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May 1999
Volume 32, Number 1

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Michelle C. Oyala, Student Regent
Steven J. Uhlfelder
Welcom "Hank" Watson
Adam W. Herbert, Chancellor

Tampa
Okahumpka
Ft. Myers
Panama City
Tallahassee
Gainesville
Orlando
Miami
Riveria Beach
Sarasota
West Palm Beach
Boca Raton
Tallahassee
Fort Lauderdale
Tallahassee

PRINCIPAL OFFICERS OF ADMINISTRATION

President
Provost and Vice President for Academic Affairs
Vice President for Administration and Finance
Interim Vice President for Student Development and Enrollment Services
Vice President for University Relations
Interim Vice President for Research
Vice President for Development and Alumni Affairs

John C. Hitt
Gary E. Whitehouse
William F. Merck, II
Thomas Huddleston, Jr.
Daniel C. Holsenbeck
M. J. Soileau
Robert Holmes, Jr.

ADMINISTRATION

Office of the President
President of the University
Senior Executive Assistant to the President
Executive Assistant to the President
General Counsel
Inspector General
Director, Athletics
Director, Constituent Relations
Director, Diversity Initiatives
Director, EEO/AA Programs
University Ombuds Officer

John C. Hitt
Beth Barnes
Amy J. Barnickel
Mary Beth Liberto
Barbara B. Ratti
Stephen C. Sloan
Karen Breakell
Valarie G. King
Janet P. Balanoff
Vicky Brown

UCF Foundation, Inc.
Vice President for Development and Alumni Affairs and CEO
Associate Vice President and Chief Financial Officer
President Emeritus and Special Assistant to the UCF Foundation President
President Emeritus and Special Assistant to the UCF Foundation President

Robert Holmes, Jr.
Theresa Schoening
Charles N. Millican
Trevor Colbourn

Office of the Provost and Vice President for Academic Affairs
Provost and Vice President for Academic Affairs
Vice Provost, Academic Programs
Associate Vice President and Director, Brevard Campus
Associate Vice President and Director, Daytona Beach Campus

Gary E. Whitehouse
Frank E. Juge
James A. Drake
Jack B. Rollins
Assistant Vice President and Director, Continuing Education
Assistant Vice President for Personnel and Undergraduate Curriculum
Dean, Honors College
Director, Cooperative Education
Director, Downtown Academic Center
Director, Faculty Center for Teaching and Learning
Interim Director, Center for Distributed Learning
Vice Provost, Information Technologies and Resources
Director, Computer Services
Director, University Libraries
Director, Instructional Resources
Director, Distance Learning Course Development
Associate Vice President, Academic Administrative Systems
Assistant Director, Academic Support Services
Associate Vice President, Planning and Evaluation
Director, Office of International Studies
Director, Florida-Eastern European Linkage Institute
Director, Florida-Canada Linkage Institute
Director, Institutional Research and Planning
Interim Associate Vice President for Graduate Studies
Assistant Director, Academic Affairs
Assistant Director, Publications
Technology Manager
Coordinator, Admissions and Registration
Thesis/Publications Editor
Accounting Coordinator, Fellowships

Office of the Vice President for Student Development and Enrollment Services
Interim Vice President for Student Development and Enrollment Services
Associate Vice President for Academic Development and Retention
Assistant Dean, Academic Services
Director, Academic Support and Advising Services
Director, Academic Exploration Program
Director, Academic Services for Student-Athletes
Director, First Year Advising and Information Services
Director, Southern Regional Office of the National Consortium for Academics and Sports
Director, Student Academic Resource Center
Director, Career Resource Center
Director, Counseling and Testing Center
Director, Transfer Services
Interim Director, Student Orientation Program
University Registrar
Associate Vice President for Campus Life
Assistant Vice President for Campus Life
Director, Campus Ministries
Director, Greek Affairs
Director, Housing and Residence Life
Director, Judicial Programs
Interim Director, LEAD Scholars Program
Director, Recreational Services
Director Student Activities
Director, Student Legal Services
Director, Student Union
Interim Director, Student Health Services
Director, Brevard Campus Life
Director, Daytona Campus Life
Associate Vice President for Student Government and Divisional Operations Support
Coordinator, Student Government Business Operations
Assistant Vice President for Administrative Affairs
Assistant Vice President for Special Programs
Associate Director, Multicultural Student Services
Director, Creative School for Children
Director, International Student and Scholar Services

Patrick Wagner
TBA
Allyn M. Stearman
Sheri Dressler
Cecilia Rivers
Karen L. Smith
Steve Sorg
Joel L. Hartman
William H. Branch
Barry B. Baker
Ruth Marshall
Barbara Truman
J. Edward Neighbor
Lynn J. Gonzalez
Denise L. Young
Mathilda E. Harris
Jean Kijek
Warren McHone
Daniel R. Coleman
Patricia J. Bishop
Joanne Muratori
Debra Winter
Solan Ngan
Tracy R. Jones
Beth Milloy
Tammy Pagel

Thomas Huddleston, Jr.
Maribeth Ehasz
David R. Dees
Patricia E. Pates
Russell Tiberii
Sandra B. Reeves
Robert E. Snow

Suzi Katz
TBA
James W. Gracey
Robert Harman
TBA
Cynthia Arnaud
Dennis J. Dulniak
Craig E. Ullom
Jimmy Watson
Anna Jackson
Gregory Mason
Christopher McCray
E. Garth Jenkins
Edward Hampton
Loren Knutson
Reuban Rodriguez
Patricia A. MacKown
Mark Hall
Robert Faust
Karen Bray
Diana L. Weidman

Kenneth D. Lawson
Montel Watson
Paul R. McQuilkin
A. J. Range
Inez Ford
Dolores Burghard
Bassam Khoury
Directors, Non-Traditional and Evening/Weekend Student Services
Director, Student Disability Services
Director, Student Outreach Programs
Director, Veterans' Affairs
Executive Director, Student Financial Assistance
Interim Executive Director, Undergraduate Admissions
Student Government Advisor

Office of the Vice President for Research
Interim Vice President for Research
Administrative Services Manager
Publication Coordinator
Technology Transfer Manager
Interim Director, Sponsored Research
Security Clearance Officer

Office of the Vice President for Administration and Finance
Vice President for Administration and Finance
Associate Vice President
Associate Director
Director, Budget Office
Interim Director, Business Services
Director, Environmental Health and Safety
Director, Facilities Planning
Director, Human Resources
Director, Physical Plant
Director, Purchasing
Director, Quality Initiatives
Director, University Police
University Controller

Office of the Vice President for University Relations
Vice President for University Relations and Senior Counsel to the President
Assistant Vice President for University Relations and Director,
Public Relations
Director, Community Relations
Director, Defense Transition Services
Director, Federal Relations

COLLEGES AND DEPARTMENTS

College of Arts and Sciences
Dean
Associate Dean
Associate Dean
Interim Assistant Dean
Assistant Dean
Director, Liberal Studies Program
Director, OASIS
Director, School of Communication
Acting Chair, Art
Chair, Biology
Chair, Chemistry
Director, School of Computer Science
Chair, English
Interim Chair, Foreign Languages and Literatures
Chair, History
Chair, Mathematics
Chair, Music
Chair, Philosophy
Chair, Physics
Chair, Political Science
Chair, Psychology
Chair, Sociology and Anthropology

Jameer Abass
Dennis K. Hall
Emily Santiago
Ronald H. Atwell
Mary McKinney
Susan R. Burr
Ossie Palla

M. J. Soileau
Beverly Laakso
Barbara Compton
Michael Herforth
Betsy Gray
Kay Mullally

William F. Merck, II
Joyce A. Clampitt
Judith E. Monroe
James G. Smith, Jr.
John P. Goree
James E. Uhler
Peter Newman
Mark A. Roberts
Richard Paradise
Walter G. Winstead
Janice D. Terrell
Richard P. Turkiewicz
Linda B. Bonta

Daniel C. Holsenbeck
Dean McFall
Helen Donegan
Alzo J. Reddick
Marilyn Cobb Croach

Kathryn L. Seidel
Ben B. Morgan, Jr.
Haven C. Sweet
Terry Frederick
Jose Fernandez
Lyman Brodie
Donald E. Jones
Judith P. Boyte
Milan D. Meeske
Joyce Lilie
David H. Vickers
Glenn N. Cunningham
Erol Gelenbe
Dawn Trouard
Bernard Decker
Richard C. Crepeau
John R. Cannon
Lee Eubank
John S. Riser
Brian Tonner
Robert L. Bledsoe
John M. McGuire
Harold J. Corzine
College of Business Administration
Dean
Interim Associate Dean
Associate Dean, Graduate and External Programs
Associate Dean, Undergraduate Programs
Center for Executive Development
Director, School of Accounting
Chair, Economics
Chair, Finance
Interim Chair, Hospitality Management
Chair, Management
Chair, Marketing
Director, Student Support

David Nickerson
Donald W. Seay

College of Education
Dean
Associate Dean for Academic Affairs
Associate Dean for Research & Graduate Studies
Assistant Dean for Administration and Accreditation
Chair, Educational Foundations
Chair, Educational Services
Chair, Exceptional and Physical Education
Chair, Instructional Programs
Director of Development
Director of Clinical Experiences
Director, Student Services
Director, Minority Programs in Education

Sandra L. Robinson
Jennifer C. Platt
Michael C. Hynes
TBA
Karen L. Biraimah
TBA
Wilfred Wienke
Jeffrey W. Cornett
TBA
Donna Walker-Knight
Tina M. Smilie
TBA

College of Engineering
Dean
Associate Dean for Research
Associate Dean for Academic Affairs
Assistant Dean for Graduate Affairs
Director of External Resources
Director of External Relations
Chair, Civil and Environmental Engineering
Chair, Electrical and Computer Engineering
Chair, Industrial Engineering and Management Systems
Chair, Mechanical, Materials and Aerospace Engineering
Chair, Engineering Technology
Chair, Aerospace Studies (AFROTC)
Chair, Military Science (Army ROTC)

Martin P. Wanielista
Debra R. Reinhart
Richard N. Miller
Issa Batarseh
Jack A. Selter
Christian S. Bauer
A. Essam Radwan
Wasfy B. Mikhael
Charles H. Reilly
Louis C. Chow
Richard G. Denning
LTC Judge
LTC John J. Ruzich

College of Health and Public Affairs
Dean
Associate Dean, Administration and Research
Assistant Dean, Academic Affairs
Assistant Dean, Student Affairs
Interim Chair, Communicative Disorders
Chair, Criminal Justice and Legal Studies
Interim Chair, Health Professions and Physical Therapy
Chair, Molecular Biology and Microbiology
Director, School of Nursing
Chair, Public Administration
Director, School of Social Work
Director of Student Support
Advisement Coordinator

Belinda R. McCarthy
Michael J. Sweeney
Joyce E. Dorner
Cheryl Green
Michael J. Sweeney
Bernard J. McCarthy
Michael J. Sweeney
Robert N. Gennaro
Elizabeth Stullenbarger
Tom Liou
Mary P. Vanhook
Judith A. Sindlinger
Debbie K. Phillis
DIRECTIONS TO UCF CAMPUS

From Orlando International Airport: (20 miles)
Go east on 528 to 417 north. Take 417 north (Toll Road) to University Blvd. Exit east onto University Blvd. to UCF.

From Orlando Sanford Airport: (20 miles)
Lake Mary Blvd to 417 south (Toll Road). Go to University Blvd. Turn left onto University Blvd. continuing east to UCF.

From Daytona Beach on I-4:
Exit 49 onto Route 434 east. Go through Longwood, Winter Springs, and Oviedo on 434 to UCF.

From Tampa on I-4:
Exit 28 onto east 528 (Toll Road). Go past Orlando International Airport to 417 north. Take 417 north (Toll Road) to University Blvd. Exit east onto University Blvd. to UCF.

From South on Florida Turnpike:
Exit 254 (Orlando South - 441). Take first right onto east 528 (Toll Road). Go east past Orlando International Airport to 417. Take 417 north (Toll Road) to University Blvd. Exit east onto University Blvd. to UCF.

