting  
(1985), B.S., M.S. (Texas A&M University), C.P.A.

KENNEDY, HENRY, Professor of Political Science  
(1971), B.S., M.Ed., M.A., Ph.D. (University of Michigan)
KERSTEN, ROBERT D., Professor of Engineering  
(1968), B.S., M.S., Ph.D. (Northwestern University), P.E. (Florida, 
Arizona, and Oklahoma)

KAJENOORI, SOHEIL, Assistant Professor of Engineering  
(1988), B.A., M.S., Ph.D. (University of Central Florida)

KHEOH, THIAN S., Assistant Professor of Statistics  
(1986), B.S., M.S., Ph.D. (The University of Western Ontario)

KJJEK, JEAN C., Chairperson, Department of Nursing and  
Associate Professor of Nursing  
(1985), R.N., Ph.D. (New York University)

KILBRIDE, WADE R., Assistant Professor of Economics  
(1978), B.S., M.A. Ed.D. (Florida Atlantic University)

KIM, JIN J. Professor of Physics  
(1988) B.S., M.S., Ph.D. (University of Wisconsin-Madison)

KITIS, LEVENT, Assistant Professor of Engineering  
(1984), B.A., B.S., M.S., Ph.D. (University of Virginia), P.E. (Florida)

KLEE, HAROLD I., Associate Professor of Engineering  
(1972), B.S., M.S., Ph.D. (Polytechnic Institute of Brooklyn),  
P.E. (Florida)

KLINTWORTH, NANCY P., Assistant Professor of Business Law  

KLOCK, DAVID R., Professor of Finance  
(1981), B.S., M.S., Ph.D. (University of Illinois)

KNAPR CHRISTINE Z., Assistant, Small Business Development Center  
(1989), B.A., M.A., (Goddard College)

KOCHE, SHARON, Assistant Professor of Nursing  
(1984), R.N., M.S.N. (Washington University)

KOEVENIG, JAMES L., Professor of Biological Sciences  
(1971), B.A., M.A., Ph.D. (University of Iowa)

KORSTAD, RICHARD J., Assistant Professor of Criminal Justice  
(1972), B.S., M.P.A. (University of Georgia)

KRAEMER, DALE F., Assistant Professor of Statistics  
(1985), B.S., M.S., Ph.D. (Purdue University)

KUHN, DAVID T., Professor of Biological Sciences  
(1970), B.A., M.S., Ph.D. (Arizona State University)

KUJAWA, FRANK B., Associate Professor of Geology  
(1969), B.A., Ph.D. (Johns Hopkins University)

KUO, SHIOU-SAN, Associate Professor of Engineering  
(1981), B.S., M.S., Ph.D. (Michigan State University), P.E.  
(Florida and Michigan)

KYSILKA, MARCELLA L., Professor of Education  
(1969), B.S.Ed., M.Ed., Ph.D. (University of Texas)

LAIRD, ROBERT J., Associate Professor of Biological Sciences  
(1970), B.S., R.P.T., M.S., Ph.D. (University of Texas)

LANDRY, JR., RAYMOND M., Assistant Professor of Accounting  
(1986), B.S., M.B.A. Ph.D. (University of Arkansas)

LANG, SHEAU-DONG, Assistant Professor of Computer Science  
(1981), B.S., M.S., Ph.D. (Pennsylvania State University)

LANGE, ROBERT R., Professor of Education  
(1980), B.S., M.Ed., Ph.D. (New Mexico State University)

LAWThER, WENDELL C., Assistant Professor of Public Administration  
(1984), B.A., M.A., Ph.D. (Indiana University)

LECKIE, SHIRLEY A., Associate Professor of History  
(1985), B.A., M.A., Ph.D. (University of Toledo)

LEE, CHIN H., Assistant Professor of Engineering  
(1985), B.E., M.S., M.S.I.E., Ph.D. (Texas Tech University)

LEESON, JOHN J., Assistant Professor of Computer Science  
(1982), B.A., M.S., Ph.D. (University of Miami)

307
LEFTWICH, D. SCOTT, Acting Director of Transportation Systems Institute and Associate Professor of Engineering
(1982), B.S., M.C.E., Ph.D. (North Carolina State), P.E. (Florida and North Carolina)

LEIGH, WILLIAM E., JR., Associate Professor of Management
(1987), B.S., M.S., M.B.A., Ph.D., (University of Cincinnati)

LEONARD, RICHARD J., Administrative Non-Commissioned Officer
(1983), Army ROTC

LESKO, ERIC S., Instructor in Music
(1980), B.M. (Hartt College of Music)

LEVANSON, STEPHEN B., Professor of Philosophy
(1969), B.A., M.A., Ph.D. (Florida State University)

LEVY, LINDA G., Visiting Assistant Professor of Business Law
(1989), B.S., M.A., J.D., L.L.M. (University of Florida)

LEWIS, HARVEY S., Associate Dean, College of Business Administration and Professor of Finance
(1986), B.S., M.B.A., Ph.D. (University of Arkansas)

LEWIS, PAMELA S., Assistant Professor of Management
(1986), B.S.B.A., M.B.A., Ph.D. (University of Tennessee-Knoxville)

LILIE, JOYCE R., Chair, Department of Political Science and Associate Professor of Political Science
(1985), B.A., M.A., Ph.D. (Johns Hopkins University)

LILIE, STUART A., Associate Professor of Political Science
(1972), B.A., Ph.D. (Johns Hopkins University)

LILLIOS, ANNA, Assistant Professor of English
(1987), B.A., M.A.L.S., Ph.D. (University of Iowa)

LIN, J.T., Associate Professor of Physics
(1985), B.S., Ph.D. (University of Rochester)

LINDHOLM, JAN, Instructor of Computer Science
(1980), B.S., M.B.A. (Western Colorado University)

LINTON, DARRELL G., Associate Professor of Engineering
(1977), B.A., M.E., Ph.D. (University of Florida), P.E. (Florida)

LIU, JUIN J., Visiting Assistant Professor of Engineering
(1986), B.S.E.E., M.S.E.E. (University of Florida)

LITTLEWOOD, IAN, Assistant Professor of Physics
(1986), B.A., D.Phil. (Oxford University)

LIU, Y. ANGELA, Assistant Professor of Finance
(1989), B.A., M.A., Ph.D. (University of Tennessee)

LLEWELLYN,RALPH A., Professor of Physics
(1980), B.S., Ph.D. (Purdue University)

LONGLEY, ROSS E., Assistant Professor of Biological Sciences
(1984), B.S., M.S., Ph.D. (University of Oklahoma)

LOTZ, STEVEN D., Professor of Art
(1968), B.A., M.F.A. (University of Florida)

LOUDERMILK, JENNIE L., Assistant Dean, College of Extended Studies
(1977) B.A., M.A., Ed.D. (University of Georgia)

LYNN, MARY ANN, Associate Dean, College of Education and Professor of Education

LYNXWILER, JOHN P., Assistant Professor of Sociology
(1989), B.A., M.A., Ph.D. (University of Tennessee)

LYTLE, J. STEPHEN, Assistant Professor of Cardiopulmonary Sciences and Health Sciences
(1975), RRT, B.S., M.S., M.P.H. (University of Central Florida)

MADESEN, BROOKS C., Professor of Chemistry
(1970), B.S., M.S., Ph.D. (Ohio University)

MAHAN, SUSAN G., Assistant Professor of Criminal Justice
(1987) Ph.D. (University of Missouri)

MAHONEY, LOIS S., Assistant to the Director and Instructor of Accounting
(1989), B.A., M.B.A. (University of Central Florida)

MALIK, ZAFAR, Assistant Professor of Computer Science
(1984), B.S., M.S., M.A., Ph.D. (University of Southern California)
MALOCHA, DONALD C., Professor of Engineering
(1981), B.S., M.S., Ph.D. (University of Illinois), P.E. (Florida)

MALONE, LINDA C., Associate Professor of Statistics
(1979), B.S., M.S., Ph.D. (Virginia Polytechnic Institute)

MANNING, PATRICIA C., Professor of Education

MARMADUKE, JANE E., Instructor in English
(1980), B.A., M.A. (University of Central Florida)

MAROWITZ, ROBERTA L., Associate Professor of Education

MARTIN, HUGH P., Assistant Professor of Education
(1972), B.S., M.A., Ed.D. (University of Alabama)

MARTIN, RAYMOND L., Associate Professor of Management
(1971), B.S.E.E., M.E.A., Ph.D. (American University)

MARTIN, ROBERT D., Chair, Instructional Programs and Professor of Education

MARTIN, THOMAS L., Associate Professor of Economics
(1983), B.A., B.S., Ph.D. (Rice University)

MATHEWS, BRUCE E., Assistant Dean, College of Engineering and Professor of Engineering
(1969), B.E.E., M.S.E., Ph.D. (University of Florida), P.E. (Florida)

MATTSON, GUY C., Professor of Chemistry
(1969), B.S., Ph.D. (University of Florida)

MAUNEZ-CUADRA, JOSE, Associate Professor of Communication
(1989), B.A., M.S., Ph.D. (Bowling Green State University)

McCANN, GUY K., Associate Professor of Communication
(1985), B.A., M.A. (Fairfield University)

McCARTHY, BELINDA R., Dean, College of Health and Professional Studies and Professor of Criminal Justice
(1990), B.A., M.A., Ph.D. (SUNY at Albany)

McCARTNEY, WILLIAM W., Associate Professor of Management
(1978), B.S.I.M., M.B.A., Ph.D. (Louisiana State University, Baton Rouge)

McCLURE, KENNETH G., Visiting Instructor of Finance
(1989), B.S., M.B.A. (Dartmouth College)

McCOWN, J. ROBERT, JR., Lecturer in English
(1969), B.A., M.A. (University of California)

McGEE, NANCY R., Professor of Education
(1970), B.S., M.A., Ed.D. (Florida Atlantic University)

McGEE, WILLIAM W., Professor of Forensic Science
(1968), B.S., M.S., Ph.D. (University of Florida)

McGUIRE, JOHN M., Professor of Psychology
(1972), B.A., M.A., Ph.D. (George Peabody College)

McHONE, W. WARREN, Chair, Department of Economics and Associate Professor of Economics
(1982), B.S., M.A., Ph.D. (University of Pennsylvania)

MCKAY, MARILYN L., Assistant Professor of Theatre
(1983), B.A., M.A., Ph.D. (University of Georgia)