From North on Florida Turnpike:
Exit 265 onto east 408 (Toll Road). Go east through Orlando to merge with 417. Take 417 north to University Blvd. Exit east onto University Blvd. to UCF.

From Titusville (East Coast):
Hwy. 50 west past 408 overpass to 434. Turn right to UCF (2 miles).

From Melbourne:
I-95 to 520 to Hwy. 50 west to right on 434 or I-95 to 528 west (toll) to 417 north to University Blvd. Exit east to UCF.

Reader comments and suggestions for improving the usefulness of this catalog may be sent to: Catalog, UCF Registrar's Office, PO Box 160114, Orlando, FL 32816-0114.
<table>
<thead>
<tr>
<th>Fall Semester 1999</th>
<th>Spring Semester 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 1</td>
<td>July 30</td>
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<td>July 15</td>
<td>November 15</td>
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<td>August 3</td>
<td>December 3</td>
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<tr>
<td>July 30</td>
<td>December 3</td>
</tr>
<tr>
<td>August 14 (1 p.m.)</td>
<td>January 1 (1 p.m.)</td>
</tr>
<tr>
<td>August 16-18</td>
<td>January 3-4</td>
</tr>
<tr>
<td>August 19</td>
<td>January 5</td>
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<td>August 20-26</td>
<td>January 6-11</td>
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<td>August 27</td>
<td>January 11</td>
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<td>October 15</td>
<td>February 25</td>
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<td>December 4</td>
<td>April 24</td>
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<td>December 6-11</td>
<td>April 25-May 1</td>
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<tr>
<td>December 12 (12 noon)</td>
<td>May 2 (12 noon)</td>
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<tr>
<td>December 14 (12 noon)</td>
<td>May 3 (12 noon)</td>
</tr>
<tr>
<td>December 18</td>
<td>May 6</td>
</tr>
</tbody>
</table>

All Undergraduate degree-seeking students are required to attend orientation prior to enrollment. Information on orientation is mailed to all students upon acceptance to the university.

*Incomplete grades must be removed within twelve months of the last day of the semester or prior to graduation from the university, whichever comes first. Refer to the incomplete policy for details.

**If possible, examinations should not be scheduled on days or during times of religious holidays. Students are expected to notify their instructor in advance if they intend to observe a holy day of their religious faith. Refer to the paragraph Religious Observances in the Academic Policies and Procedures section of this catalog. For additional information contact the Office of Diversity Initiatives, AD 329, Phone: (407) 823-6479.

<table>
<thead>
<tr>
<th>Tests</th>
<th>Fall Dates</th>
<th>Spring Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLAST</td>
<td>October 2</td>
<td>February 19</td>
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<tr>
<td>FTCE</td>
<td>October 23</td>
<td>January 22</td>
</tr>
<tr>
<td>LSAT</td>
<td>October 2</td>
<td>April 15</td>
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<tr>
<td>MCAT</td>
<td>December 4</td>
<td>February 12</td>
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<tr>
<td></td>
<td>August 21</td>
<td>April 15 (tentative)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>University Holidays &amp; Special Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor Day Holiday</td>
</tr>
<tr>
<td>Homecoming Week</td>
</tr>
<tr>
<td>Veteran's Day</td>
</tr>
<tr>
<td>Thanksgiving</td>
</tr>
<tr>
<td>Martin Luther King, Jr. Day.</td>
</tr>
<tr>
<td>Spring Break</td>
</tr>
<tr>
<td>Founders' Day Honors Convocation (classes canceled 10:30-12:30)</td>
</tr>
</tbody>
</table>

NOTE: Dates subject to change. Consult the schedule of classes and on-line academic calendar (www.ucf.edu) for early registration dates and updated information.
### ACADEMIC CALENDAR 1999-2000

(See 1999-2000 calendars on page 11)

#### SUMMER TERMS 2000

<table>
<thead>
<tr>
<th>Event</th>
<th>TERM &quot;A&quot;</th>
<th>TERM &quot;B&quot;</th>
<th>TERM &quot;C&quot;</th>
<th>TERM &quot;D&quot;</th>
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</thead>
<tbody>
<tr>
<td>Application deadline for international students</td>
<td>December 1</td>
<td>December 1</td>
<td>December 1</td>
<td>December 1</td>
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<tr>
<td>Application deadline for all undergraduate</td>
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<tr>
<td>applicants, transfers, and readmissions</td>
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<tr>
<td>Graduation Application due in college advising office</td>
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<tr>
<td>Residence halls open</td>
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<tr>
<td>Regular registration</td>
<td></td>
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<tr>
<td>Classes begin</td>
<td></td>
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<tr>
<td>Late registration, add/drop</td>
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<tr>
<td>Last day to submit Grade Forgiveness Request</td>
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<tr>
<td>Fees due; Last day for full refund</td>
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<tr>
<td>Withdrawal deadline</td>
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<tr>
<td>Classes end; Last day to remove incomplete*</td>
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<tr>
<td>Final Examination Period**</td>
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<tr>
<td>Residence halls close</td>
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<tr>
<td>Grades due in Registrar's Office</td>
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<tr>
<td>Commencement</td>
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<td></td>
<td>June 3</td>
<td>June 3</td>
<td>June 3</td>
<td>June 3</td>
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<tr>
<td>TESTS</td>
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</tr>
<tr>
<td>CLAST</td>
<td>August 5</td>
<td>August 5</td>
<td>August 5</td>
<td>August 5</td>
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<tr>
<td>FTCE</td>
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<tr>
<td>UNIVERSITY HOLIDAYS</td>
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<tr>
<td>Memorial Day Holiday</td>
<td>May 29</td>
<td>May 29</td>
<td>May 29</td>
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</tr>
<tr>
<td>Independence Day Holiday</td>
<td>July 4</td>
<td>July 4</td>
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</tr>
<tr>
<td>NOTE: Dates subject to change. Consult the schedule of classes and on-line academic calendar (<a href="http://www.ucf.edu">www.ucf.edu</a>) for early registration dates and updated information.</td>
<td></td>
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<td>January</td>
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<table>
<thead>
<tr>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
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<tbody>
<tr>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
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</thead>
<tbody>
<tr>
<td>S</td>
<td>M</td>
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<td>21</td>
<td>22</td>
<td>23</td>
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</tr>
</tbody>
</table>

Note: The calendar is for the years 1999 and 2000.
## CAMPUS SERVICES DIRECTORY

<table>
<thead>
<tr>
<th>CAMPUS OFFICE/SERVICE</th>
<th>LOCATION</th>
<th>EXTENSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.A. DEGREE APPLICATION</td>
<td>Academic Services, (AD) 210</td>
<td>3-2691</td>
</tr>
<tr>
<td>ACADEMIC EXPLORATION PROGRAM</td>
<td>Phillips Hall, (PH) 202</td>
<td>3-5322</td>
</tr>
<tr>
<td>ACADEMIC RESOURCE CENTER</td>
<td>Portable Classroom, (PC) 1-102</td>
<td>3-5130</td>
</tr>
<tr>
<td>ACADEMIC STATUS</td>
<td>Registrar (AD) 161</td>
<td>3-3100</td>
</tr>
<tr>
<td>ADDRESS CHANGE</td>
<td>College Advising Office, Kiosks, Registrar (AD) 161</td>
<td>3-3100</td>
</tr>
<tr>
<td>ADMISSIONS: UNDERGRADUATE</td>
<td>Admissions, (AD) 161</td>
<td>3-3000</td>
</tr>
<tr>
<td>GRADUATE</td>
<td>Graduate Studies, (AD) 144</td>
<td>3-2766</td>
</tr>
<tr>
<td>ADVISING</td>
<td>Development and Retention (AD) 210</td>
<td>3-2169</td>
</tr>
<tr>
<td>ALUMNI ASSOCIATION</td>
<td>Administration, (AD) 340</td>
<td>3-2586</td>
</tr>
<tr>
<td>AMBULANCE</td>
<td></td>
<td>9-1-1</td>
</tr>
<tr>
<td>ARENA BOX OFFICE</td>
<td>Arena, Second Level</td>
<td>3-6006</td>
</tr>
<tr>
<td>ARENA INFORMATION</td>
<td>Arena, Second Level</td>
<td>3-3070</td>
</tr>
<tr>
<td>ATHLETES, ACADEMIC SERVICES FOR STUDENT-BANKING</td>
<td>Trailer, (TR) 521</td>
<td>3-5895</td>
</tr>
<tr>
<td>BOOKS, SUPPLIES, &amp; SUNDRY ITEMS</td>
<td>Bookstore, Student Services</td>
<td>3-2665</td>
</tr>
<tr>
<td>BREVARD CAMPUS</td>
<td>1519 Clear Lake Road</td>
<td>506-5567</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or (407) 823-32691</td>
</tr>
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<td>CAREER RESOURCE CENTER</td>
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14
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.

**MISSION STATEMENT**

The University of Central Florida is a major metropolitan research university whose mission is to deliver a comprehensive program of teaching, research, and service. It provides intellectual leadership through quality undergraduate and graduate programs. It proudly identifies with its geographic region while striving for national and international excellence in selected programs of teaching and research. It serves students who are diverse in age, ethnic, and racial identity, and socioeconomic background. It supports the cultural vitality of our region, serves as a major intellectual and creative resource, develops creative partnerships with public and private enterprise, and participates fully in the economic development of Florida.

UCF offers undergraduate education rooted in the arts and sciences, providing a broad liberal education while developing competence in fields of special interest. Unique aspects of UCF's approach are its commitment to educate students for a world in which cooperation is as important as competition; in which societal and environmental impacts of new developments are as important as their technical merits; and in which technology, the arts, sciences, humanities, and commerce work together to shape the future.

The complexity of modern society requires comprehensive graduate and professional programs. UCF provides advanced education that matches institutional strengths with evolving regional, state, national, and international needs. It supports these advanced programs by recruiting excellent students, faculty, and staff and by supplying the infrastructure that enables these programs to achieve national prominence.

Basic and applied research, as well as creative activity, are integral parts of a quality education. UCF faculty members are scholar-teachers. As such, they create new knowledge, new points of view, and new means of expression in a broad range of academic, professional, and socially significant areas. Their creativity fosters innovation as they convey their results, methods, values, and expressions to students, colleagues, and the public.

UCF works actively to build partnerships that promote development of Central Florida's economy through carefully targeted programs of graduate study and research. The I-4 High-Technology Corridor Council, whose goal is to attract, retain and expand high technology investment and jobs, is but the latest example of UCF's collaboration with partners from industry, state and local government, and higher education.

Service to its community is an important extension of the metropolitan mission of the University. Public service is prominent at UCF, with the University developing partnerships with the community to enrich the educational, artistic, cultural, economic, and professional lives of those it serves in Central Florida and beyond.

**ACCREDITATION**

The University of Central Florida is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award degrees at the associate, baccalaureate, master's, and doctoral levels.

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Business Administration (all disciplines)

Education (all disciplines)

School Psychology

Engineering
Aerospace Engineering
Civil Engineering
Computer Engineering
Environmental Engineering
Electrical Engineering
Industrial Engineering
Mechanical Engineering

Engineering Technology
Electrical Engineering Technology

Engineering Technology

Health and Public Affairs
Cardiopulmonary Science

Communicative Disorders (Speech Pathology/Audiology)
Health Information Management

Medical Laboratory Sciences

Nursing

Physical Therapy

Radiologic Science

Social Work

American Assembly of Collegiate Schools of Business (AACSB)

State Accreditation-Florida Department of Education; National Council for Accreditation of Teacher Education (NCATE)

National Association of School Psychologists

All undergraduate engineering programs are accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology, Inc. (ABET) 111 Market Place, #1050 Baltimore, MD 21202-4012 Telephone: (410) 347-7700 FAX: (410) 625-2238

Both the BSET and BSEET programs are accredited by the Technology Accreditation Commission (TAC) of the Accreditation Board for Engineering & Technology (ABET) (Address and telephone/FAX numbers above)

Committee on Accreditation for Respiratory Care in conjunction with the Commission on Accreditation of Allied Health Education Programs (CAAHEP) of AMA American Speech-Language-Hearing Association - Educational Standards Board (ASHA) American Health Information Management Association (AHIMA) in conjunction with Council on Accreditation of Allied Health Education Programs (CAAHEP)

National Accrediting Agency for Clinical Laboratory Science (NAACLS)

National League for Nursing (NLN), Florida Board of Nursing

Commission on Accreditation in Physical Therapy Education (CAPTE)

Commission on Accreditation of Allied Health Education Programs (CAAHEP of AMA)

Council on Social Work Education (CSWE)

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

UCF is located in East Central Florida, a region with a population of about two million. Known principally for its tourist attractions, the area is one of the fastest growing regions in the nation. East Central Florida is noted for its many lakes. Atlantic beaches are an easy hour drive from the main campus. The area offers Walt Disney World and other attractions that draw more vacationers here than anywhere else. The area also offers Broadway productions, pop and classical music headliners, art festivals, a Shakespeare festival of UCF origin, the National Basketball Association's Orlando Magic, and restaurants of every type and price.

THE ORLANDO CAMPUS

The 1,445-acre campus is located in the Orlando suburbs, 13 miles northeast of downtown. Seventy-nine permanent buildings - valued at more than $300 million - radiate outward from an academic core, where UCF's colleges, classrooms and library are located. More than $34.8 million for construction of academic facilities is anticipated in the three-year period ending with 1999-2000. Projects expected to be completed or in progress during the period include a building for the College of Health and Public Affairs, a classroom building, and another engineering building. UCF recreational facilities include lighted tennis and racquetball courts, an outdoor swimming pool, golf driving range, volleyball, and basketball courts and ball fields.

UCF VIRTUAL CAMPUS

The UCF Virtual Campus offers classes that include use of the Internet, e-mail, computer conferencing, chat, multimedia, videotape, and interactive two-way television. The courses are delivered through a variety of technologies, including the world wide web, interactive two-way television, videotape, and radio broadcasting.
UCF offers students convenient opportunities to take credit courses and select degree programs through a variety of interactive distributed technologies. Interactive television (ITV) courses are broadcast in real-time using two-way video and two-way audio between the main, Brevard and Daytona campuses, and the Downtown Center. ITV courses may be enhanced with multimedia delivery and may originate from any of the receive sites using a compressed video system.

Learning on-line through distributed courses allows students to participate virtually via a computer using e-mail, computer conferencing, and the World Wide Web. Traditional courses use on-line components to enhance classroom activity, while distributed on-line courses may replace some class meetings. Fully on-line courses have minimal class meetings and may involve additional media such as audio and video tapes. UCF's virtual campus brings the university to students with on-line courses and services. See: http://pegasus.cc.ucf.edu/~distrib/ for more information. Courses are listed each semester in the Schedule of Classes. Students planning to take a course with a World Wide Web component should either be familiar with the use of the Web, or have taken CGS 1060.

CENTER FOR DISTRIBUTED LEARNING

Interim Director: Steven E. Sorg, http://pegasus.cc.ucf.edu/~distrib/cdl

The Center for Distributed Learning serves as the Virtual Campus for the University. As the Virtual Campus, the Center brings focus to University efforts in Distributed Learning by providing administrative support for all distributed learning credit courses, degree programs, and activities offered by the University.

The Center provides facilitation and direct services in the areas of learner support, course and program marketing, scheduling, registration, and admissions. Credit courses and programs offered by the academic colleges and facilitated by the Center adhere to the same quality standards that apply to the traditional on-campus programs. The Center provides leadership for efforts to achieve accreditation for distance learning programs. Serving as UCF's Virtual Campus, the Center's goal is to provide support to students, faculty, and staff as new and existing technologies become increasingly available for distributed learning courses and programs.
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 and Daytona Beach. Times and dates for all courses are listed in the regularly published schedule of classes. A new Downtown Academic Center serves selected educational needs of downtown Orlando residents and businesses.

**UCF BREVARD AREA CAMPUS**
1519 Clearlake Road
Cocoa, FL 32922

Campus Executive Officer/CEO
James A. Drake
(407) 632-1111, Ext. 65567

Coordinator: Admissions/Registration and Records/Financial Aid Services
Deborah Bradford
(407) 632-1111, Ext 65610

Associate Director for Area Campus
Scheduling Coordination
Pam Cavanaugh (Interim)
(407) 632-1111, Ext. 65560

Academic Support
Bob Caldwell
(407) 632-1111, Ext. 65564

Palm Bay Center
250 Community College Parkway
Palm Bay, FL 32909
Administrative Coordinator
David Mumford (Interim)
(407) 632-1111, Ext. 23003

Associate Campus Director
Mem Stahley
(407) 632-1111, Ext. 65567

Director: Campus Life
Karen Bray
(407) 632-1111, Ext. 65555

Computer Laboratory
Sue Striby
(407) 632-1111, Ext. 63311

Library Services
Barbara Rossignol
(407) 632-1111, Ext. 65607
The Brevard Campus of the University of Central Florida operates in partnership with the Brevard Community College District System. Although the Brevard Campus is housed primarily at the BCC Cocoa Campus, The University also operates the UCF Palm Bay Center on the campus of BCC-Palm Bay. In the 2000-2001 academic year, UCF and BCC will dedicate a new joint-use building which will become the permanent home of the UCF Palm Bay Center.

In Cocoa, the UCF Brevard Campus forms part of the “Circle of Science and Technology,” a complex of buildings encompassing the world-class BCC Planetarium, the state of the art BCC/UCF Joint-Use Library, and the laboratories and facilities of the Florida Solar Energy Center (FSEC), a UCF research division.

At the UCF Palm Bay Center, the University plans to offer, with the appropriate state-agency approval, an increasing array of programs that meet the career plans of community-college graduates and the economic development needs of southern Brevard County - one of the fastest growing metropolitan areas in the Southeast.

In Brevard County, the University offers upper-division (junior, senior) and graduate courses in twenty-four bachelor's and master's degree programs. An increasing array of interactive television (ITV) and Web-based courses are also offered in Brevard County as a complement to the University's classroom-based courses.

In a new initiative, staff from UCF and BCC have co-located in the Student Center to provide a one-stop center for undergraduate admissions, registration, records updates, and cashiering. Students have access to a joint use computer lab, and the BCC Computer Aided Instruction Lab offers students of both schools remedial classes, writing skills assistance, and tutoring.

Every UCF college, including the newly-formed UCF Honors College, has advisors and administrative offices at the Brevard Campus. Telephone numbers, as well as programs offered by each of the colleges, are shown below:

**UNDERGRADUATE DEGREE PROGRAMS**

**College of Arts and Sciences (407) 632-1111, Ext. 65545**
- Psychology
- Liberal Studies Program
- Social Sciences

**College of Business (407) 632-1111, Ext. 65576**
- General Business Administration

**College of Education (407) 632-1111, Ext. 65575**
- Elementary Education
- Exceptional Education
- Vocational/Technical Education

**College of Engineering (407) 632-1111, Ext. 65556**
- Electrical Engineering Technology with concentrations in Electrical Systems and Information Systems
- Engineering Technology with concentration in Operations
- Industrial Engineering

**College of Health and Public Affairs (407) 632-1111, Ext. 65586**
- Communicative Disorders
- Criminal Justice
- Legal Studies
- Nursing
- Public Administration

**GRADUATE PROGRAMS**

- Masters of Business Administration (MBA)
- Masters of Communicative Disorders (MA)
- Masters of Education Leadership (MEd)
- Masters of Education Elementary Education (MEd)
- Masters of Exceptional Student Education-Varying Exceptionalities (MEd and MA)
- Masters in Public Administration (MPA)
The UCF Daytona Beach campus offers upper division and graduate level courses to residents of Volusia and Flagler counties. A unique educational partnership between UCF and Daytona Beach Community College allows students to earn an associate of arts degree at DBCC and a baccalaureate degree at UCF. UCF courses are taught by eighteen resident faculty, visiting Orlando faculty, and local adjuncts. Web-based courses are also offered.

UCF moved from a resident center on Clyde Morris Blvd. to a new, more expansive facility on the DBCC campus in 1987. A silicone-domed higher education building housing classrooms, labs, and office space enabled UCF to expand programs and acquire branch campus status in the Board of Regents system. A second building, completed in 1991, houses more classrooms and faculty offices as well as a 130-seat auditorium and conference center.

A broad range of services is offered for Daytona Beach students including admissions, registration, financial aid, student clubs and organizations, disability services, veterans affairs, career resources, and others. Registration periods at Daytona Beach correspond to Orlando schedules. Admissions, registration and student services offices are located in Building 34. Business hours are 8:00 AM to 6:00 PM Monday through Thursday and 8:00 AM to 4:00 PM on Friday. Hours are extended during scheduled registration periods.
The following degree programs are currently offered at the Daytona Beach campus:

**UNDERGRADUATE DEGREE PROGRAMS**

**College of Arts and Sciences (904) 254-4412**
- Liberal Studies
- Psychology
- Social Sciences

**College of Business Administration (904) 254-4412**
- General Business Administration

**College of Education (904) 254-4428**
- Elementary Education
- Exceptional Education

**College of Engineering (904) 255-7423**
- Engineering (Partial/Video)

**College of Health & Public Affairs (904) 254-4412**
- Criminal Justice
- Legal Studies
- Nursing (904) 254-4428

**GRADUATE DEGREE PROGRAMS (904) 255-7423**
- Business Administration (MBA)
- Certificate in Public Administration (GCPA)
- Criminal Justice
- Domestic Violence (Certificate)
- Educational Leadership
- Elementary Education
- Engineering (Video)
- Exceptional Education
- Health Services Administration
- Public Administration
- Sociology

**MINORS**
- Business Administration
- Criminal Justice
- History
- Legal Studies
- Philosophy
- Psychology
- Religion
- Sociology
The Downtown Academic Center is located in the heart of downtown Orlando. Situated near Orlando’s Church Street Station, access to the center is easy. With five classrooms, including a 130-seat lecture hall, a multitude of credit and non-credit courses and programs are made available to UCF students as well as to the business and residential community of Orlando. The Institute of Government, housed at the center, further expands opportunities for professional development through on-going workshops and seminars. In addition, a distributed learning center features an interactive television system which connects students to courses on the main campus and to satellite conference sites. A state-of-the-art computer lab provides the latest technology to aid student learning and enhance computer literacy. Selected courses are available by video to meet the needs of students unable to attend classes offered at set times. Admissions, financial assistance and other university information is readily available.

The Downtown Center also serves as a centralized place for meetings, mini-conferences and retreats. The AT&T executive conference room and flexible classroom space create an atmosphere conducive to hosting a variety of educational activities and cultural events to promote the mission of the university.

Selected courses in the following majors are currently offered at the Downtown Academic Center*:

**College of Arts and Sciences**
- Undergraduate
  - Computer Science
  - Liberal Studies
  - Psychology

**College of Business Administration**
- Undergraduate
  - General Business

**College of Education**
- Graduate
  - Exceptional Education
  - Instructional Programs
College of Engineering
Note: Most majors at the bachelor's and master's levels are available. All engineering courses are offered via video (FEEDS) or interactive television (ITV).

College of Health and Public Affairs
Undergraduate
Criminal Justice
Legal Studies**
Public Administration
Graduate
Health Service Administration
Public Administration
Social Work
* Minors are available in selected areas per catalog requirements.
** The Legal Studies program is offered full-time at the upper division level.

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 acres 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.

University organizations, including the Institute for Simulation and Training, are located in the Research Park. The Naval Air Warfare Center Training Systems Division, and the Army Simulation, Training, and Instrumentation Command (STRICOM), the focal point of the nation's simulation and training industry, have their headquarters in the Research Park. Over $700 million in federal contracts is granted by the Army and Navy each year.

Currently over 80 companies are located in the Research Park pursuing activities in simulation and training, lasers, optical filters, behavioral sciences, diagnostic test equipment, and oceanographic equipment. Approximately 5,500 employees currently work in the Research Park including many students and faculty.

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.

ENDOWED CHAIRS

Endowed chairs are established under the Florida Major Gifts Trust Fund which provides $420,000 in state funds to match $600,000 in contributions from private sources within a six-year period. UCF presently has ten fully funded endowed chairs and three others fully pledged:
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.