McLAIN, J. NANNETTE, Associate Professor of Education
(1968), B.S., M.Ed., Ph.D. (University of Chicago)

McLATCHEY, MARILYN B., Visiting Instructor of English
(1984), B.A., M.A.T. (Brown University)

McQUILKIN, PAUL R., Associate Dean of Undergraduate Studies
(1971), B.S., M.B.A., Ph.D. (Iowa State University)

McQUILLEN, CHARLES D., Visiting Professor of Finance
(1987), B.S., M.B.A., Ph.D. (University of Florida)

MEALOR, DAVID J., Chair, Educational Services and Associate Professor of Education
(1980), B.S., M.Ed., Ph.D. (University of Georgia)

MEDIN, JULIA A., Assistant Professor of Education
(1988), B.S., M.A., Ph.D. (The American University)
MEESKE, MILAN D., Professor of Communication
(1970), B.S., M.A., Ph.D. (University of Denver)

MENDENHALL, THOMAS S., Interim Associate Dean, College of Health and Professional Studies and Associate Professor of Health Sciences
(1976), B.A., MT(ASCP), M.S., Ph.D. (University of Missouri)

MENDEZ, ANTHONY W., Assistant Professor of Aerospace Studies
(1985) B.S.B.A., M.A. (University of South Dakota)

MERRITT, MARLENE F., Instructor of Education
(1989) B.A., M.A. (University of Central Florida)

MICARELLI, CHARLES N., Associate Vice President and Dean, Undergraduate Studies and Professor of Foreign Languages
(1967), B.A., M.A., Ph.D. (Boston University)

MIDGETT, JEANICE, Professor of Education
(1972), B.S., M.A., Ed.S., Ed.D. (University of Georgia)

MIKHAEL, WASFY B., Professor of Engineering
(1988), B.S.E.E., M.S.E.E., Ph.D. (Concordia University)

MIKUSINSKI, PIOTR, Assistant Professor of Mathematics
(1985), M.S., Ph.D. (Polish Academy of Sciences, Institute of Mathematics)

MILES, D. HOWARD, Chair, Department of Chemistry and Professor of Chemistry
(1988) B.S., Ph.D. (Georgia Institute of Technology)

MILLER, A. JEANNE, Associate Professor of Education

MILLER, ALAN, Professor of Physics
(1988) B.Sc., Ph.D. (University of Bath-United Kingdom)

MILLER, CALVIN C., Professor of Education
(1967), B.A., M.Ed., Ed.D. (Florida State University)

MILLER, HARVEY A., Professor of Biological Sciences
(1970), B.S., M.S., Ph.D. (Stanford University)

MILLER, MARGARET, Director, Teacher Education Center and Associate Professor of Education
(1971), B.S., M.S., Ed.D. (University of Florida)

MILLER, RICHARD N., Assistant Dean and Associate Professor of Engineering
(1979), B.S., M.S.E.E., Ph.D. (SUNY Buffalo), P.E. (Colorado)

MILLER, ROBERT S., Assistant Professor of Sociology
(1971), B.A., M.A., Ph.D. (Florida State University)

MILLER, SANDRA D., Instructor of English
(1984), B.A., M.A. (University of Central Florida)

MILMAN, ADY, Assistant Professor in Hospitality Management
(1986), B.A., M.Sc., Ph.D. (University of Massachusetts)

MINARDI, ANTONIO, Assistant Professor of Engineering
(1977), B.A.Sc., S.M. (Massachusetts Institute of Technology), E.I. (Florida)

MITCHELL, DEBBY L., Instructor of Education
(1989) B.A., M.A. (University of Central Florida)

MODANI, NAVAL K., Associate Professor of Finance
(1983), B.S., M.B.A., Ph.D. (University of South Carolina)

MOHAPATRA, RAM N., Professor of Mathematics
(1984), B.S., M.S., Ph.D. (University of Jabalpur)

MOHARAM, GAMAL, Associate Professor of Electrical Engineering Science
(1987) B.S., Ph.D. (University of British Columbia)

MONROE, JUDITH E., Assistant Director, Administration and Finance
(1978) B.S., M.A. (University of Central Florida)

MOORE, BARBARA A., Coordinator, Center for Economic Education and Instructor of Economics
(1986), B.S., M.Ed. (University of Central Florida)

MORALES, WALTRAUD Q., Associate Professor of Political Science
(1980), B.A., M.A., Ph.D. (University of Denver)

MORGAN, THOMAS O., Professor for Communication
(1972), A.B., M.A., Ph.D. (Florida State University)
MORRIS, MICHAEL H., Associate Professor of Marketing
(1984), B.A., M.S., M.B.A., Ph.D. (Virginia Polytechnic Institute and State University)

MORSE, LUCY C., Assistant Professor of Engineering
(1983), A.B., M.S., Ph.D. (University of Central Florida)

MOSHELL, J. MICHAEL, Associate Professor of Computer Science
(1984), B.S., Ph.D. (Ohio State University)

MOSLEHY, FAISSAL A., Associate Professor of Engineering
(1980), B.S., M.S., Ph.D. (University of South Carolina), P.E. (Florida)

MUKHERJEE, AMAR, Chair and Professor of Computer Science
(1979), B.S., M.S., Ph.D. (University of Calcutta)

MULLIN, THOMAS A., Associate Professor of Communicative Disorders
(1972), B.A., M.S., Ph.D. (Syracuse University)

MURRAY, BARBARA, Assistant Professor of English
(1989), B.A., M.A., Ph.D. (University of Tennessee)

MYLER, HARLEY R., Assistant Professor of Engineering
(1986), B.S.E.E., M.S.E.E., Ph.D. (New Mexico State University), P.E. (Florida)

NEIGHBOR, J. EDWARD, Professor of Physics
(1987), B.S., M.S., Ph. D. (Massachusetts Institute of Technology)

NEUSTEL, ARTHUR D., Assistant Professor of Finance
(1984), B.S., M.S., M.B.A., Ph.D. (Virginia Polytechnic Institute and State University)

NOLL, DAVID J., Instructor in Computer Science
(1983), A.B., M.A.R. (Emmanuel School of Religion)

NOON, JACK H., Professor of Physics
(1971), B.S., M.S., Ph.D. (University of Rochester)

NORMAN, EDWARD, Associate Professor of Mathematics
(1969), B.S., Ph.D. (Cornell University)

NUCKOLLS, CHARLES E., Associate Professor of Engineering
(1973), B.S., M.S., Ph.D. (University of Oklahoma), P.E. (Florida, Texas)

O'HARA, JOHN B., Dean, College of Extended Studies
(1979) B.A., M.A., Ph.D. (University of Oklahoma)

O'KEEFE, M. TIMOTHY, Professor of Communication
(1968), B.A., M.A., Ph.D. (University of North Carolina)

OLSON, ARTHUR H., Associate Professor of Education

OLSON, JUDITH L., Professor of Education
(1974), B.S., M.A., Ph.D. (University of Florida)

OMANS, STUART E., Professor of English
(1968), B.A., M.A., Ph.D. (Northwestern University)

O'NEAL, HOWARD L., JR., Non-Commissioned Officer in Charge
(1983), Army ROTC

OROOGI, ALI, Assistant Professor of Computer Science
(1985), B.S., M.S., Ph.D. (Ohio State University)

ORTIZ, S. ENRIQUE, Assistant Professor of Education

ORWIG, GARY W., Associate Professor of Education
(1977), B.S., M.S., Ed.D. (Indiana University)

OSBORNE, JOHN A., Professor of Biological Sciences
(1972), B.S., M.S., Ph.D. (Kansas State University)

OSBORNE, KING W., Professor of Engineering Technology

OWENS, KAREN R., Assistant in Center for Economic Education
(1987), B.A. (University of Florida)

OWENS, W. STEVEN, Assistant Professor of Music

PALMER, MARY J., Professor of Education
(1970), B.S., M.S., Ed.D. (University of Illinois)

PAPPAS, SARAH H., Director, Daytona Beach Campus
PARK, HOON, Assistant Professor of Finance
(1988), B.A., M.B.A., Ph.D. (Georgia State University)

PARKINSON, EDWARD, Assistant Professor of Engineering
(1989) B.S., M.S., Ph.D. (University of South Florida)

PATTERSON, CHARLES, Assistant Professor of Marketing
(1987), B.S., M.E., M.B.A., Ph.D. (University of Pennsylvania)

PAUGH, ROBERT F., Associate Professor of Education
(1973), B.S., M.A., Ed.D. (North Carolina State University)

PAUL, GORDON W., Professor of Marketing
(1977), B.S., M.B.A., Ph.D. (Michigan State University)

PAULEY, BRUCE F., Professor of History
(1971), B.A., M.A., Ph.D. (University of Rochester)

PAYAS, ARMANDO, Chair, Department of Foreign Languages and
Associate Professor of Foreign Languages
(1969), B.A., M.A., J.D., Ph.D. (Florida State University)

PELLI, MOSHE, Director, Judaic Studies Program and
Associate Professor of Foreign Languages
(1985), B.S., Ph.D. (The Dropsie College)

PENNINGTON, ROBERT L., Director, Center for Economic Education and
Associate Professor of Economics
(1983), B.A., Ph.D. (Texas A&M University)

PETRASKO, JANICE Z., Assistant Professor of Nursing
(1982), R.N., M.S. (University of Rochester)

PETTOFREZZO, ANTHONY J., Professor of Mathematics

PHILLIPS, RONALD L., Professor of Engineering Science and Mathematics
(1970), B.S.E., M.S.E., M.A., Ph.D. (Arizona State University)

PHILLIPS, THOMAS E., Associate Professor of Accounting
(1977), A.B., M.B.A., Ph.D. (University of Nebraska), C.P.A.