Carl H. Galloway Chair for Excellence in Business - Created in 1986 to honor Carl Galloway, a pioneer in telecommunications. The purpose is to enhance scholarly activity in teaching and research in the College of Business Administration.

The Cobb Family Eminent Chair in Optical Sciences and Engineering - Created in 1988 to support the work of an internationally recognized scholar in laser and optical sciences. The Chair: Dr. George I. A. Stegeman.

Darden Eminent Scholar Chair in Restaurant Management - Created in 1990 to develop a program of excellence in restaurant management. This chair, the first of its kind in the country, will also serve as a critical resource for the hospitality industry.

SunTrust, N.A. Eminent Chair in Banking for Teaching Excellence - Created in 1989 to attract a nationally or internationally prominent expert in banking with a strong commitment to undergraduate, graduate, and executive development. The Chair: Dr. Stanley Smith.

Al Burnett-Contemporary Cars Eminent Scholar Chair in Accounting - Created in 1989 to support an exceptional faculty member in the School of Accounting. The Chair: Dr. Robin W. Roberts.

Bert Fish Memorial Eminent Scholar Chair - Created in 1990 to establish an endowed chair in nursing education. This is the first chair to be established at the Daytona Campus. It is designed to improve nursing education and ease the shortage of nurses. The Chair: Dr. Angeline A. Bushy.

Lockheed Martin Academy in Math and Science Education - Created in 1992 to stress content enhancement and problem solving approaches in the teaching of science and mathematics. The Chair: Dr. Michael C. Hynes.

INTERNATIONAL STUDIES AND PROGRAMS

Director: Dr. Mathilda E. Harris, (407)275-4397, (407)275-4386 fax
Research Pavilion, Suite 263, P.O. Box 3105, Orlando, FL 32816-3105

Coordinator, Study Abroad: Dr. Karl-Heinrich Barsch, (407)275-4397, (407)275-4386 fax
Research Pavilion, Suite 263, P.O. Box 3105, Orlando, FL 32816-3105

Director, Florida/Canada Linkage Institute: Dr. Warren McHone, Voice Mail: (407) 823-2629

Director, Eastern Europe Linkage Institute: Dr. Jean Kijek, Voice Mail: (407) 823-2160

One of the University of Central Florida's five general goals is to internationalize the campus by providing an international focus to its curricula and research programs, increasing the number and diversity of international students, and fostering cross-cultural activities. UCF offers a variety of programs that support the goal to internationalize the university by educating students for global competence via internationalized courses, language offerings, internships and work-experiences in internationally related areas. UCF also offers many types of study-abroad programs that meet the general education requirements and the needs of majors in all colleges. The ultimate goal of global education is to create a transnational understanding of social, economic, cultural, and political realities of the 21st Century.

The Office of International Studies (OIS) is a university level office that serves as a clearinghouse for all international programs and coordinates such programs within the university. The mission of the OIS is to create an environment that facilitates the identification, development, promotion, coordination, and support of high quality international activities related to the academic mission of UCF. The ongoing development of the international dimension at UCF will be realized through the implementation of goals and objectives related to the curriculum, faculty development, policies and planning, academic support, students, the community, funding, and external agencies. The general goals stated in the UCF Five-Year Plan for International Studies are to:

- Infuse the curriculum with international content that will teach students to think about themselves and their profession within an interdependent world context and prepare them to compete in a global market.
STUDY ABROAD PROGRAMS

UCF offers a large number of study abroad programs that relate to an array of the academic and experiential interests of students. Students are encouraged to study abroad especially because the global environment and marketplace will increasingly demand knowledgeable and trained persons who are globally competent.

Summer Study Abroad Programs
Summer study abroad programs are currently offered in the following countries and areas: Caribbean, College of Arts & Sciences, African American Studies; England, College of Arts & Sciences, English and Art Departments; Germany, College of Arts & Sciences, Foreign Languages and Literatures (two semesters of German required); Italy, College of Arts & Sciences, Foreign Languages and Literatures; Mexico, College of Health and Public Affairs, School of Social Work; and Quebec, College of Arts & Sciences, Foreign Languages and Literatures (two semesters of French required). A Nursing program in England takes place during Spring Break.

Semester and Academic Year Student Exchanges
Semester and academic year student exchange programs are open to qualifying juniors and seniors who would like to have a more extensive experience abroad. These are in France, University of Angers; England, Northampton College University; Canada, University of Windsor; Germany, University of Koblenz; and Finland, South Carolina Polytechnic in Lappeenranta.

State of Florida University System Programs
The State University System (SUS) programs offer high quality and diverse study abroad experiences for students throughout the State of Florida. This gives the student the opportunity to meet students from other Florida universities and to participate in additional programs not offered directly by UCF. The SUS-wide study abroad programs are in England, Italy, and Costa Rica.

National Student Exchange Program
UCF's membership in the National Student Exchange (NSE) affords qualifying juniors and seniors the opportunity to spend one semester or an entire academic year as exchange students at any of the 150 NSE membership institutions in the U.S. In many cases, students on NSE exchange may also do their studies at one of the more than 200 study abroad sites that are associated with individual NSE membership institutions. This adds a wide array of additional opportunities to UCF's own student exchanges and programs abroad.

The Office of International Studies can supply students with additional information on other study abroad programs worldwide. For additional information on all study abroad opportunities, please contact the UCF Office of International Studies, (407)275-4397

LINKAGE INSTITUTES

The eleven Bi-national Linkage Institutes were established by the Florida Legislature to mobilize the resources of Florida universities and community colleges and integrate them with the efforts of government and business. They were created to enhance the State's competitive position in strategic foreign countries. Institutes have been created for Brazil, Canada, the Caribbean, China, Costa Rica, Eastern Europe, France, Israel, Japan, Mexico, and West Africa. These institutes are authorized to waive up to 25 FTE of the out-of-state portion of tuition each academic year for international students from the representative countries enrolled in SUS universities and community colleges.

The University of Central Florida is home to two of these linkage institutes. For more information about the Florida-Canada Linkage Institute, call (407) 823-2629. For more information about the Eastern European Linkage Institute call (407) 823-3647. Contact the OIS for the names and numbers of the directors of programs at the other SUS universities.
AREA STUDIES PROGRAMS

Area Studies programs are multi-disciplinary programs that focus on specific regions or cultural groups. UCF has five area studies programs with an international focus: Asian, Canadian, Judaic, Latin American and Iberian Studies, and Russian Studies. Although the academic home of these programs is the College of Arts and Sciences, faculty and students from across the entire university may participate in them. These programs may be elected as minors by students majoring in any discipline within the university. For more information about the programs and contact numbers of the program directors see the list below. Contact the Office of International Studies for assistance or referral for all international inquiries regarding academic programs.

Asian Studies - Contact: Dr. Robert Bledsoe, (407) 823-2608
Canadian and Commonwealth Area Studies - Contact: Dr. Elliot Vittes, (407) 823-0119
Latin American Studies - Contact: Dr. José Fernández, (407) 823-2389
Judaic Studies - Contact: Dr. Moshe Pelli, (407) 823-5039
Russian Studies - Contact: Dr. Richard Crepeau, (407) 823-2224

THE UCF ALUMNI ASSOCIATION

The University of Central Florida Alumni Association was developed to maintain awareness and support of the university by the alumni. Membership is open to all alumni and friends of the university. Membership in our Alumni Association provides many benefits, including:

- Timely information within the pages of Pegasus, UCF's bi-monthly alumni magazine
- Career resources and placement opportunities available nationwide
- Discounts with rental car agencies, hotels, and theme parks all across the country
- Free use of several campus recreational facilities
- Invitations to events like Homecoming, as well as local and regional alumni get-togethers
- Free borrowing at UCF library (main branch)
- Special alumni rates at UCF Computer Store
- Discounts on UCF logo items at campus Bookstore and other locations
- Members-only discounts at Association-sponsored activities
- Numerous personal and professional networking opportunities

Every dues-paying member is eligible to participate in the election of a Board of Directors for the Association and to hold an office on the Board or one of its committees. The Board guides the direction of the Association including the development of programs and annual scholarships for undergraduate and graduate students. For information, contact the UCF Alumni Association, Administration 340, Phone (407) UCF-ALUM (823-2586) or toll-free, (800) 330-ALUM.

UCF FOUNDATION, INC.

The UCF Foundation, Inc. is a non-profit, tax-exempt corporation directed by a 60 member community based Board of Trustees that encourages, solicits, receives, and administers private gifts and bequests of property and funds for scientific, educational, and charitable purposes. All gifts to UCF are received and processed through the Foundation for support of the university. Call (407) 249-4740 for additional information.

UCF ARENA

The UCF Arena is an indoor multipurpose facility that opened in August of 1991. The Arena is host to a variety of campus events, including all commencement ceremonies, men's and women's basketball games, volleyball games, concerts, lectures, and other sporting and entertainment events. Adjacent to the Arena is a world-class track and field facility that hosts a variety of events including track meets, soccer games, NFL tryouts, and football clinics. For event or rental information, call (407) 823-3070.

UNIVERSITY BOOKSTORE

The University Bookstore is operated by the Barnes and Noble College Book Stores. The University Bookstore is 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. For more information, please call (407) 823-2665.

INTERCOLLEGIATE ATHLETICS

Programs in Intercollegiate Athletics are coordinated by athletic department 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 and competes in the Trans America Athletic Conference. Intercollegiate athletic contests are governed by the rules of play published by NCAA and all established eligibility standards are observed.

UCF's current intercollegiate sports for men include baseball, basketball, cross county, golf, football, soccer, and tennis. Women's sports include basketball, crew, cross-country, golf, soccer, track, tennis, and volleyball.

THE ORLANDO-UCF SHAKESPEARE FESTIVAL

The Orlando-UCF Shakespeare Festival is Central Florida's premiere classical theater, presenting professional artists in a variety of world-class plays. OSF provides a year-round calendar of entertainment
and educational programs. An Equity company, OSF presents a Fall season of plays at the Orange County Historical Museum Theatre and the Spring Repertory Season at the Walt Disney Amphitheater in Lake Eola Park.

In its tenth season, OSF has achieved a position of national recognition, attracting artists from around the world. OSF has been featured in such national publications as Southern Living, Theater Week, Backstage, and Southern Theater.

Among OSF's educational programs are: The Young Company, a classical multi-cultural acting company composed of talented Central Florida secondary students from diverse economic backgrounds; Shakespeare Alive!, a performance-based education program with teacher workshops, study guides, one-day residencies and student matinee performances by the Equity company; and Shakesperience, a comprehensive in-school residency that lasts from a week to a semester in partnership with Orange County Public Schools.

Internships and independent studies with OSF are available to students from many different departments. Those interested in exploring formal relationships with OSF should contact Artistic Director, Jim Helsinger, 30 S. Magnolia Avenue, Suite 250, Orlando, Florida 32801, (407) 245-0985.

**TRANSIT SERVICES**

Through joint efforts of UCF, LYNX and the University/Alafaya Corridor Transportation Association (UACTA), UCF students, faculty, and staff have the availability of a number of transit options.

Three bus routes serve UCF from Oviedo, Downtown Orlando, and both Valencia Community College campuses. Through the use of these routes, commuters can connect to most anywhere in Greater Orlando. These buses normally operate at 30 to 60 minute intervals. The cost to ride LYNX is eighty-five cents per ride. Special passes are available at discounted rates.

The LASER Shuttle is a local shuttle system with three separate routes. These routes connect UCF with most residential and commercial areas near UCF, as well as the Central Florida Research Park and The Quadrangle. LASER runs every thirty minutes (Monday through Friday) and costs twenty-five cents. Semester passes are also available at substantial savings and are sold at the UCF Student Union Ticket Center. Route maps may be obtained at the Administration Building Information Booth or by calling UACTA at (407) 658-8492, or LYNX at (407) 841-8240.

**UCF PUBLIC SAFETY AND POLICE**

The UCF Police Department has 41 certified officers, and they have all completed the Florida Criminal Justice Standards and Training Commission's requirements for a law enforcement officer (800-hour Police Academy). Officers receive a minimum of four hours of monthly training for police-related subjects, such as investigative procedures, criminal law, traffic enforcement, cultural diversity and sensitivity training, emergency first aid, etc. Emergency phone 9-1-1. Non-emergency phone 823-5555. Web site: http://pegasus.cc.ecf.edu/~ucfpd.

**Patrol Division**

The Patrol Division consists of three consecutive, eight-hour shifts with six police officers per shift, which provides police services 24 hours a day, seven days a week. The officers patrol the campus in marked police vehicles and unmarked surveillance vehicles. The three daily vehicle patrol shifts are supplemented with an additional squad of police officers on mountain bicycles. The eight Police Bicycle Patrol Officers are able to patrol the inner core of the campus where the patrol vehicle can not access. In addition to the routine patrol duties, the officers provide police services for traffic control, parking, and security for special UCF events such as graduation ceremonies, student sponsored activities, sporting events, etc. There are three motorcycle officers for selective traffic enforcement.

**Investigations Division**

There are three investigators who investigate the unresolved reported criminal cases. Each investigator has training and experience with crime scene investigation procedures, interview and interrogation techniques, and forensics. They also maintain a close working relationship with all local police departments to include sharing intelligence information and occasionally working jointly on cases.

**Crime Prevention Unit**

The Crime Prevention Unit is comprised of three subsections: 1) crime prevention officers, 2) Community-Oriented Policing (COP) officers, and 3) the Student Escort Patrol Service (SEPS).

1. The **Crime Prevention Officer** goes out to the university community and presents numerous
services pertaining to various crime prevention topics, such as: Campus Crime Statistics; Personal Safety Tips; Crime Watchers Program; Drug and Alcohol Awareness; Cashiers Bank Robbery Training; Building Security Alarm Surveys; Media Public Information Officer (PIO); Burglary, Theft, and Robbery Awareness; New Student, Staff, and Faculty Orientations; Operation Identification (property engraving); Building Situation Reports (police reports of unlocked, ajar, or propped open doors after business hours).

2. There are currently five Community-Oriented Policing (COP) officers assigned to the entire UCF campus. The COP officers utilize police equipped mountain bicycles for easy access around the campus housing areas. These officers strive to develop mutual trust, respect, and rapport in a crime fighting "partnership" with the UCF community.

3. The Student Escort Patrol Service (SEPS) has part-time student workers hired and trained by the UCF Police Department (UCFPD) to provide an escort service to anyone on campus during the evening hours (7:00 p.m. - 12:30 a.m.). The SEPS wear yellow shirts with the insignia SEPS and carry radios that are in direct communication with the police dispatchers. SEPS are also trained as "Crime Watchers." They will make radio calls to the UCFPD to report any suspicious activity. The SEPS have proven to be an excellent crime deterrent because of their visibility and direct radio link to police dispatchers. For SEPS escorts call 823-2424. If the SEPS are off duty, please call 823-5555 and a police officer will be dispatched to assist you. Safe escorts on campus are offered 24 hours a day.

Victim Services Unit

Victim Services is a very important function of the UCFPD. If you or someone you care about become a victim of crime, you may need to talk with someone about what to do next. Victim Advocates are available 24 hours daily. During normal business hours (8:00 a.m. - 5:00 p.m., Mon-Fri) they can be reached by calling 823-6332 or 823-6069. In an emergency, call 9-1-1 or the UCFPD at 823-5555 and a Victim Advocate will be notified to contact you.

It is not uncommon to experience a broad range of emotions including fear, confusion, anger, guilt, frustration, and a tremendous sense of loss. The Victim Advocates will help you receive the services you may need for: 1) crisis intervention: an advocate will respond to a crime scene if needed or if directed by a law enforcement officer; 2) emotional support and practical assistance: the advocates can help you understand what can be expected during an investigation or the prosecution process by the criminal and/or university judicial systems; 3) information and referral: the advocates maintain a current listing of social service agencies on and off campus that can assist with may different needs such as counseling, legal aid, and emergency shelter, among others; and 4) educational services: speakers are available for presentations on various subjects, such as victimization, sexual assault, domestic and relationship violence, etc.

Communications Division

The Communications Division is the heart of the UCFPD. Dispatchers are the vital link to callers requesting emergency and non-emergency service. A call to 823-5555 will prompt an immediate response to complaints or service calls. The UCF campus is equipped with 9-1-1 Enhanced System connected directly to the UCFPD for emergency services such as responding to a crime in progress, medical emergency, or fire.

The Blue Light 9-1-1 system has been installed in various locations throughout the campus. If you need emergency medical assistance, or you wish to report a crime or fire, these telephones are connect directly to the UCFPD's Communications Center and help will be immediately dispatched.

Parking Services Division

http://pegasus.cc.edu/~parking

The Parking Services Division has the responsibility of maintaining all the parking lots and parking garages on campus. The revenue generated by permit sales is utilized for maintenance of the existing parking lots, and provides funding for the construction of new parking lots and garages. The division is comprised of full-time UCF Career Service staff and part-time student employees.

The Parking Services Division has part-time Student Parking Patrollers (SPP). The SPP's wear UCFPD Parking Services Logo T-shirts, carry radios that are monitored by UCF dispatchers, and patrol all the campus parking lots with parking services vehicles or mountain bikes.

The SPP's enforce the parking regulations on campus, and also provide the following services: operate the UCF visitor's information booth, assist the UCF police officers with traffic control, assist stranded
motorists with off-the-road stuck vehicles, assist stranded motorists with battery jumps, assist motorists with keys locked in their vehicles, provide tram service for special events, and report any suspicious activity on campus.

The Parking Services Division sells UCF parking decals. All full-time and part-time faculty, staff, and students (day & evening) must have a parking decal. Purchase and proper display of the permit is required prior to parking on campus the first day of class of each semester.

A $2.00 one day parking permit is available to anyone who does not yet have the regular UCF parking permit.

For more information, please call 823-5812 or stop by the Parking Services Division at the UCFPD and pick up a copy of the parking regulations.


INFORMATION TECHNOLOGIES AND RESOURCES

Vice Provost: Joel L. Hartman, AD 326, Phone (407) 823-6778

The Division of Information Technologies and Resources has university-wide responsibility for planning, implementation, and support of information technology resources. Units within the Division include the Library, Computer Services, Telecommunications, Instructional Resources, and Course Development & Web Services. The services and resources of each unit are described in the following sections.

UNIVERSITY LIBRARIES

Director: Barry B. Baker, LR 512, Phone (407) 823-2564, http://library.ucf.edu
Associate Director for Administrative Services: Frank R. Allen, LR 512, Phone (407) 823-2564

The main University Library, housed in a facility of 226,000 square feet, has a collection of over 1.2 million volumes, including 5,700 current serial subscriptions. In addition to bound volumes, the Library owns approximately 2.1 million microforms and 22,000 media titles. UCF is a partial depository for both United States and Florida government publications. The Library is open approximately 94 hours per week including evenings and weekends. Hours are extended during the last few weeks of each semester and shortened during vacation periods. Current hours are available on the web site: <http://library.ucf.edu/hours.htm>, or by calling 823-2756. Borrowing periods for library materials vary depending upon the item format. See the web site <http://library.ucf.edu/circ/default.htm> for complete circulation policies.

WebLUIS, the Library's web-based catalog, can be accessed from any public as well as home PC. From the web go to <http://library.ucf.edu> and click on WebLUIS. WebLUIS also offers a gateway to hundreds of electronic databases, the catalogs of other state university system libraries, and the community college system libraries. CD-ROM based databases are available from within the library in the Electronic Reference Area, located near the Reference Desk on the 2nd (main) floor. For help and advice in the use of the Library and its materials, the Reference Desk is open during most library hours. Librarians are on duty for assistance with interpreting the on-line catalog (holdings and locations), as well as with electronic reference sources and other library collections.

The Interlibrary Loan and Document Delivery Services Department (ILL) assists students in obtaining materials not owned by the Library. Most book loans and photocopied materials can be acquired free of charge within two weeks. Request forms are available on the ILL Web site at <http://library.ucf.edu/ill>, at the ILL Office (Room 321), or at the Reference Desk. For more information, call 823-2383 during office hours, or visit the ILL Web site.

Special services are provided for people with disabilities. By using a WebLUIS students can determine the availability of books they need and telephone the Library to request that books be retrieved from the shelves and brought to them at the circulation desk. A Kurzweil reading machine is available in the Library for people with visual impairments; students may arrange for instruction in its use. Through the cooperation of the University's Office of Student Disability Services and the Florida
Bureau of Blind Services, the Library staff will aid disabled students in obtaining special equipment they may need to use Library resources.

The Curriculum Materials Center, a unit of the University Library, is located in the Education Building. The CMC provides representative K-12 educational curriculum materials for preview, review, analysis, and circulation. The facility serves primarily the students and faculty of the College of Education (COE); however, is open to all campus faculty, staff, and students. For more information see the CMC web page at <http://library.ucf.edu/cmc> or call 823-2791.

Additional library collections are available at the Brevard Community College/University of Central Florida Joint Use Library in Cocoa and the Daytona Beach Community College Library in Daytona Beach. At both locations the university partners with the local community college to provide complete information services, including materials processing and checkout. Both locations have electronic access to LUIS and to University resources on the web. Courier and intercampus loan services make the main library's collections available to UCF students at all area campus sites. For more information see the web site at <http://library.ucf.edu/branches.htm>.

**COMPUTER SERVICES AND TELECOMMUNICATIONS**

**Director:** William H. Branch, CSB 305, Phone (407) 823-2711

Computer Services and Telecommunications provides central support for administrative data processing, Academic Computing Support, telecommunications networks, e-mail, campus telephone services, training, user help, and microcomputer sales and support.

Academic Computing Support is supported primarily through the following systems: Sun Enterprise 450, IBM ES/9000 model 170, a series of Novell LAN file servers, and other Internet and campus facilities. Five public access IBM PC labs, available to all faculty and students, are located around campus. Two labs are in Computer Center II: Main Lab West (CCII 104) and Main Lab East (CCII 113). The other labs are located in the following buildings: Education (EDU 326A), Library (2nd floor library), and Magruder lab in Business Administration (BA 148). UNIX equipment is available in CCII and Macintosh labs are available in CCII and EDU. Most labs are open seven days a week with extended hours.

Voice response systems support dial-up access to registration, grades, and financial aid information. Similar information and services are available from http://polaris.ucf.edu/. Campus kiosk workstations are available in the following buildings: Administration, Library, Business Administration, College of Health and Public Affairs, Computer Science, Education, and Daytona and Brevard Campuses. Additional information is available on the UCF World Wide Web server (http://www.ucf.edu/). Computer accounts are provided to all students, faculty, and staff for access to e-mail, public computer labs, and campus backbone network.

The university also operates a full service on-campus computer store (Student Union) that provides the UCF community computer products and services that adhere to campus standards at competitive prices. The store is an authorized campus reseller for Dell, Apple, IBM, Microsoft, and many other major brands. Training classes and computer equipment maintenance services are also available from the store.

Main campus telephone services are provided by the Telecommunications Department’s Siemens 9751 multinode PBX. Campus residence students have the option to subscribe to voicemail and access to the long distance carrier of their choice. AT&T is the primary long distance provider to the campus.

**OFFICE OF INSTRUCTIONAL RESOURCES**

**Director:** Dr. Ruth Marshall, LIB 107, Phone (407) 823-2571, http://www.oir.ucf.edu

Instructional Resources supports UCF administrators, faculty, and staff with multimedia design and production, digital media, television production, audio production, photography, graphics, and a full range of multimedia and audiovisual classroom support services. OIR's facilities include the Digital Image Processing Lab (DIPL), located in the Research Pavilion in the Central Florida Research Park. In association with its community partners, DIPL offers UCF faculty access to state-of-the-art digital imaging technologies including digital image processing, digital document scanning, and CD-ROM production. OIR's Faculty Multimedia Center (LIB 156) provides multimedia production and training resources for faculty using Macintosh and Windows personal computer systems. OIR's Electronic Classroom (LIB 157) is used for video conferencing and distributed learning course origination. It also provides faculty with an excellent location for training in distributed learning production and delivery skills. OIR also supports several advanced multimedia classrooms located throughout the campus.