PICKERING, ROY, Associate Professor of Music
(1979), B.M.E., M.M. (Indiana University)

PIZAM, ABRAHAM, Chair and Professor of Hospitality Management
(1983), B.A., M.P.A., Ph.D. (Cornell University)

POLIVER, ALOYSIUS T., Instructor, Small Business Development Center and
Instructor

POLLOCK, PHILIP H., Associate Professor of Political Science
(1982), B.A., Ph.D. (University of Minnesota)

POWELL, JOHN W., Associate Professor of Education

PRICE, MARIAN W., Assistant Professor of English
(1974), B.A., M.A., Ph.D. (Florida State University)

PRYOR, ALBERT V., Professor of Communication
(1972), B.S., M.A., Ph.D. (University of Michigan)

PULLIN, JAMES R., Instructor of Management
(1987), B.S., M.B.A., M.S. (Georgia State University)

PUTCHINSKI, LINDA B., Visiting Coordinator of Graduate Programs, College of Business
Administration
(1989), B.A., M.B.A. (University of Central Florida)

PYLE, RANSFORD C., Associate Professor of Legal Studies
(1976), A.B., J.D., M.A., Ph.D. (University of Florida)

RAFFA, FREDERICK A., Professor of Economics
(1969), B.S., M.B.A., Ph.D. (Florida State University)

RAGUSA, JAMES M., Associate Professor of Management
(1987), B.S.M.E., M.S.M., D.B.A. (Florida State University)
RAMEY, MARY E., Visiting Assistant Professor of Nursing
(1988) M.N.Ed. (University of Pittsburgh)

RATLIFF, JOANNE, Assistant Professor of Education
(1987), B.S., M.Ed., Ph.D. (Louisiana State University)

RATUSNIK, DAVID L., Chair, Department of Communicative Disorders
and Professor of Communicative Disorders
(1985), B.S., M.A., Ph.D. (Northwestern University)

RAUTENSTRAUCH, C. PETER, Associate Professor of Mathematics
(1988), B.A., M.A., Ph.D. (Auburn University)

REGUEIRA-ROSA, YADIRA R., Visiting Assistant Professor
(1989) M.S.N. (University of Puerto Rico)

REIFF, WALLACE W., Associate Dean for Administration, College of
Business Administration and Professor of Finance

REINHART, DEBRA R., Assistant Professor of Engineering
(1989) B.S.E., M.S., Ph.D. (Georgia Tech)

REITZUG, ULRICH C., Assistant Professor of Education

RENNER, KENNETH H., Assistant Professor of Education
(1969), B.S.P.E., M.P.H. (University of Florida)

RICE, STEPHEN L., Associate Dean and Professor of Engineering
(1983), B.S., M.E., Ph.D. (University of California, Berkeley), P.E.
(Florida)

RICHARDSON, GARY D., Associate Professor of Mathematics and Statistics
(1984), B.S., M.S., Ph.D. (North Carolina State University)

RICHIE, SAMUEL M., Instructor of Engineering
(1984), B.S.E., M.S.E. (University of Central Florida), E.I. (Florida)

RIGGS, K. ROGER, Instructor in Computer Science
(1988) B.A., M.S. (University of Central Florida)

RILEY, PAUL E., Chair, Department of Humanities, Philosophy and
Religion and Associate Professor of Humanities

RINALDUCCI, EDWARD J., Associate Dean of College of Arts and Sciences and Profes­
sor of Psychology
(1986), B.A., M.A., Ph.D. (University of Rochester)

RISER, JOHN S., Associate Professor of Philosophy
(1969), B.A., Ph.D. (University of North Carolina)

RIVERS, ROBERT H., JR., Associate Professor of Art

ROBERTS, DAVID J., Director, Center for Executive Development and Instructor
(1987), B.S., M.B.A., (Indiana University)

ROBERTSON, EDWARD H., Instructor in Accounting
(1981), M.B.A. (Columbia University), C.P.A.

ROBINSON, MAUREEN H., Instructor of Education

RODGERS, RALPH V., Assistant Professor of Engineering
(1989) B.S., M.S., Ph.D. (University of Virginia)

RODRIGUEZ, RENE S., Assistant Professor of Mathematics
(1971), B.Ch.E., Ph.D. (University of Tennessee)

ROHTER, FRANK D., Professor of Education
(1968), B.S., M.Ed., Ph.D. (University of Southern California)

ROLLINS, DAVID K., Assistant Professor of Mathematics
(1988) B.Sc., Ph.D. (California Institute of Technology)

ROLLINS, JACK B., Professor of Psychology
(1969), B.S., M.S., Ph.D. (University of Georgia)

RONEY, WILLIAM L., Associate Professor of Music and Artist in Residence
(1982), B.S. (Harvard College)

ROSENRANTZ, STUART A., Associate Professor of Management
(1989), B.G.S., M.A., Ph.D. (University of Nebraska)

ROSELL, ELLEN, Assistant Professor of Public Administration
(1989) D.P.A. (University of Georgia)
ROTHBERG, ROBERT A., Professor of Education  
ROUSH, PAMELA Y., Assistant Professor of Accounting  
(1989), B.A., M.B.A., Ph.D. (Georgia State University)  
RUBIN, RONALD S., Professor of Marketing  
(1972), B.A., M.A., Ph.D. (University of Massachusetts)  
RUNGELING, BRIAN S., Professor of Economics  
(1981), M.A., Ph.D. (University of Kentucky)  
RUSHIN, PATRICK J., Associate Professor of English  
(1983), B.A., M.A., M.A. (Johns Hopkins University)  
RUSNOCK, JOSEPH S., Associate Professor of Theatre  
(1985), B.A., M.F.A. (University of Minnesota)  
SAHA, HARI, Assistant Professor of Physics  
(1987) B.S., Ph.D. (University of Calcutta)  
SALTER, JOHN H. III, Associate Professor of Accounting  
(1975), B.S., M.S., Ph.D. (Louisiana State University), C.P.A.  
SALTER, MARILYN P., Visiting Instructor of Accounting  
(1981), B.S., M.S.A. (University of Central Florida), C.P.A.  
SALZMANN, FRANK L., Assistant Professor of Mathematics  
(1970), B.S., M.S., Ph.D. (Auburn University)  
SANFORD, DANIEL W., Assistant Professor of Education  
(1985), B.S., M.Ed., Ed.D. (University of Southern Mississippi)  
SAVAGE, LINDA J., Associate Professor of Accounting  
(1980), B.S., M.S., Ph.D. (University of Florida), C.P.A.  
SCHELL, JOHN F., Chair, Department of English and Professor of English  
(1987), B.A., M.A., Ph.D. (Vanderbilt University)  
SCHIFFHORST, GERALD J., Professor of English  
(1970), B.S., M.A., Ph.D. (Washington University)  
SCHOTT, JAMES R., Assistant Professor of Statistics  
(1982), B.S. (University of Florida)  
SCHOTT, SUSAN C., Instructor in Mathematics  
(1982), B.S., M.S. (University of Florida)  
SCHRADER, GEORGE F., Professor of Engineering  
(1969), B.S., M.S., Ph.D. (University of Illinois), P.E. (Florida, Illinois)  
SCIORTINO, PHILIP T., Associate Professor of Education  
(1977), B.S., M.B.A., M.Ed., Ph.D. (University of Notre Dame)  
SCOTT, DAVID F. JR., Chairholder, Della Phillips-Martha D. Schenck  
Chair in American Private Enterprise and Professor of Finance  
(1982), B.S.B.A., M.B.A., Ph.D. (University of Florida)  
SEGAMI, CARLOS, Assistant Professor of Computer Science  
(1985), M.A., Ph.D. (University of North Carolina)  
SEIDEL, KATHRYN L., Assistant Dean College of Arts and Sciences and  
Associate Professor of English  
(1986), B.A., M.A., Ph.D. (University of Maryland)  
SEPULVEDA, JOSE A., Associate Professor of Engineering  
(1981), B.S.Ch.E., M.S.I.E., M.P.H., Ph.D. (University of Pittsburgh),  
P.E. (Florida)  
SHAH, MUBARAK A., Assistant Professor of Computer Science  
(1986), B.E., M.S., Ph.D. (Wayne State University)  
SHAPEK, RAYMOND A., Chair, Department of Public Administration and Professor of  
Public Administration  
(1985), B.A., M.P.A., Ph.D. (University of Colorado)  
SHAYKHIAN, Gholam A., Assistant Professor of Engineering Technology  
(1986), B.E.T., M.S. (University of Central Florida)  
SHERIDAN, EDWARD P., Dean, College of Arts and Sciences and Professor of Psychology  
(1990), B.A., M.A., Ph.D. (Loyola University-Chicago)  
SHERIDAN, KATHLEEN, Professor of Psychology  
(1990) A.B., M.A., J.D., Ph.D. (Fordham University)  
SHERWOOD, HOWARD, Professor of Mathematics  
(1969), B.S., M.S., Ph.D. (University of Arizona)
SHIRKEY, EDWIN C., Associate Professor of Psychology
(1971), B.A., M.A., Ph.D. (University of Wisconsin)

SHIVAMOGGI, BHIMSEN, Associate Professor of Mathematics
(1985), B.S., M.S., Ph.D. (University of Colorado)

SHOFNER, JERRELL H., Chair, Department of History and Professor of History
(1972), B.S., M.S., Ph.D. (Florida State University)

SHOSTAK, THOMAS A., Director of Orlando Area Programs

SHRYOCK, RICHARD P., Assistant Professor of Political Science
(1989), B.A., M.A., Ph.D. (Columbia University)

SICILIANO, DARLENE M., Instructor of Education
(1989) B.A., M.S. (Oklahoma State University)

SIEMON, BARBARA J., Assistant Professor of Accounting
(1989), B.S., M.B.A. (University of North Carolina)

SIEBERT, BARRY W., Assistant Professor of Political Science
(1989), B.S., M.A., Ph.D. (University of South Florida)

SKOGlund, MARGARET A., Instructor of Art
(1977), B.S., M.A. (University of Missouri)

SLAUGHTER, DAVID B., Assistant Professor, Department of Public Service Administration
(1978), B.A., J.D. (Florida State University)

SMITH, FRANCES B., Associate Professor of Nursing
(1979), R.N., M.S.N., Ed.D. (Florida State University)

SMITH, HARRY W., JR., Director, Department of Theatre and Professor of Theatre
(1969), B.A., M.A., Ph.D. (Tulane University)

SMITH, RONALD F., Associate Professor of Communication
(1980), A.B., M.A., M.A. (Ball State University)

SMITH, WILLIAM F., Associate Professor of Management

SMOLEROFF, STEVEN T.E., Assistant Professor of Aerospace Studies
(1984) B.S., M.S. (University of Northern Colorado)

Snelson, Franklin F., JR., Chair, Department of Biological Sciences
and Professor of Biological Sciences
(1970), B.S., Ph.D. (Cornell University)

SOILEAU, MARION J., Director of CREOL and Professor of Engineering Science
(1986) B.S., M.S., Ph.D. (University of Southern California)

Somerville, Paul N., Professor of Statistics
(1972), B.S., Ph.D. (University of North Carolina)

Sommer, MARGARET E., Associate Professor of English
(1972), B.A., M.Ed., Ed.D. (University of Georgia)

Sorg, STEVEN E., Associate Professor of Education
(1978), B.S., M.S., Ph.D. (Florida State University)

Soskin, Mark D., Visiting Associate Professor of Economics

SOUDER, H. RAY, Associate Professor of Management
(1986), B.B.A., M.B.A., Ph.D. (University of Cincinnati)

SPUDECK, RAYMOND E., Assistant Professor of Finance

STALLINGS, MARK E., Visiting Assistant Professor of Music

STAP DONALD L., Associate Professor of English
(1985), B.A., Ph.D. (University of Utah)

STEARMAN, ALLYN M., Associate Professor of Sociology
(1976), B.A., M.A., Ph.D. (University of Florida)

STEGEman, GEORGE I.A., Chairholder, Cobb-L.J. Hooker Chair in Optical Sciences and Engineering
(1990), B.A.Sc, MSc, Ph.D. (University of Toronto)

STERN, MARK, Professor of Political Science
(1972), B.S., Ph.D. (University of Rochester)

STEVENS, GEORGE E., Professor of Management
STOUT, I. JACK, Professor of Biological Sciences  
(1972), B.S., M.S., Ph.D. (Washington State University)

STRANGE, CHARLES C., Assistant Professor of Engineering Technology  
(1986), B.I.E., M.S.E. (University of Central Florida), E.I. (Georgia)

STRASSHOFER, SUSAN, Instructor of English  
(1985), B.A., M.A. (University of Central Florida)

STRING, TANIA C., Instructor and UCF Gallery Curator  
(1986), B.S., M.A. (Florida State University)

SUH, EDWARD K., Associate Professor of Social Work  
(1985), B.A., M.A., M.S.W., Ph.D. (Brandeis University)

SULLIVAN, MICHAEL, Assistant Professor of Communication  
(1985), A.B., M.A. (University of Texas)

SULLIVAN, TIMOTHY J., Associate Professor of Education  

SUNDARAM, KALPATHY, Assistant Professor of Engineering Science  
(1987) B.S., B.E., M.T., Ph.D. (Indian Institute of Technology, Bombay)

SWART, WILLIAM W., Chair, Department of Industrial Engineering and  
Management Systems and Professor of Engineering  
(1985), B.S., M.S., Ph.D. (Georgia Institute of Technology), P.E. (Florida)

SWEENEY, MICHAEL J., Professor of Biological Sciences  
(1972), B.S., Ph.D. (Temple University School of Medicine)

SWEET, HAVEN C., Professor of Biological Sciences  
(1971), B.S., Ph.D. (Syracuse University)

TANZI, LAWRENCE A., Associate Professor of Communication  
Professor of Communication  
(1969), B.S.M.E., M.S., Ph.D. (Indiana University)

TAYLOR, DORIS M., Visiting Instructor of Accounting  
(1983), B.S.B.A., M.S.A. (University of Central Florida), C.P.A.

TAYLOR, FINLEY M., Assistant Professor of Foreign Languages  
(1970), A.B., M.A., Ph.D. (University of Tennessee)

TAYLOR, JAMES S., Director Environmental Systems Engineering Institute  
and Professor of Engineering  
(1977), B.S.I.E., M.S., Ph.D. (University of Florida), P.E. (Florida)

TAYLOR, K. PHILLIP, Professor of Communication  
(1970), B.A., Ph.D. (Indiana University)

TAYLOR, MICHAEL D., Associate Professor of Mathematics  
(1968), B.A., M.S., Ph.D. (Florida State University)

TAYLOR, WALTER K., Professor of Biological Sciences  
(1969), B.S., M.S., Ph.D. (Arizona State University)

TEEPLE, EUGENE E., Professor of Marketing  
(1968), B.S., M.B.A., D.B.A. (University of Oregon)

TELL, PHILLIP M., Associate Professor of Psychology  
(1969), B.A., M.A., Ph.D. (University of Virginia)

THOMAS, MARGARET H., Professor of Psychology  
(1971), B.A., M.A., Ph.D. (Tulane University)

THOMPSON, RICHARD A., Professor of Education  
(1969), B.S., M.S., Ed.D. (Ball State University)

THOMSON, DOUGLAS R., Assistant Professor of Military Science  

TOWLE, HERBERT C., Professor of Engineering  
(1970), B.S.E., M.S.E., Ph.D. (University of Michigan), P.E. (Florida, New York)

TREFONAS, LOUIS M., Associate Vice President for Academic Affairs, and Dean of  
Graduate Studies and Professor of Chemistry  
(1981), B.A., M.S., Ph.D. (University of Minnesota)

TROFF, WALTER D., Associate Professor of Social Work  
(1972), B.A., M.S.W., Ph.D. (University of Florida)

TUBBS, LeVESTER, Vice President for Student Affairs and Associate  
Professor of Education  
(1980), B.S., M.S., Ed.D. (University of Missouri-Columbia)
TUCKER, RICHARD D., Chair, Department of Psychology and Professor of Psychology (1972), A.B., M.A., Ph.D. (Emory University)

TURNAGE, JANET J., Associate Professor of Psychology (1981), B.A., M.S., Ph.D. (Iowa State University)

TZANNES, NICOLAOS S., Chair, Electrical Engineering and Communication Sciences, Professor of Engineering (1986), B.E.E., M.E.E., Ph.D. (The Johns Hopkins University)

UMPHREY, ROBERT E., Professor of English (1970), B.A., M.A., Ph.D. (University of Washington)

UNKOVIC, CHARLES M., Professor of Sociology (1968), B.A., M.A., Ph.D. (University of Pittsburgh)

USPENSKI, ALEXANDER, Assistant Professor of Engineering Technology (1983), Dipl. Ing., M.S.E.E., E.E. (Syracuse University)

UTT, HAROLD A. Jr., Assistant Professor of Communicative Disorders (1981), M.S., Ph.D. (Florida State University)

VAJRAVELU, KUPPALAPALLE, Assistant Professor of Mathematics (1984), B.A., M.S., Ph.D. (Indian Institute of Technology)

VAN STRYLAND, ERIC W. Professor of Physics (1987), B.S., Ph.D. (University of Arizona)

VARNEY, A. MICHAEL, Visiting Associate Professor of Engineering (1989), B.A.E., M.S.A.E., Ph.D. (Georgia Institute of Technology)

VAZQUEZ, EMIL C., Assistant Professor of Engineering Technology (1988), B.S.E.E., M.B.A., (InterAmerican University), P.E. (Florida)

VEIT, MARCIA R., Visiting Instructor of Accounting (1980), B.A., M.B.A. (University of Arkansas), C.P.A.

VENTRE, GERARD G., Associate Professor of Engineering (1969), As.E., M.S., Ph.D. (University of Cincinnati), P.E. (Florida)

VERMA, RAM, Visiting Assistant Professor of Mathematics (1989), B.S., M.S., Ph.D. (University of Lucknow)

VICKERS, DAVID H., Associate Professor of Biological Sciences (1969), B.S., M.S., Ph.D. (Louisiana State University)

VITTES, M. ELLIOT, Associate Professor of Political Science (1983), B.A., M.A., Ph.D. (University of Massachusetts)

WAHID, PARVEEN F., Assistant Professor of Engineering (1984), B.S., M.S., Ph.D. (Indian Institute of Science, Bangalore)

WAHLMAN, MAUDE, Chair, Department of Art and Associate Professor of Art (1985), B.A., M.A., M.Phil., Ph.D. (Yale University)

WALKER, ROBERT L., Professor of Engineering (1972), B.S., M.S., Ph.D. (Stanford University), P.E. (Florida)

WALLACE, RONALD L., Associate Professor of Anthropology (1975), B.A., M.A., Ph.D. (University of Florida)

WALTERS, ROY A., Associate Professor of Engineering (1981), B.E.E., M.S.N.E., Ph.D. (University of Florida), P.E. (Florida)

WANG, ALVIN Y., Assistant Professor of Psychology (1987), B.A., Ph.D. (State University of New York at Stony Brook)

WANIELISTA, MARTIN P., Professor of Engineering (1970), B.S.C.E., M.S., Ph.D. (Cornell University), P.E. (Florida)

WASHINGTON, DAVID W., Associate Professor of Biological Sciences (1974), B.S., M.S., Ph.D. (Texas A & M University)

WEAVER, WILLIAM C., Associate Professor in Finance (1985), B.S., M.B.A., Ph.D. (Georgia State University)

WEHR, PAUL W., Professor of History (1969), B.A., M.A., Ph.D. (Ball State University)

WEISS, ROBERT M., Chair and Professor of Military Science, Army ROTC (1982), B.S., M.B.A. (American University)

WELCH, JUDITH K., Assistant Professor of Accounting (1988), B.A., M.B.A., Ph.D. (Florida State University)