OIR provides UCF with a full array of distributed learning delivery systems including an interactive video network that serves several rooms on the main campus, the Downtown Academic Center, the
COURSE DEVELOPMENT & WEB SERVICES


Course Development & Web Services (CD&WS) supports teaching and learning on-line at UCF. The unit is responsible for offering classes to faculty about teaching on-line such as IDL 6543 (http://reach.ucf.edu/~idl6543) offered twice a year and WebCT Academy (http://reach.ucf.edu/~webct411) offered year-round to all faculty, staff, and student assistants. CD&WS also produces on-line courses and web sites found on the Reach Server (http://reach.ucf.edu) and maintains the University’s primary web site. Webmaster support through training and referrals is available upon request for departments and faculty needing web-based authoring. Special events are held regularly to promote campus-wide participation and web-based research and development.

CD&WS is comprised of teams of instructional and digital media designers, software engineers, and programmers called Techrangers who work with faculty, departments, and students to create collaborative digital media projects. The Pegasus Connections CD-ROM is produced semi-annually by CD&WS to provide the UCF community with Internet software tools, tutorials, and UCF information (see http://reach.ucf.edu/~oursdev/cdrom).

On-line courses are listed each semester in the Schedule of Classes.

INSTRUCTIONAL TELEVISION ENGR 387, (407) 823-2481

The university offers a variety of courses by way of television. They are available either live or on tape at various locations both on and off campus. Live courses may be viewed at the Brevard and Daytona Beach campuses, as well as at selected sites around the Greater Orlando area. Live courses may also be viewed on a cable channel in the dorms and at several fraternity and sorority houses. Some courses are also broadcast to individual homes through local cable companies in Brevard and Orange counties. Courses on tape are available in the learning centers or libraries at all of the university’s campuses. Courses available on tape or live television are listed each semester in the Schedule of Classes.
INTRODUCTION

Student Development and Enrollment Services (SDES) refers collectively to the division and its many functional units responsible for the administration and management of programs, services, facilities, and activities designed to support and complement the educational mission of the university while simultaneously improving the student's total collegiate experience. In partnership with other university divisions and the community, the division fosters a philosophy that promotes an optimal student learning environment.

The guiding purpose of SDES is to provide excellence in student services integral to the development of a meaningful collegiate experience.

Key values in the division's organizational identity are: caring, commitment, collaboration, honesty, inclusiveness, innovation, integrity, loyalty, operational excellence, respect, and trust.

The division administers programs involving orientation, advisement and academic exploration, registration and admissions, financial assistance, multicultural services, personal counseling, housing, health services, career development and placement, student activities and organizations, veterans affairs, and a variety of academic development and retention and other special programs. These responsibilities are integral to the mission of the University, addressing the immediate needs of students and faculty while responding to the concerns of other constituencies such as business and industry, parents, alumni, and other educational institutions.

While it is convenient to divide the university and division into units for operational effectiveness and efficiency, students are not so easily compartmentalized. The recognition that each student is a whole and unique person encompasses the basic philosophy of the Division of Student Development and Enrollment Services. Perhaps this philosophy is best reflected in the mission statement of the division:

"The Student Development and Enrollment Services Division provides services through activities, programs, and opportunities that establish a meaningful collegiate student learning experience. This will be developed through a productive work environment that recognizes employee's contributions and teamwork.

The primary activities, programs, and opportunities of Student Development and Enrollment Services contribute to enrollment growth, campus life, and academic development support services for a diverse and talented student population.

The composition of student services will be based on assessed needs, targeted populations, and institutional priorities.

Collaboration and partnerships will be a cornerstone within the Student Development and Enrollment Services Division to ensure broad support and quality outcomes."

ACADEMIC DEVELOPMENT AND RETENTION

Associate Vice President: Maribeth Ehasz, AD 210, (407) 823-2169

The unit of Academic Development and Retention (ADR) provides critical support functions to facilitate the university mission. ADR promotes excellence through the delivery of quality services that facilitate student enrollment, personal development, progression, graduation, and career opportunities.

ACADEMIC SUPPORT AND ADVISING PROGRAMS

Director: Patricia E. Pates, PC1-102, (407) 823-6630

The unit of Academic Support and Advising Programs focuses on academic advising, support, retention, and successful progression for targeted student populations. Through a program of assessment, collaboration, and coordination, the unit provides leadership for academic orientation programs, academic advising services, and academic success programming. These services are provided through the following offices:
The Academic Exploration Program (AEP) is a student-centered source of academic support and information for students who choose not to make a premature choice of major, but prefer to explore the many options available to them under the guidance of academic advisors and with the assistance of other professional resources throughout UCF. The central mission of the Academic Exploration Program is to provide a focal point of academic support and assistance for students who are uncertain about their program of study or have been displaced from a restricted or limited access major.

Opportunities are provided for students to participate in a series of workshops and seminars that provide them with an opportunity to explore interests, assess abilities and provide an organized approach to making thoughtful, well informed and meaningful decisions about their education and careers. Students in AEP progress through a variety of activities and tasks through which they learn to use the skills of academic and occupational data gathering and evaluate this information in the context of their own personal strengths, limitations and interests. The objective of AEP is to assist students in defining their goals and selecting an academic major.

In addition to workshops, individualized academic advising is provided to help students find the correct balance of support, challenge, structure and freedom to assist in the development of their academic programs. Central to all academic advising and support programs is a developmental approach to assisting students. Support is provided for self-assessment, exploration of academic disciplines, and decision making to achieve the fulfillment of academic and life goals. Course selection assistance is provided during each registration period, and long range academic planning assistance is provided throughout the academic year.

The university makes a strong academic commitment to its student-athletes. The Office of Academic Services for Student-Athletes collaborates with the Athletic Department to ensure that student-athletes balance the academic demands of the full-time student with the competition of Division I intercollegiate athletics through the NCAA/CHAMPS Life Skills Program. The focus of the program is on five commitments: athletic excellence, academic excellence, personal development, service, and career development.

Through cooperation with college departments, professional advisors advise student-athletes according to requirements for their program of study. Academic support services include organized study sessions, tutorial services, time management and study skills instruction. The office is responsible for notifying and working with faculty to arrange for make-up work for student-athletes when they travel for competition. A career exploration component assists the student-athlete with decisions related to choosing a major, a career, graduate school or other career interests.

Through collaboration with the Athletic Department and the NCAA faculty representative, professional advisors ensure compliance with NCAA requirements from the admissions process through graduation. The office serves as a resource for student-athletes. The advisors refer student-athletes regularly to faculty members or other support services on campus for assistance.

UCF recognizes that starting in a new learning environment can present many challenging life transitions for incoming students. First Year Advising and Information Services has been established to proactively prepare and support first year students, specifically first-time-in-college students who are not assigned to other freshmen advising offices. The overriding mission of the office is to assist first year students by providing general education advising services and other programs that will lead to students' overall satisfaction, success and persistence at UCF.

To fulfill this mission, the office focuses its efforts on providing a caring environment, serving as a centralized source of academic information, conducting personalized advising and academic support, establishing early and regular communication, providing outreach activities for freshmen, and tracking the academic progress and success of our target student population. To assist with a smooth transition to college life, a priority is to provide activities and interaction with first year students that promote early affiliation and involvement with UCF. FY coordinates the Class Advantage Program, a special early advising initiative for high academic achieving, incoming freshmen. In addition, high school
students admitted to UCF as part of the Early Admission or Dual Enrollment programs are advised and academically supported through this office.

FY works collaboratively with college advisors in providing accurate academic program information and in creating appropriate academic plans for our students. The office provides general education advising, general information, and other assistance beginning with the new student orientation process and continuing throughout the initial stages of students' UCF collegiate experience.

NATIONAL CONSORTIUM FOR ACADEMICS AND SPORTS (NCAS)
Director: Suzi Katz, WDS Center 123A, (407) 823-5243

The University of Central Florida has shown a commitment to the education of its student-athletes and to the well being of the community by continuing its relationship with the National Consortium for Academics and Sports (NCAS) as host for the Southern Regional Office.

The mission of the National Consortium for Academics and Sports is to help create a better society by focusing on educational attainment and using the power and appeal of sport to positively affect social change.

The NCAS evolved in response to the need to help "keep the student in the student-athlete." Since its inception, NCAS member institutions have proven to be effective advocates for balancing academics and athletics. By joining the NCAS, a college or university agrees to bring back, tuition-free, their own former student-athletes. In exchange for the tuition assistance, these student-athletes agree to participate in the schools' outreach and community service program.

In addition to outreach, the NCAS offers its members education programs to train staff members and student-athletes on issues relating to men's violence against women. Student-athletes learn about this issue and become empowered to take a leadership role on their campuses to end men's violence against women and all forms of sexual harassment. Diversity training is also offered to member institutions both for student-athletes as well as administrators.

Programs of the National Consortium for Academics and Sports include: National STUDENT-Athlete Day, Outreach and Community Service, Mentors in Violence Prevention (MVP) Program, TEAMWORK Leadership Initiative (TLI), Athletes in Service to America, TEAMWORK-South Africa, Degree Completion Program, NBA/NBPA Career Transition Program, and NFL/NFLPA Pro Education Program.

STUDENT ACADEMIC RESOURCE CENTER (SARC)
Director: TBA, PC1-102, (407) 823-5130

The Student Academic Resource Center (SARC) provides high-quality academic support programs, including Supplemental Instruction, tutoring, academic advising, and various other programs and services to UCF students to support the goal of providing a quality education at the University of Central Florida. SARC serves as a means for retention of students and is an important element in enabling UCF students to achieve their academic goals. SARC provides students with free individualized and small-group tutoring in biology, chemistry, economics, Spanish, physics, reading, statistics, and many other courses.

Every semester, SARC offers a series of CLAST Review Workshops for each of the four CLAST subtests. The staff can also prescribe self-paced programs specifically designed for CLAST preparation. Classes are offered for those preparing for the GRE. Computer preparation materials are also available for GRE, GMAT, LSAT, and the MCAT.

SARC's professional academic advisors work with a select group of UCF freshmen as well as with others who need academic advice, study skills help, and assistance in selecting an appropriate schedule of courses. SARC also provides assistance with time management, note taking, test taking, memory, creative and critical thinking, and test anxiety for all students wishing to enhance their educational experience.

ACADEMIC SERVICES
Assistant Dean: David R. Dees, AD 210, (407) 823-2691
This office is responsible for administering state and university academic policies which pertain to academic record changes, curriculum file management, the degree audit program, and university-wide academic policies and graduation requirements. The primary goal of the office is to apply these policies fairly, promptly and evenly according to established guidelines, to provide a prompt response to requests from students, faculty and staff and to maintain accurate and effective computer records.

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for advisement and graduation certification.

**CAREER RESOURCE CENTER**

**Director:** James Gracey, SRC 185, (407) 823-2361

The Career Resource Center, provides a broad range of career related services to UCF students, alumni, and employers. The Center sponsors seven career expos and fairs, facilitates weekly career planning mini classes, and hosts several hundred employer recruiting visits each year. To help students navigate the complexities of the job market, the center offers an online résumé system which can refer résumés to interested employers. Full-time and part-time jobs are listed on a 24-hour telephone jobsline called KnightLink. An employer information library is available. Career Development Coordinators are available to assist with individual career needs.

Students beginning studies at UCF are encouraged to begin thinking about careers as soon as possible. Seniors are urged to register at least two semesters prior to graduation.

**COUNSELING AND TESTING CENTER**

**Director:** Robert Harman, SRC 203, (407) 823-2811

The University of Central Florida Counseling and Testing Center is the only campus agency designated to provide psychological and testing services to university enrolled students. The Center is composed of a professional staff of psychologists, mental health counselors, and test administrators who provide both a confidential atmosphere and a safe environment in which students may explore and resolve issues of concern. The Center maintains and assures confidentiality as provided by law. The Center is open Monday through Friday and operates on an appointment basis. The following counseling services are offered:

**Personal Counseling:** One-on-one confidential counseling is available to assist students with a variety of concerns. These may include depression, relationships, anxiety, grief and loss, trauma, sexual values, and/or eating problems.