WELCH, PAUL R., Associate Professor of Accounting (1988), B.S., M.B.A., Ph.D. (University of Florida)
WELKE, JAMES W., Chair, Department of Communication and Professor of Communication  
(1986), A.B., M.A., Ph.D. (Indiana University)  
WELKER, PATRICIA E., Assistant Professor of Radiologic Sciences  
(1987), B.S., R.T., M.A. (Idaho State University)  
WELLMAN, CHARLES W., Associate Professor of Art  
WESTRICK, ROBERT W., Director, Brevard Campus  
WHILE, MARGARET L., Assistant Professor of Education  
(1985), B.S., M.A., Ed.D. (Ball State University)  
WHISLER, BRUCE A., Interim Associate Dean and Associate Professor of Music  
(1971), B.A., Ph.D. (University of Rochester)  
WHITE, DANIEL R., Assistant Professor of Humanities  
(1988) B.A., M.A., Ph.D. (Florida State University)  
WHITE, KENNETH R., Associate Professor of Economics  
(1968), B.S., Ph.D. (University of Oklahoma)  
WHITE, ROSEANN S., Professor of Biological Sciences  
(1969), B.S., Ph.D. (University of Texas)  
WHITNEY, JOHN C., Assistant Professor of Music  
(1982), B.S., M.M. (New England Conservatory)  
WHITTIER, HENRY D., Professor of Biological Sciences  
(1968), B.S.Ed., M.A., Ph.D. (Columbia University)  
WELDMAN-PEPE, JULIE L., Assistant in Statistical Consulting  
(1984), B.A., M.S. (Purdue University)  
WILLIAMS, HENRY L., Assistant Professor of Engineering Sciences  
(1990) B.A., M.S., Ph.D. (Washington University)  
WILLIAMS, KARRI J., Associate Professor, College of Education  
(1984), B.S., M.Ed., Ph.D. (University of Arizona)  
WILLIS, DANA N., Assistant Professor of Aerospace Studies  
(1986), B.A., M.A. (State University of New York, at Plattsburgh)  
WODZINSKI, RUDY J., Professor of Biological Sciences  
(1970), B.S., M.S., Ph.D. (University of Wisconsin)  
WOLF, J. GARY, Distinguished Service, Professor of Music  
(1972), B.M.Ed., M.M., D.M.A. (Eastman School of Music)  
WOOD, ALEXANDER T., Chair, Educational Foundations and Associate Professor of Education  
(1969), B.A., M.S., Ph.D. (Florida State University)  
WOOTEN, WILLIAM, Assistant Professor of Psychology  
(1985), B.A., M.S., Ph.D. (Memphis State University)  
WORBS, HELMUTH E., Associate Professor of Engineering Technology  
(1978), B.S.M.E., M.S.M.E. (Stanford University), P.E. (Florida, California)  
WORKMAN, DAVID A., Associate Professor of Computer Science  
(1976), B.S., M.S., Ph.D. (University of Iowa)  
WORRELL, LEWIS T., Associate Professor of Cardiopulmonary Sciences  
(1976), B.S., M.P.H. (University of Central Florida)  
WRANCHER, ELIZABETH A., Associate Professor of Music  
(1974), B.M. (Indiana University), Prima Soprano Koblenz, Augsburg and Detmoid  
WYATT, WYATT Professor of English  
(1970), B.A., M.A. (Columbia University)  
WYCOFF, EDGAR B., Associate Professor of Communication  
(1972), B.S., M.B.A., Ph.D. (Florida State University)  
XANDER, JAMES A., Associate Professor of Economics  
(1969), B.S., Ph.D. (University of Georgia)  
YON, DONNA L., Assistant Professor of Accounting  
(1984), B.S., M.Acc., Ph.D. (Texas A&M University)  
YOUSEF, YOUSEF A., Professor of Engineering  
(1970), B.S.C.E., M.S., Ph.D. (University of Texas), P.E. (Florida, Texas)
PROFESSIONAL LIBRARIANS

ALLISON, ANNE MARIE, Director of Libraries (1983), B.A., M.A.L.S. (Rosary College)


BAIN, JANICE, Head, Access Services and Associate University Librarian (1966), B.A., M.L.S. (University of Maryland)

BALLARD, ROCHELLE R., Assistant University Librarian (1989), B.S., M.L.S. (University of Maryland)

FRANKS, JEFFREY, Assistant University Librarian (1987), B.A., M.L.S. (Kent State University)

GROVDahl, ELBA, Associate University Librarian (1973), B.A., M.S.L.S., A.M.D. E.D.D. (Florida State University)

HINSHAW, CAROLE S., Assistant University Librarian (1989), B.S., M.L.S. (Louisiana State University)

HOLLER, SUZANNE, Associate University Librarian (1987), B.A., M.L.S. (University of South Florida)

HOOD, SHARON L., University Librarian (1989), B.Sc., M.L.S. (University of Toronto)

HUDSON, PHYLLIS J., University Librarian (1972), B.A., M.S.L.S. (University of Illinois)

LaBRAKE, Orlyn B., Associate Director of Libraries (1977), B.A., M.L.S. (State University of New York at Albany)

LEE, CHANG C., University Librarian (1983), L.L.B., M.S., Ph.D. (Florida State University)

LLOYD, LUCILLE, Associate University Librarian (1971), B.A., M.L.S. (University of South Florida)

MAHAN, CHERYL B., Associate University Librarian (1977), B.A., M.L.S. (Florida State University)

PFARRER, THEODORE R., Associate University Librarian (1976), B.S., M.L.S., Ad.M.L.S., Ph.D. (Florida State University)

ROSSI, PETER, Head, Cataloging Department and Associate University Librarian (1973), A.B., M.L.S. (State University of New York at Genesco)

RUPPERT, CHERYL, Instructor Librarian (1987), B.A., M.L.S. (University of South Florida)


SNOW, MARILYN, Associate University Librarian (1984), B.A., M.L.S. (George Peabody College)

SOWDER, JEFFREY, Assistant University Librarian (1987), B.A., M.A.L.S. (University of South Florida)

STILLMAN, JUNE S., University Librarian (1988), B.A.L.S., M.A. (Florida State University)

SUTTON, LINDA, Associate University Librarian (1988), B.A., M.L.S. (Florida State University)

WARD, JEANETTE, Associate University Librarian (1984), B.S., M.L.S. (Rutgers University)

PROFESSIONAL LIBRARIAN WITH EMERITUS STATUS

WALKER, LYNN W. (1967), B.A., M.A. (Florida State University)

Director of Libraries Emeritus
FACULTY WITH EMERITUS STATUS

BARR-JOHNSON, VIRGINIA
(1971), B.A., M.Ed., Ph.D. (Florida State University)
Professor Emeritus of Education

BROWNE, ROLAND A.
(1968), B.A.M.A., C.E.F. (Queen's University, Canada)
Professor Emeritus of English

COLBOURN, TREVOR
President Emeritus and Professor of History

COMISH, NEWEL W.
(1968), B.S., M.S., Ph.D. (Ohio State University)
Professor Emeritus of Management

CRAIG, ALBERT
(1970), B.S., M.A., Ed.D. (Florida State University)
Professor Emeritus of Education

ERICKSON, ERNEST E.
(1969), B.E.E., M.S.E., Ph.D. (University of Florida), P.E. (Florida)
Professor Emeritus of Engineering

FOWLER, EARL C.
Professor Emeritus of Education

GREEN, HAROLD E.
(1968), B.S., M.Ed., Ed.D. (University of Missouri)
Professor Emeritus of Education and Director, Daytona Beach Campus

GRIFFITH, HAROLD L.
(1972), B.S., M.S. (Pennsylvania State University), P.E. (Florida)
Professor Emeritus of Engineering Technology

HARDEN, RICHARD C.
(1967) B.M.E., B.E.E., M.S.E., Ph.D. (University of Florida) P.E. (Florida)
Professor Emeritus of Engineering and Director, South Orlando Campus

HUBLER, J. W.
(1967), B.S.C.E., C.E., M.S.E., M.S.C.E. (Yale University), D.Eng. S. (Hon.) (University of Central Florida), P.E. (Florida and 18 other states)
Professor Emeritus of Engineering Technology

LYTLE, ERNEST J.
(1968), B.S., M.A., Ph.D. (University of Florida)
Professor Emeritus of Mathematical Sciences

McLELLON, WALDRON M.
(1969), B.S., B.C.E., M.C.E., M.S. (Physics), M.S. (Env.Engr.), Ph.D. (Rensselaer Polytechnic Institute)
Professor Emeritus of Engineering

MILLICAN, CHARLES N.
(1965), B.S., M.A., Ph.D. (University of Florida)
President Emeritus and Professor of Finance

OSTLE, BERNARD
(1967), B.A., M.A., Ph.D. (Iowa State University)
Professor Emeritus of Statistics

REIDENBACH, RICHARD C.
(1970), B.A., M.S., Ph.D. (St. Louis University)
Professor Emeritus of Management

SCHRADER, GEORGE F.
(1969), B.S., M.S., Ph.D. (University of Illinois), P.E. (Florida, Illinois)
Professor Emeritus of Engineering

TESORI, ANTHONY P.
Professor Emeritus of Education and Director, Brevard Campus
TOWLE, HERBERT C.
(1970) B.S.E., M.S.E. Ph.D. (University of Michigan) P.E. (Florida, New York)
Professor Emeritus of Engineering

WRIGHT, BURTON
(1970), B.S., M.S., Ph.D. (Florida State University)
Professor Emeritus of Sociology

HONORARY DEGREES AWARDED

December, 1969  Kurt H. Debus, Doctor of Engineering Science
                 William H. Dial, Doctor of Commercial Science
June, 1970      John W. Young, Doctor of Applied Science
March, 1973     Louis C. Murray, Doctor of Public Service
August, 1974    Fred Elmo Clayton, Doctor of Professional Engineering
August, 1978    Richard F. Livingston, Doctor of Business Administration
June, 1979      Albert F. Hegenberger, Doctor of Engineering Science
                 Lee R. Scherer, Doctor of Engineering Science
December, 1979  Joseph D. Duffey, Doctor of Humane Letters
August, 1980    Thelma Vivian Jackson Dudley, Doctor of Humanities
                 Howard Phillips (Posthumous), Doctor of Public Service
December, 1981  Gene Burns, Master of Letters
April, 1982     Andrew Duda, Jr., Doctor of Agricultural Service
                 Ferdinand Duda, Doctor of Agricultural Service
                 John Duda, Doctor of Agricultural Service
                 Robert J. Whalen, Doctor of Engineering Science
July, 1982      Mary Jo Stroud Davis, Doctor of Public Service
                 William E. Davis, Doctor of Public Service
December, 1982  Joseph A. Boyd, Doctor of Engineering Science
July, 1983      J. W. Hubler, Doctor of Engineering Science
                 Charles Wadsworth, Doctor of Public Service
December, 1984  Allan E. Gottlieb, Doctor of Laws
June, 1985      George J. Becker, Jr., Doctor of Public Service
                 Jerry Collins, Doctor of Public Service
                 D. Robert Graham, Doctor of Public Service
                 Walter O. Lowrie, Doctor of Engineering Science
                 William C. Schwartz, Doctor of Engineering Science
March, 1986     Isaac Bashevis Singer, Doctor of Letters
October, 1988   Elie Wiesel, Doctor of Letters
December, 1988  Sven Caspersen, Doctor of Engineering Science
                 John D. Holloway, Doctor of Public Service
                 Wolfgang-Detlef Petri, Doctor of Commercial Science
May, 1989       David Albertson, Doctor of Humane Letters
                 Frank M. Hubbard, Doctor of Public Service
                 William S. Jenkins, Doctor of Humane Letters
                 Charles N. Millican, Doctor of Laws
                 James C. Robinson, Doctor of Public Service