**Career Counseling:** Career indecision is resolved through exploring a student's background, interests, and goals as they relate to career satisfaction. A variety of tests is available to assist in this process.

**Couples/Conjoint Counseling:** Couples who are both UCF students may seek premarital, marital, divorce, sexual adjustment, or alternative life-style counseling. Any two students, such as roommates, may also utilize this service.

**Group Counseling:** Groups led by professional staff offer students a supportive and stimulating environment to explore common issues of concern. Typical groups may include personal growth, eating disorders, and/or stress management. Contact the Center for the status and availability of current or upcoming groups.

**Testing:** The Test Office administers the state College Level Academic Skills Test (CLAST) and the Computer-Adapted CLAST (CAT-CLAST); placement examinations such as the College Placement Test (CPT), Foreign Language Proficiency Exam (FLPE), the Grammar Proficiency Exam (GPE); and the institutional Academic College Test (ACT) and College Level Examination Program (CLEP). It also administers the following national exams:

- Graduate Record Examination (GRE)
- Law School Admissions Test (LSAT)
- Medical College Admissions Test (MCAT)
- Florida Teachers Certification Examination (FTCE)

**ORIENTATION CENTER**

**Interim Director:** Cynthia Arnaud, SRC 227, (407) 823-5105

The orientation program assists entering freshmen and transfer students with their transition to the University of Central Florida by providing information about student services, campus life, academic support, academic advising, and registration.

Each freshman and transfer student must attend an orientation session prior to registering for classes. Information is mailed to each student accepted to the university regarding date, time, and location of the orientation sessions.

**TRANSFER SERVICES**

**Director:** TBA, Trailer (TR) 619, Room 103, (407) 823-2231

The Office of Transfer Services provides the following services and resources:

- accurate and current information about university programs and policies including entrance and exit requirements
- articulation workshops and conferences involving instructional, advising and administrative personnel from the university, community colleges and other selected institutions
- support and referral for transfer students before and after matriculation
written articulation agreements between the university and the community colleges and among colleges within the university
systematic monitoring of the UCF's compliance with the state-wide articulation agreement
interpretation of statutes and rules for the university community and the state university system and interpretation of university rules for the community colleges
systems to improve the academic readiness of students to pursue their major fields of study and complete their baccalaureate degrees in a timely manner

The director of this office serves as ombudsman for community college students experiencing problems, while establishing systems to prevent transfer problems from occurring. Of primary concern is the improvement of the academic readiness of students to pursue their major fields of study and complete their baccalaureate degrees in a timely manner.

**UNIVERSITY REGISTRAR’S OFFICE**

**University Registrar:** Dennis J. Dulniak, AD 161, (407) 823-3100
The Registrar's Office primary purpose is the registration of all students, safekeeping and control of all student records, maintaining the student database, developing the Schedule of Classes and the assignment of classrooms and coordinating graduation and commencement activities. The office contributes to the enhancement of student enrollment and retention and ensures that the appropriate administrative support services are available to contribute to the academic experiences of students who are attending or have attended the university.

The Registrar’s Office is comprised of five units: Records, Registration, Student Database Control, Room Scheduling and Graduation and Commencement. The office operates as a cohesive unit in providing registration; record services for students, faculty, and staff; coordination of the commencement ceremony; and room scheduling for academic purposes. All units operate as student service units whose primary function is providing academic services to all students of the university.

**CAMPUS LIFE**

**Associate Vice President:** Craig E. Ullom, AD 282, (407) 823-2626

The Campus Life unit contributes significantly to the student learning experience by providing a variety of programs and services including housing and residence life, off-campus resident services, health and wellness programs, recreational sports, Greek life, Student Union and student activities, religious life, and the LEAD Scholars Program. These co-curricular activities supplement cognitive learning with exceptional student involvement and personal development opportunities.

**BREVARD & DAYTONA CAMPUS LIFE**

**Director Brevard:** Karen Bray  
**Director Daytona:** Diana L. Weidman  
The Brevard (231 Brevard, 407-632-1111) and Daytona (34/202 Daytona, 904-255-7423) Campus Life offices provide student services at the branch campuses including orientation, career advising, co-op, and accommodations for disabled students. In addition, they provide programs, assistance to clubs and organizations, and CLAST registration for students on those campuses.

**CAMPUS MINISTRIES**

**Director:** Anna Jackson, SRC 150, (407) 823-5335  
The campus ministry is a combined effort of a wide variety of religious persuasions providing students with professional personnel who will encourage spiritual, moral, and social opportunities in a spiritual context within the university community. They offer counseling, scripture study, public lecture and discussion programs, fellowship, recreation, and worship services.

**GREEK AFFAIRS**

**Director:** Gregory Mason, AD 210, (407) 823-2824  
(Greek Council Office, Student Union 208B, (404) 823-2072)  
The Office for Greek Affairs is committed to providing the best possible fraternity and sorority experience for students and the university community. This office fosters individual and group development through a co-curricular educational program within the mission of the university. It encompasses small group living and more importantly, developmental programming for individuals, chapters, chapter alumni boards, house corporation officers, and collegiate governing boards (Panhellenic Council, Interfraternity Council (IFC), National Pan-Hellenic Council (NPHC), and the Greek Council).

Fraternities and sororities at UCF are some of the most positive and rewarding organizations that a student can become involved with while in college. Sorority or fraternity life can offer students a "home away from home," a source of job contacts, a scholastic support system, an organization for community service, a hands-on experience in running a working entity, and a foundation for long-
The procedures for protecting the confidentiality of student records are based on state regulations and the federal Family Educational Rights and Privacy Act of 1974. In accordance with 228.093, F.S., the university is required to release student directory information to independent vendors upon request.
Therefore, if students do not wish their names on such lists, they should notify the Office of Judicial Programs. *The Golden Rule* outlines the university procedures for confidentiality.

**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 and becomes disruptive to normal classroom procedures, the instructor has the authority to remove the offending party from the room and refer the student to the Office of Judicial Programs for judicial action.

**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 judicial action. Detailed conduct regulations and procedures are presented in *The Golden Rule*.

A person applying for admission to UCF who has declared an adjudication of a violation of conduct policies at a previous college or university or a violation of the law which resulted in probation, community service, a jail sentence, or the revocation or suspension of their driver’s license (including traffic violations which resulted in a fine of $200 or more) may have circumstances of the case reviewed by the Office of Judicial Programs to consider eligibility for admission.

**LEAD SCHOLARS PROGRAM**

*Interim Director: Edward Hampton, AD 251, (407) 823-2223, http://pegasus.cc.ucf.edu/~lsp*

The LEAD (Leadership Enrichment and Academic Development) Scholars Program is an intentional and comprehensive two-year student development program for competitively selected, academically talented first year college students with experience and interest in leadership, academic excellence, and community service. LEAD Scholars join a unique partnership with faculty, staff, and alumni community leaders as a way to make an immediate connection with academic and community life.

The LEAD Scholars Program (LSP) fosters further enrichment in these areas through intentional development in 13 leadership dimensions to enhance the academic growth and development of future leaders during their first two years of higher education. The general goal is to prepare students to be effective community leaders in personal, professional, and civic communities. This goal is achieved through three salient venues: academic excellence, leadership, and community service.

- To develop academic excellence, students are integrated with faculty in the five colleges of Arts and Sciences, Business Administration, Education, Engineering, and Health and Public Affairs. Each of these colleges also hosts a two credit foundations of leadership course which provides the primary means of facilitating the focus for study, advisement, and educational activities as it relates to leadership, academic excellence, and community service within the college. As an alternative, sophomore students may take a leadership practicum in lieu of a class. Over his or her two years as a LEAD Scholar, each student will take one course or practicum each semester. Additionally, students will be provided special competitive opportunities to be paired with faculty or staff in the LEAD Scholars Assistantship program. The intent of this program is to enable students to develop professionally through a special mentoring relationship involving research and/or project development by joining an ongoing effort in the student’s area of interest.

- To develop leadership, students are provided opportunities to work on project teams and/or special programs. Leadership development will be fostered in the university, in the community, and through skill enhancement.

- To develop community service, students will participate in specially structured community service projects. These projects are designed to provide special learning and development opportunities. Although LEAD Scholars will identify with a particular college, the program is available to students deciding upon their major academic interest as well as those who have settled upon a major. Beginning academic year 2000/01, sophomores will be selected on a competitive basis to continue the program.

Through a competitive process based on academic record, extracurricular and community activities, school recommendation, and expressed interest in leadership, academic excellence, and community service, LEAD Scholars are selected for this two year program that serves as a bridge for participation in leadership opportunities as upper division students and future community leadership roles.

**OFF-CAMPUS RESOURCE CENTER**

*Director: Jimmy Watson, AD 282, (407) 823-2821*

Recognizing that there are numerous apartment and duplex communities within a two miles radius of the campus, the Off-Campus Resource Center provides off-campus residents with information regarding housing opportunities, as well as a variety of on-campus programs and services. The office welcomes and encourages off-campus students to get involved in campus life and become connected with the many benefits the university has to offer. The center fosters a supportive environment for off-campus residents by providing an advocate for resolving problems, campus referrals, and exploring available resources for students.
RECREATIONAL SERVICES

Director: Loren Knutson, RS 101, (407) 823-2408

The Office of Recreational Services offers a variety of sports, fitness, and recreational opportunities to the students of UCF and to faculty/staff and employees of the Central Florida Research Park, who purchase Recreation Memberships. Some limited services are extended to student and Recreation Member families, alumni, and the surrounding community on a space available basis.

Opportunities include competitive intramural sports leagues and tournaments, organized recreation and fitness programs, unstructured open "free play" recreation, sports-related special events, selected instructional classes and certification workshops, and racquet stringing service. Available facilities include the Fitness Center, with free weights, Cybex, cardio machines, and an aerobics/martial arts room; Lake Claire Recreation Area, with picnic facilities, water craft, and nature trail; disc golf course; lighted sand volleyball courts; swimming pool; outdoor basketball, volleyball, and racquetball courts; and softball and multi-purpose sports fields.

The Office of Recreational Services (RS 101), located at the south end of campus on Gemini Blvd. next to the swimming pool, employs up to 100 students each semester.

STUDENT ACTIVITIES, OFFICE OF

Director: Reuban Rodriguez, SU 208, (407) 823-6471

The Office of Student Activities provides programs, resources, and services that enhance student life at the university. The office registers over 200 student organizations (student government, academic/ preprofessional and honorary, sports clubs, military, religious, special interests, minority/international, and service groups) and advises the Campus Activities Board (CAB), the Consultants for Effective Leadership (CEL), the Diversity Dialogue Consultants (DDC), and Volunteer UCF (VUCF). Other programs and services sponsored through this office include the Knights of the Roundtable and Leadership Services.

STUDENT HEALTH SERVICES (SHS)

Interim Director: Robert Faust, SHC, (407) 823-2094

Recognizing the importance of lifestyle in health and the prevention of disease, the Student Health Services combines quality care for illness and accidents with an aggressive health education and lifestyle enhancement program. A Student Wellness Advocate Team (SWAT) enhances the health promotion efforts of the Wellness Center. The Student Health Advisory Committee (SHAC) serves as liaison representing students for Health Center programs and operation.

The Student Health Center (SHC) is staffed by physicians, advanced registered nurse practitioners, physician assistants, registered nurses, pharmacists, and a full complement of other medical support personnel. Full referral service to Orlando area specialists is established.

Each health fee paying student is entitled to the benefits provided through the Student Health Services program and outlined in the Student Health Services brochure. Copies of the brochure are available in the Student Health Center and are mailed to students along with the optional health and accident insurance materials.

Most office consultations and Student Health Service programs are provided without additional costs. Laboratory tests, x-rays, medications, and some supplies require additional but significantly reduced payments which may be made with cash, credit card, personal check, or charged to student's account.

Optional Health and Accident Insurance may also be purchased by response to the mailers or by contacting the Office of Student Development and Enrollment Services or Student Government. Please remember that optional health and accident insurance is not part of the Student Health Services program, but is designed to provide for health coverage needs which are beyond the scope of the Student Health Services, such as hospital referrals. (Charges incurred outside the Student Health Center are the responsibility of the student.)