COURTESY APPOINTMENTS

ALBERT, JONATHON C., Clinical Faculty, Cardiopulmonary Sciences
RRT, B.S. (University of Central Florida)

ALEXANDER, GREGOR, Clinical Faculty, Cardiopulmonary Sciences
M.D. (Javeriana University)

ALMEIDA, ARTIE, Faculty Associate, Instructional Programs
M.A. (University of Central Florida)

ANDREWS, DEE H., Faculty Associate, Psychology
Ph.D. (Florida State University)

BARGAR, SHERRI, Faculty Associate, Educational Services
M.S. (Rollins College)
BARRON, ANN, Faculty Associate, Educational Services
M.A. (University of Central Florida)

BAUSER, MICHAEL G., Assistant Professor of Biological Sciences
B.S., M.S., Ph.D. (University of Florida)

BECKER, GARY, Faculty Associate, Educational Services
M.S. (Syracuse University)

BERTRAM, BURT, Associate, Educational Services
Ed.D. (University of Florida)

BEST, JAMES, Faculty Associate in Theatre

BIRD, MARY, Faculty Associate, Educational Foundations
MSM (Rollins College)

BOLVES, ELLEN, Faculty Associate, Educational Services
M.A. (University of Central Florida)

BOULWARE, ZELLA, Faculty Associate, Educational Services
M.Ed. (University of Central Florida)

BROWN, ASHMUN, Clinical Faculty, Health Sciences
J.D. (University of Michigan)

BUTKINS, PETER, Faculty Associate, Educational Services
M.S. (Niagara University)

CAPRAUN, LYNN W., Clinical Faculty, Cardiopulmonary Sciences
RRT, B.S., M.S. (University of Central Florida)

CARLETON, CHARLES C., Clinical Faculty, Medical Laboratory Sciences
M.D. (McGill University)

CARR, EDWARD O., Clinical Faculty, Medical Laboratory Sciences
S.B.B., M.T., (ASCP), B.S. (Mississippi State)

CLARKE, THOMAS L., Faculty Associate, Department of Mathematics
B.S., M.S., Ph.D. (University of Miami)

COHEN, CINDY, Clinical Faculty, Cardiopulmonary Sciences
RRT, A.S. (Valencia Community College)

COMPANION, MICHAEL A., Faculty Associate, Psychology
Ph.D. (New Mexico State University)

CONVERTINO, VICTOR A., Clinical Faculty, Cardiopulmonary Sciences
Ph.D. (University of California)

CURRY, RUPERT C., JR., Clinical Faculty, Cardiopulmonary Sciences
M.D. (University of Florida)

CRAWMER, ANDREW, Faculty Associate, Educational Foundations
Ed.D. (University of Florida)

DENNISON, JOLENE, Clinical Faculty, Radiologic Sciences
RT, (ARRT)

DEW, DOUGLAS K., Clinical Faculty, Health Sciences
M.D. (University of Miami School of Medicine)

DORN, JAMES S., Clinical Research Associate Health Sciences
D.V.M., (Cornell University)

DRYDEN, TOM, Clinical Faculty, Medical Laboratory Sciences
B.S. (Florida Southern College)

EVAN-IWANOWSKI, ROSS, Professor, Department of Mechanical Engineering and Aerospace Sciences
M.A., Ph.D. (Cornell University)

FISHER, KENNETH, Faculty Associate, Educational Services
Ed.D. (University of Florida)

FITZPATRICK, JACK, Clinical Faculty, Cardiopulmonary Sciences
RRT, B.S. (University of Central Florida)

FOWLER, JULIE, Clinical Faculty, Radiologic Sciences
R. T. (ARRT)

FREY, MARY A., Clinical Faculty, Cardiopulmonary Sciences
Ph.D. (George Washington University)

GILES, JO ANN, Clinical Faculty, Medical Laboratory Sciences
B.S., MT (ASCP) (University of Florida)

GILLIARD, LAWRENCE M., Clinical Faculty, Respiratory Therapy
M.D. (University of Miami)
Glaize, David, Faculty Associate, Educational Services
   Ed.D. (University of Central Florida/University of Florida)
Graham, Eleanor, Clinical Faculty, Medical Laboratory Sciences
   M.S. (Wayne State University)
Grieco, Alan, Clinical Faculty, Health Sciences
   Ph.D. (Memphis State University)
Griffin, Darrell R., Clinical Faculty, Cardiopulmonary Sciences
   B.S. (Florida Technological University)
Guy, Albert G., Professor of Chemistry
   D.Sc (Carnegie Institute of Technology)
Hartley, John R., Clinical Faculty, Cardiopulmonary Sciences
   B.A. (University of Florida)
Heddens, James, Faculty Associate, Instructional Programs
   Ed.D. (University of Northern Colorado)
Helms, Albert W., Faculty Associate, Educational Services,
   Ed.D., (University of Central Florida)
Hinkle, C. Ross, Assistant Professor of Biological Sciences
   Ph.D. (University of Tennessee)
Holimon, James L., Clinical Faculty, Medical Laboratory Sciences
   M.D. (Medical College of Virginia)
Jackson, Barbara, Clinical Faculty, Medical Record Administration
   RRA, B.S. (Florida Technological University)
Janeczko, Donna, Faculty Associate, Instructional Programs
   M.Ed., (University of Central Florida)
Kale, Herbert W., II, Assistant Professor of Biological Sciences
   Ph.D. (University of Georgia)
Kane, Susan, Clinical Faculty, Radiologic Sciences
   RT (ARRT), B.S. (University of Central Florida)
Kaplan, David T., Faculty Associate, Biological Sciences
   B.S., M.S., Ph.D. (University of California)
Kaufman, Roger, Faculty Associate, Industrial Engineering and Management Systems
   B.S., M.S., Ph.D. (New York University)
Kennedy, Robert S., Faculty Associate, Psychology
   B.A., M.A., Ph.D. (University of Rochester)
Kimel, Isodoro, Professor of Physics
   Ph.D. (University of Chicago)
Kincaid, J. Peter, Faculty Associate, Psychology
   Ph.D. (Ohio State University)
Klotz, Saul D., Professor of Biological Sciences and Clinical Faculty, Cardiopulmonary Science.
Knott, William M., Assistant Professor of Biological Sciences
   Ph.D. (North Carolina State University)
Langdon, John, Associate Professor of Health Sciences
   B.S., M.D. (Creighton University)
Lipman, Brian, Clinical Faculty, Cardiopulmonary Sciences
   F.C.P. (College of Medicine of South Africa)
Livesay, Kelland, Faculty Associate, Educational Services
   Ph.D. (Indiana State University)
Longley Ross E., Faculty Associate, Biological Sciences
   B.S., M.S., Ph.D. (University of Oklahoma)
Marvin, Paul W., Clinical Faculty, Radiologic Sciences
   B.S., M.S. (Bucknell University)
Mayer, Richard T., Professor of Chemistry
   Ph.D. (University of Georgia)
Mcgee, Carla F., Clinical Faculty, Medical Laboratory Sciences
   B.S. MT (ASCP) (Winona State University)
McCausland, Elizabeth A., Clinical Faculty, Cardiopulmonary Sciences
   B.S. (Florida Technological University)
McPherson, Brenda, Faculty Associate, Educational Services
   M.S. (University of Central Florida)
MENGEL, MARVIN C., Clinical Faculty, Cardiopulmonary Sciences
M.D. (Johns Hopkins University)

MIXON, LONNIE M., Clinical Faculty, Cardiopulmonary Sciences
NMTCB, A.A. (South Florida Junior College)

ODELL, DANIEL KEITH, Adjunct Assistant Professor of Biology
B.S., M.A., Ph.D. (University of California, Los Angeles)

OZKAPTAN, HALIM, Faculty Associate, Psychology
Ph.D. (Catholic University)

PENTELLA, MICHAEL A., Clinical Faculty, Medical Laboratory Sciences
B.S., M.S. (Thomas Jefferson University)

PELLOSIE, JOHN C., Clinical Faculty, Health Sciences
D.O. (Philadelphia College of Osteopathic Medicine & Surgery)

PINDER, A.R., Professor of Chemistry
B.Sc., Ph.D., D. Phil., D.Sc. (University of Sheffield)

PRITCHARD, PETER C. H., Assistant Professor of Biological Sciences
B.A., M.A., Ph.D. (University of Florida)

PYLES, VALORIE K., Clinical Faculty, Medical Laboratory Sciences
A.A., B.S. MT(ASCP) (University of South Florida)

REDDY, KONDRA R., Assistant Professor of Biological Sciences
Ph.D. (Louisiana State University)

RINI, JAMES, Faculty Associate, Educational Services
Ed.D., (University of Central Florida/University of Florida)

ROBERTS, W.J., JR., Clinical Faculty, Medical Laboratory Sciences
A.A., B.S. MT(ASCP) (Florida International University)

ROGERS, ROBERT L., JR., Clinical Faculty, Cardiopulmonary Sciences
RRT, B.S. (University of Central Florida)

SAGERT, REBA, Clinical Faculty, Medical Record Administration
B.S., RRA (Loma Linda University)

SCOTT, MEREDITH LEE, Clinical Faculty, Cardiopulmonary Sciences
M.D. (University of Florida Medical School)

SINDLER, ROBERT B., Clinical Faculty, Cardiopulmonary Sciences
D.V.M. (University of Georgia)

SINGER, MICHAEL JAMES, Faculty Associate, Psychology
B.A., M.S., Ph.D. (University of Maryland)

SMITH, JUDITH, Clinical Faculty, Medical Record Administration
RRA, B.S. (Florida Technological University)

STERLING, JO, Clinical Faculty, Medical Laboratory Sciences
B.S. MT(ASCP) (Southwest Missouri State University)

STONE, LINDA, Faculty Associate, Educational Services
Ph.D., (University of Florida)

STRAYER, RICHARD F., Assistant Professor of Biological Sciences
Ph.D. (Michigan State University)

SWERDLOW, CATHY, Clinical Faculty, Medical Record Administration
RRA, B.S. (University of Western Carolina)

THOMPSON, CORLEY M., Associate Professor of Chemistry and Research Chemist
B.S., M.S., Ph.D. (Auburn University)

TOMASELLI, CLARE M., Clinical Faculty, Cardiopulmonary Sciences
Ph.D. (George Washington University)

VOGJMAYR, JOSEF KARL, Adjunct Assistant Professor of Biology
B.Sc.Agric., M.Sc., Ph.D. (University of Sidney)

VONSTILLE, WALTER, Clinical Faculty of Health Sciences
B.S., M.S., Ph.D. (Columbia University)

WALSH, ANTHONY, Clinical Faculty, Medical Laboratory Sciences
Ph.D., (University of Florida)

WEBB, JAMES M., Clinical Faculty, Cardiopulmonary Sciences
RRT, B.S. (Loma Linda University)

WHISLER, MARILYN W., Associate Professor in Political Science
B.A., M.A., Ph.D. (University of Wisconsin)

WILLIAMS, KENT E., Faculty Associate, Department of Psychology
M.A., Ph.D. (University of Connecticut)
WINDHAM, STEVE C., Clinical Research Associate, Health Sciences
B.S., M.P.H., (University of Alabama, Birmingham)

YESAWICH, PETER, Professor of Hospitality Management

YING, NELSON, Faculty Associate, Department of Physics
B.S., M.S., Ph.D. (Adelphi University)

YOKOMI, RAYMOND K., Faculty Associate, Biological Sciences
B.S., Ph.D. (University of California)
### INDEX

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA Degree</td>
<td>38, 84</td>
</tr>
<tr>
<td>Academic</td>
<td></td>
</tr>
<tr>
<td>Ethics Policy</td>
<td>55</td>
</tr>
<tr>
<td>Honors</td>
<td>60</td>
</tr>
<tr>
<td>Policies</td>
<td>55</td>
</tr>
<tr>
<td>Probation</td>
<td>57</td>
</tr>
<tr>
<td>Programs</td>
<td>84</td>
</tr>
<tr>
<td>Resource Center, Student</td>
<td>82</td>
</tr>
<tr>
<td>Schedule Change</td>
<td>58</td>
</tr>
<tr>
<td>Standing</td>
<td>57</td>
</tr>
<tr>
<td>Terms and Actions-Defined</td>
<td>57</td>
</tr>
<tr>
<td>Warning</td>
<td>57</td>
</tr>
<tr>
<td>Accounting, School of</td>
<td>136</td>
</tr>
<tr>
<td>Accreditation</td>
<td>17</td>
</tr>
<tr>
<td>Accredited Institutions</td>
<td>40</td>
</tr>
<tr>
<td>ACT (Am. College Test)</td>
<td>37, 38</td>
</tr>
<tr>
<td>Add/Drop Policy</td>
<td>58</td>
</tr>
<tr>
<td>Administration, UCF Offices of</td>
<td>6</td>
</tr>
<tr>
<td>Admissions</td>
<td></td>
</tr>
<tr>
<td>Deadline</td>
<td>10-14, 36</td>
</tr>
<tr>
<td>Early Admission</td>
<td>61</td>
</tr>
<tr>
<td>Transfer</td>
<td>38</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>35</td>
</tr>
<tr>
<td>Upper Division</td>
<td>72</td>
</tr>
<tr>
<td>Admissions and Standards</td>
<td></td>
</tr>
<tr>
<td>Committee</td>
<td>35</td>
</tr>
<tr>
<td>Advanced Placement Program</td>
<td>63</td>
</tr>
<tr>
<td>Advertising/Public Relations</td>
<td>97</td>
</tr>
<tr>
<td>Advisement (See Calendar)</td>
<td></td>
</tr>
<tr>
<td>College of Arts &amp; Sciences (OASIS)</td>
<td>88</td>
</tr>
<tr>
<td>Aerospace Engineering</td>
<td>165</td>
</tr>
<tr>
<td>Aerospace Studies</td>
<td>74, 159</td>
</tr>
<tr>
<td>Afro-American Studies</td>
<td>66, 88</td>
</tr>
<tr>
<td>Affirmative Action</td>
<td>2</td>
</tr>
<tr>
<td>Air Force (See Aerospace Studies)</td>
<td></td>
</tr>
<tr>
<td>American Private Enterprise, Phillips-Schenck Chair</td>
<td>22</td>
</tr>
<tr>
<td>American Studies Program</td>
<td>66, 89</td>
</tr>
<tr>
<td>Anthropology</td>
<td>125, 127</td>
</tr>
<tr>
<td>Appeal</td>
<td>45</td>
</tr>
<tr>
<td>Application Fee</td>
<td>43</td>
</tr>
<tr>
<td>Application for Undergraduate</td>
<td></td>
</tr>
<tr>
<td>Admission</td>
<td>35</td>
</tr>
<tr>
<td>Area Campuses</td>
<td>19</td>
</tr>
<tr>
<td>Army ROTC</td>
<td>75</td>
</tr>
<tr>
<td>Art</td>
<td>89, 102</td>
</tr>
<tr>
<td>Art Education</td>
<td>149</td>
</tr>
<tr>
<td>Arts and Sciences, College of</td>
<td>86</td>
</tr>
<tr>
<td>Asian Studies</td>
<td>24</td>
</tr>
<tr>
<td>Associate of Arts Degree</td>
<td>38, 84</td>
</tr>
<tr>
<td>Athletics, Intercollegiate</td>
<td>25</td>
</tr>
<tr>
<td>Audit</td>
<td>42, 55</td>
</tr>
<tr>
<td>Bachelor's (Baccalaureate) Degree</td>
<td>84, 85</td>
</tr>
<tr>
<td>Second Degree</td>
<td>85</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>91</td>
</tr>
<tr>
<td>Board of Education, State of Florida</td>
<td>6</td>
</tr>
<tr>
<td>Board of Regents, State of Florida</td>
<td>6</td>
</tr>
<tr>
<td>Bookstore</td>
<td>26</td>
</tr>
<tr>
<td>Botany</td>
<td>93</td>
</tr>
<tr>
<td>Brevard Area Campus</td>
<td>19</td>
</tr>
<tr>
<td>Business Administration, College of</td>
<td>134</td>
</tr>
<tr>
<td>Business Administration, General</td>
<td>140</td>
</tr>
<tr>
<td>Calendar, University</td>
<td>10-14</td>
</tr>
<tr>
<td>Cambridge Program</td>
<td>23</td>
</tr>
<tr>
<td>Campuses, Area</td>
<td>19</td>
</tr>
<tr>
<td>Center for Executive Development</td>
<td>188</td>
</tr>
<tr>
<td>Center for Multilingual multicultural Studies</td>
<td>187</td>
</tr>
<tr>
<td>Central Florida Research Park</td>
<td>26</td>
</tr>
<tr>
<td>Certification for Teaching</td>
<td>72</td>
</tr>
<tr>
<td>Checks, Personal</td>
<td>45</td>
</tr>
<tr>
<td>Chemistry</td>
<td>94</td>
</tr>
<tr>
<td>Children, Creative School for</td>
<td>33</td>
</tr>
<tr>
<td>Civil and Environ. Engineering</td>
<td>161</td>
</tr>
<tr>
<td>Classification by Semester Hours</td>
<td>55</td>
</tr>
<tr>
<td>College Level Academic Skills</td>
<td></td>
</tr>
<tr>
<td>Test (CLAST)</td>
<td>72</td>
</tr>
<tr>
<td>College Level Examination Program</td>
<td></td>
</tr>
<tr>
<td>(CLEP)</td>
<td>61</td>
</tr>
<tr>
<td>College Preparatory Instruction</td>
<td>41</td>
</tr>
<tr>
<td>Colleges</td>
<td></td>
</tr>
<tr>
<td>Arts and Sciences</td>
<td>86</td>
</tr>
<tr>
<td>Business Administration, General</td>
<td>134</td>
</tr>
<tr>
<td>Education</td>
<td>143</td>
</tr>
<tr>
<td>Engineering</td>
<td>157</td>
</tr>
<tr>
<td>Health and Professional Studies</td>
<td>171</td>
</tr>
<tr>
<td>Extended Studies</td>
<td>187</td>
</tr>
<tr>
<td>Communication, School of</td>
<td>97</td>
</tr>
<tr>
<td>Communication, Interpersonal</td>
<td>98</td>
</tr>
<tr>
<td>Communication, Organizational</td>
<td>100</td>
</tr>
<tr>
<td>Communicative Disorders</td>
<td>172</td>
</tr>
<tr>
<td>Community Arts, William &amp; Alice</td>
<td></td>
</tr>
<tr>
<td>Jenkins Chair</td>
<td>22, 102</td>
</tr>
<tr>
<td>Community College Relations</td>
<td>77</td>
</tr>
<tr>
<td>Computer Center</td>
<td>103</td>
</tr>
<tr>
<td>Computer Engineering</td>
<td>163</td>
</tr>
<tr>
<td>Computer Science</td>
<td>103, 104</td>
</tr>
<tr>
<td>Charles N. Millican Chair</td>
<td>22</td>
</tr>
<tr>
<td>Confidentiality of Records</td>
<td>28</td>
</tr>
<tr>
<td>Continuing Education</td>
<td></td>
</tr>
<tr>
<td>Extended Studies</td>
<td></td>
</tr>
<tr>
<td>Continuous Enrollment</td>
<td>67</td>
</tr>
<tr>
<td>Cooperative Education</td>
<td>77</td>
</tr>
<tr>
<td>Corequisite Course (CR)</td>
<td>195</td>
</tr>
<tr>
<td>Topic</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Correspondence Courses</td>
<td>72</td>
</tr>
<tr>
<td>Costs—See Fees</td>
<td>30</td>
</tr>
<tr>
<td>Counseling and Testing Center</td>
<td>192</td>
</tr>
<tr>
<td>Course Classification</td>
<td>192</td>
</tr>
<tr>
<td>Course Descriptions</td>
<td>192</td>
</tr>
<tr>
<td>Course Numbering System</td>
<td>192</td>
</tr>
<tr>
<td>Course Substitution</td>
<td></td>
</tr>
<tr>
<td>General Education Program</td>
<td>67-69</td>
</tr>
<tr>
<td>Courses-Special</td>
<td>195</td>
</tr>
<tr>
<td>CPA Exam Requirements</td>
<td>321</td>
</tr>
<tr>
<td>Creative School for Children</td>
<td>33</td>
</tr>
<tr>
<td>Credit</td>
<td></td>
</tr>
<tr>
<td>By Examination</td>
<td>66</td>
</tr>
<tr>
<td>Transfer</td>
<td>38, 136</td>
</tr>
<tr>
<td>While Disqualified/Excluded</td>
<td>58</td>
</tr>
<tr>
<td>CREOL</td>
<td>189</td>
</tr>
<tr>
<td>Criminal Justice Program</td>
<td>173</td>
</tr>
<tr>
<td>Daytona Area Campus</td>
<td>21</td>
</tr>
<tr>
<td>Dean of Students</td>
<td>28</td>
</tr>
<tr>
<td>Dean's List</td>
<td>60</td>
</tr>
<tr>
<td>Degrees Offered</td>
<td>84</td>
</tr>
<tr>
<td>Degree Requirements</td>
<td>67</td>
</tr>
<tr>
<td>Directory, Campus</td>
<td>15</td>
</tr>
<tr>
<td>Disqualification</td>
<td>57, 58</td>
</tr>
<tr>
<td>Double Major</td>
<td>85</td>
</tr>
<tr>
<td>Dual Enrollment—See Early Admission</td>
<td></td>
</tr>
<tr>
<td>Economics Education, Center for</td>
<td>189</td>
</tr>
<tr>
<td>Economics (BA)</td>
<td>105</td>
</tr>
<tr>
<td>Economics (BSBA)</td>
<td>137, 138</td>
</tr>
<tr>
<td>Education, College of</td>
<td>143</td>
</tr>
<tr>
<td>Student Internship Programs</td>
<td>145</td>
</tr>
<tr>
<td>Educational Foundations</td>
<td>146</td>
</tr>
<tr>
<td>Educational Services</td>
<td>146</td>
</tr>
<tr>
<td>Exceptional &amp; Physical Education</td>
<td>147</td>
</tr>
<tr>
<td>Instructional Programs</td>
<td>149</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>163</td>
</tr>
<tr>
<td>Elementary Education</td>
<td>150</td>
</tr>
<tr>
<td>Employment Opportunities</td>
<td>47, 49, 77</td>
</tr>
<tr>
<td>Endowed Chairs</td>
<td>22</td>
</tr>
<tr>
<td>Engineering, College of</td>
<td>157</td>
</tr>
<tr>
<td>Engineering Technology</td>
<td>156, 159, 166</td>
</tr>
<tr>
<td>English</td>
<td>105</td>
</tr>
<tr>
<td>English Language Arts Educ.</td>
<td>151</td>
</tr>
<tr>
<td>Examination Scores and GPA</td>
<td>37</td>
</tr>
<tr>
<td>Environmental Sciences-Engr</td>
<td>161</td>
</tr>
<tr>
<td>Equal Opportunity</td>
<td>2</td>
</tr>
<tr>
<td>Ethics Policy, Academic</td>
<td>55</td>
</tr>
<tr>
<td>Evening Student Services</td>
<td>32</td>
</tr>
<tr>
<td>Exceptional Child Education</td>
<td>147</td>
</tr>
<tr>
<td>Exclusion, Academic</td>
<td>58</td>
</tr>
<tr>
<td>Extended Studies, College of</td>
<td>187</td>
</tr>
<tr>
<td>Faculty</td>
<td>296</td>
</tr>
<tr>
<td>Faculty, Emeritus</td>
<td>320</td>
</tr>
<tr>
<td>Fees, Tuition and</td>
<td>43, 46</td>
</tr>
<tr>
<td>Fee Waivers, Appeals, Refunds</td>
<td>45, 46</td>
</tr>
<tr>
<td>Film</td>
<td>101</td>
</tr>
<tr>
<td>Finance</td>
<td>138</td>
</tr>
<tr>
<td>Financial Aid, Office of</td>
<td>47</td>
</tr>
<tr>
<td>Determining Eligibility</td>
<td>47</td>
</tr>
<tr>
<td>UCF Application Deadlines</td>
<td>47</td>
</tr>
<tr>
<td>Application Procedures</td>
<td>47</td>
</tr>
<tr>
<td>Verification</td>
<td>48</td>
</tr>
<tr>
<td>Transfer Students</td>
<td>48</td>
</tr>
<tr>
<td>Independent Student Status</td>
<td>49</td>
</tr>
<tr>
<td>Programs Available at UCF</td>
<td>49</td>
</tr>
<tr>
<td>Grants</td>
<td>49</td>
</tr>
<tr>
<td>Employment</td>
<td>49</td>
</tr>
<tr>
<td>Loans</td>
<td>49</td>
</tr>
<tr>
<td>Loans and Employment Not Based on Need</td>
<td>50</td>
</tr>
<tr>
<td>Other Services</td>
<td>50</td>
</tr>
<tr>
<td>Scholarships</td>
<td>50</td>
</tr>
<tr>
<td>Award Packages</td>
<td>50</td>
</tr>
<tr>
<td>Automatic Deferment</td>
<td>51</td>
</tr>
<tr>
<td>Disbursements</td>
<td>51</td>
</tr>
<tr>
<td>Refunds and Repayment</td>
<td>52</td>
</tr>
<tr>
<td>Requirements to Receive Aid</td>
<td>52</td>
</tr>
<tr>
<td>Satisfactory Academic Progress</td>
<td>52</td>
</tr>
<tr>
<td>Financial Aid for Graduate Students</td>
<td>54</td>
</tr>
<tr>
<td>Student Rights and Responsibilities</td>
<td>54</td>
</tr>
<tr>
<td>Florida Canada Institute</td>
<td>189</td>
</tr>
<tr>
<td>Florida, East Central</td>
<td>18</td>
</tr>
<tr>
<td>Florida Information Resources Network (FIRN)</td>
<td>103</td>
</tr>
<tr>
<td>Florida Resident/Tuition</td>
<td>44</td>
</tr>
<tr>
<td>Florida Solar Energy Center</td>
<td>190</td>
</tr>
<tr>
<td>Food Services</td>
<td>31, 43</td>
</tr>
<tr>
<td>Foreign Languages</td>
<td></td>
</tr>
<tr>
<td>Combination</td>
<td>109</td>
</tr>
<tr>
<td>Department of</td>
<td>107</td>
</tr>
<tr>
<td>Proficiency Requirement</td>
<td>70</td>
</tr>
<tr>
<td>Foreign Language Education</td>
<td>151</td>
</tr>
<tr>
<td>Foreign Study Centers</td>
<td>88</td>
</tr>
<tr>
<td>Forensic Science</td>
<td>96</td>
</tr>
<tr>
<td>Foundation, UCF</td>
<td>26</td>
</tr>
<tr>
<td>French</td>
<td>108</td>
</tr>
<tr>
<td>Freshman Applicants</td>
<td>37</td>
</tr>
<tr>
<td>General Education Program</td>
<td>67</td>
</tr>
<tr>
<td>Geography</td>
<td>241</td>
</tr>
<tr>
<td>Geology</td>
<td>242</td>
</tr>
<tr>
<td>German</td>
<td>107</td>
</tr>
<tr>
<td>Gerontology Certificate Program</td>
<td>77</td>
</tr>
<tr>
<td>Gordon Rule</td>
<td>70</td>
</tr>
<tr>
<td>Government, Institute of</td>
<td>187</td>
</tr>
<tr>
<td>Grade Forgiveness Policy</td>
<td>40, 59</td>
</tr>
<tr>
<td>Grading System</td>
<td>56</td>
</tr>
<tr>
<td>Graduate Programs</td>
<td>85</td>
</tr>
<tr>
<td>Graduation Process</td>
<td></td>
</tr>
<tr>
<td>Steps in</td>
<td>67, 72</td>
</tr>
<tr>
<td>Degree Req.-University</td>
<td>67</td>
</tr>
<tr>
<td>Requirements-Catalog Choice</td>
<td>67</td>
</tr>
<tr>
<td>Handicapped Student Services</td>
<td>33</td>
</tr>
<tr>
<td>Health</td>
<td></td>
</tr>
<tr>
<td>Record</td>
<td>31</td>
</tr>
<tr>
<td>Sciences</td>
<td>174</td>
</tr>
<tr>
<td>Services</td>
<td>31</td>
</tr>
</tbody>
</table>
Management Institute .................................. 191
Maps
Area Campuses ........................................... 19-22
Orlando Area ............................................. Inside Front Cover
Orlando Campus .......................................... Inside Back Cover
Marketing .................................................... 141
Mathematics ................................................. 111
Mathematics Education .................................. 152
Mechanical Engineering ................................ 165
Medical History for Admissions ......................... 36
Medical Laboratory Sciences ............................ 176
Medical Record Administration ........................ 175
Microbiology ................................................ 93
Minor (Consult Departments) ........................... 85
Minority Student Services ................................ 82
Motion Picture Technology (Film) ....................... 101
Multilingual-Multicultural Studies ...................... 187
Music ......................................................... 114
Music Education ......................................... 117
Non-Degree Student ...................................... 42, 56
Nursing ....................................................... 182
OASIS .......................................................... 88
Optical Sciences and Engineering, Cobb, L. J. Hooker Chair ............ 22
Organizational Communication .......................... 100
Orientation .................................................. 30
Overall Average Defined .................................. 57
Paris Internship Program ................................ 24
Past Due Accounts ........................................ 45
Peer Advisors ............................................... 30
Pegasus ....................................................... 1
Philosophy and Humanities ................................ 118
Philosophy, UCF Statement of ........................... 17
Photography ................................................ see Art, Journalism
Physical Education ......................................... 148
Physics ........................................................ 119, 120
Placement ..................................................... see Career Resource Ctr
Policies, Academic ......................................... 55
Political Science ............................................. 121, 123
Post Baccalaureate Status ................................ 55
Pre-Health Professions .................................... 86, 87, 131
Prelaw .......................................................... 86, 123
Preprofessional Programs ................................ 86, 87
Prerequisites ................................................ 195
President's Honor Roll .................................... 60
Press, UCF .................................................... 25
Probation, Academic ...................................... 57
Project for the Development of the Humanities and Fine Arts .......... 26
Provisional Student ........................................ 56
Psychology .................................................... 124
Public Administration ...................................... 184
Public Relations ............................................ see Advertising
Purpose, UCF Statement of .............................. 17
Radio-Television ............................................ 100

Management . .............................................. see Judaic Studies
Majors ......................................................... 84, 85
Management ................................................. 140
Reader comments and suggestions for improving the usefulness of this catalog may be sent to: Catalog, Office of Undergraduate Studies, AD 210, UCF, Orlando, FL 32816-0125
COLLEGES OF:

Arts and Sciences
Business Administration
Education
Engineering
Health and Professional Studies
Liberal Studies Program

Member, State University System of Florida