Testing for HIV (AIDS virus) is not done routinely in our laboratory because a program for anonymous testing is available elsewhere, and arrangements for highly confidential AIDS testing on campus may be made by calling the HIV AIDS Education office at UCF-AIDS (407) 823-2437 or Health Resource Center (407) 823-5841. Information concerning these programs may be obtained through the Student Health Center at (407) 823-2701 during regular hours. When the Student Health Center is not open, students can call the Police Department to obtain help for urgent needs.

Blood drives are held several times annually on campus by the Central Florida Blood Bank. Students, faculty, staff, and family members are eligible for credits from the blood bank simply by identification and demonstrated need. Contact the Nurse Supervisor at (407) 823-5275 to make arrangements.
STUDENT LEGAL SERVICES  
**Director:** Patti MacKown, SRC 155, (407) 823-2538  
The Student Legal Services office provides 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 student currently enrolled at UCF or graduate student currently enrolled in UCF) is entitled to consult with a 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) 823-2538, or Student Resource Center Room 155. This service is by appointment only, and no legal advice is given over the phone.

STUDENT UNION  
**Director:** Mark Hall, SU 312, (407) 823-2117  
The Student Union is the meeting place on campus. It also services the campus community with a variety of programs and services in addition to being home to restaurants including Java Express, The Sweet Retreat, Sbarro, Subway, Wendy’s, and Locos. Retail stores include STA Travel, KnightStop Convenience Store, Greek Unique, Knightwear, and the UCF Computer Store. Special services include the Student Government Kiosk, U.S. Postal Service Kiosk, and Suntrust, UCF Credit Union, and Nation’s Bank ATM machines. The Student Union will be undergoing a major building expansion beginning the spring of 1999. Additional specialty stores, restaurants, and a new Grand Ballroom will be included in the expansion. For information, phone (407) 823-0001.

SPECIAL PROGRAMS  
**Assistant Vice President:** A.J. Range, AD 210, (407) 823-2691  
The unit of Special Programs is vital to the mission and purpose of the university as it seeks to provide leadership and advocacy in programs and services for students with special needs. These specialized opportunities and services enhance and complement existing support and programs which maximize collegiate student success.

CREATIVE SCHOOL FOR CHILDREN  
**Director:** Dolores Burghard, CSC, (407) 823-2726  
The Creative School for Children (Educational Research Center for Child Development) provides an educational program, including kindergarten-first grade, for children two through seven years old. The daily program is planned and conducted by degreed 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. Hours are 7:45 a.m. - 5:15 p.m. Monday through Friday.

The school remains open until 6:00 p.m. for late pick-up. The school conducts a Summer Recreational Day Camp for elementary school children during the Summer semester.

INTERNATIONAL STUDENT AND SCHOLAR SERVICES  
**Director:** Bassam Khoury, Barbara Ying Center 106A, (407) 823-2337  
The International Student and Scholar Services office provides assistance and information to the University of Central Florida international community. Its main function is to assist international students and scholars attending UCF to adjust 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 help international students and scholars maintain their non-immigrant visa status. This is done by issuing and processing the necessary immigration documents such as I-20 A/B and IAP-66 and by interpreting relevant immigrant rules and regulations. Counseling and assistance on personal, financial, academic, and cultural concerns are also provided to guide the international students and scholars within the university community so they may successfully pursue their academic programs and research. Another important role of the office is to advance the cause of international awareness and foster cultural understanding by the promotion of many social, cultural, and educational activities of the various international student clubs and organizations on campus and in the Orlando metropolitan area.

MULTICULTURAL STUDENT SERVICES  
**Associate Director:** Inez M. Ford, AD 145, (407) 823-2716  
The Office of Multicultural Student Services (MSS) provides comprehensive academic support, cultural enrichment, consultation, and referral services that promote the recruitment, admission, retention, and graduation of African American, Hispanic American, Asian American and Native American students. MSS offers personalized advising and support; monitors academic progress; sponsors a six week summer program, Seizing Opportunities for Achievement and Retention (SOAR); and designs and coordinates cultural and social activities to assist students of color in realizing their academic, career and personal goals. MSS serves as the focal point of operations in addressing the specific needs, issues and concerns that confront multicultural students at UCF.
NON-TRADITIONAL AND EVENING/WEEKEND STUDENT SERVICES

Director: Jameer Abass, AD 282, (407) 823-3111

The Office of Non-Traditional and Evening/Weekend Student Services is responsible for developing and implementing support services that will enhance the success of adult and evening/weekend students at the University of Central Florida. The office serves as an advocate for adult and evening/weekend students. It works in collaboration with academic and non-academic departments within the university to promote the awareness of adult and evening/weekend students and works with students to solve problems and disseminate pertinent information.

Information Centers & Evening/Weekend Student Services:
- Monday through Thursday, Location: Second-floor Administration Building, Education Building Lobby, and College of Business Information Center
- Monday through Friday, Location: Student Government Kiosk
- Saturday, Location: Student Government Kiosk
- Sunday, Location: Student Government Kiosk

STUDENT DISABILITY SERVICES

Director: Dennis K. Hall, AD 149, (407) 823-2371

The University of Central Florida encourages academically qualified students with disabilities to take advantage of its educational programs. The Office for Student Disability Services provides information and individualized services which are consistent with the student's documented disability. Such services may include, but are not limited to: orientation to campus facilities and services, assistance with classroom accommodations, assistance with course registration, disabled parking decals, counseling, and referral to campus and community services for students with disabilities.

To be eligible for disability-related services, individuals must have a documented disability as defined by the Americans with Disabilities Act (ADA), 1990. 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 requiring administrative or academic accommodations. Individuals seeking services are required to provide documentation from an appropriate health care provider or professional.

If a student needs special admission consideration based on a disability, the student should answer this question on the Application for Admission form and send the requested appropriate documentation to the Admissions Office. Students who have a disability which may require special assistance are requested to voluntarily contact the Office of Student Disability 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 with disabilities. A Telecommunication Device for the Deaf (TDD) is available for hearing-impaired or speech-impaired persons with TDD's to contact the university. Telephone (407) 823-2116, for TDD calls only.

STUDENT OUTREACH

Director: Emily Santiago, TR 547, Room 101, (407) 823-5580

The primary mission of Student Outreach is to attract, motivate, and prepare select underrepresented student groups to complete a college education. These students are provided with essential information, educational materials and collegial experiences to enhance their preparation for post-secondary study.

A myriad of pre-collegiate programs are administered by Student Outreach. The College Reachout Program (CROP) is supported by the Florida Department of Education and provides campus and school-based programs to strengthen the success skills of students in grades 6-12. The UCF McKnight Center of Excellence is housed at the Callahan Neighborhood Center and offers direct access to the community-based programs to students at every grade level. Community partnerships help to identify high potential students, offer volunteer support and make significant contributions to support program goals and objectives.

Throughout the year, workshops, seminars and other activities and events are sponsored to support the student's personal development and academic achievement. Leadership training and promotion of civic responsibility are integrated into all outreach programs. Students are invited to the UCF campus
for summer programs that provide an early introduction to college life and equips students with unique approaches to attain college preparedness. Participants also obtain a head start on becoming productive citizens.

**VETERANS' AFFAIRS, OFFICE OF**

**Director: Ronald H. Atwell, SRC 132, (407) 823-2707**

The Office of Veterans' Affairs (OVA) is a center for all veterans and eligible dependents, including students who are using VA educational benefits to further their education. The office 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 UCF admissions process.

**Veterans' Benefits**

Students who are entitled to DVA educational benefits must make initial contact with the Office of Veterans' Affairs. To maintain eligibility for DVA education benefits, students must adhere to the policies and procedures contained in the UCF "Student Veteran Handbook" and DVA rules and regulations. A copy of the "Student Veteran Handbook" can be obtained at the Office of Veterans' Affairs.

The OVA evaluates and awards transfer credit for military training and education in accordance with Department of Veterans Affairs regulations and UCF policies. Credit is awarded for schools and courses only. Transfer credit is not awarded for experience, military skills level and/or special certifications. In addition, no credit is awarded for Basic Military Training. Transfer credit is awarded per the recommendations of the ACE (American Council on Education) Guide, based upon courses and/or training listed on the DD Form 214 or other official military records. U.S. Air Force veterans are asked to provide official copies of Community College of the Air Force transcripts to the Admissions office.

Students eligible for DVA education benefits may also be eligible for a VA Deferral of tuition and fees. The VA Deferral due date is published in the Schedule of Classes each semester. STUDENTS ELIGIBLE FOR FINANCIAL AID ADEQUATE TO COVER TUITION AND FEES ARE NOT ELIGIBLE FOR THIS DEFERMENT.

For fall and spring semesters, undergraduates must carry at least 12 semester hours for full-time DVA benefits, 9-11 semester hours for three-quarter time benefits, and 6-8 semester hours for half-time benefits. Five semester hours or less will be reimbursed at cost of tuition and fees or quarter-time depending on DVA Chapter. Check with OVA for summer course load requirements.

Students intending to enroll concurrently 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 their academic advising office.

Veterans and eligible dependents who wish to change their major, or pursue a double major or dual degree, or add a minor may also receive VA benefits but must make arrangement through the Office of Veterans' Affairs before taking any of the new courses. This includes a minor in Military Sciences. Note: some majors have room in the program for extra electives that can be filled with courses for a minor or for another major.

In order to receive veterans' educational benefits, students must maintain satisfactory academic progress and conduct. Accordingly, benefits will be terminated for individuals who are disqualified, excluded, suspended, or expelled from the university. If reinstated by the university following disqualification, exclusion, suspension, or expulsion, 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. For students who fail to maintain satisfactory academic progress, benefits will be terminated 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. Payment is received during both the on-campus semester and the off-campus work terms. Contact the Office of Veterans' Affairs at (407) 823-2707 for more specific benefit information on Cooperative Education.
STUDENT FINANCIAL ASSISTANCE

Executive Director: Mary H. McKinney, AD 150 (407) 823-2827, For appointment (407) 823-5285

The primary role of this office is to provide financial assistance to students and families, allowing them to participate fully in the total educational experience. The office is responsible for coordinating and processing all resources for both undergraduate and graduate students. It also serves as the Undergraduate Student Personnel Office. Students are encouraged to apply for financial assistance by completing the Free Application for Federal Student Aid (FAFSA). Students may contact the Office of Student Financial Assistance to receive individual, comprehensive counseling by telephone or to schedule an appointment with a counselor. The office provides a complete line of services regarding financial assistance to all students. For more detailed information visit our website at: http://pegasus.cc.ucf.edu/~finaid/

STUDENT GOVERNMENT

Advisor: Ossie Palla, SU 214, (407) 823-2191

Student Government's (SG) purpose is representing student views on issues affecting UCF and promoting progressive changes to create improvements in campus life. In advocating better communication and understanding among the UCF family, Student Government also provides numerous services which impact student life. These services currently include computer labs, discount tickets to movie theaters and theme parks, free local calling on campus telephones, funding for legal services, recreational services and Campus Activities Board programming. Money which Student Government allocates for these services comes from activity and service fees which students pay during registration. Additionally, UCF clubs and organizations may receive funding for events, projects and travel to conventions from the Student Senate, SG's legislative body. SG coordinates its efforts with the Florida Student Association in lobbying for students' rights on local, state and national government levels.

Student Government's structure is modeled closely after our federal government system in that there are three branches: Legislative, Judicial, and Executive. The Executive branch, composed of the Student Body President, Vice President, cabinet, and staff, oversees the daily administrative operation of Student Government. The Legislative branch funds campus clubs and organizations and also passes bills and resolutions which benefit the student body. The Judicial branch oversees hearings concerning student rights violations.

All students are encouraged to take an active role in Student Government. For information on how to be involved with SG or how your club or organization can receive funding, contact the Student Government Association offices located in the Student Union, Room 214, (407) 823-2191, or visit the Student Government web page (http://pegasus.cc.ucf.edu/~sga).

UNDERGRADUATE ADMISSIONS

Interim Director: Susan R. Burritt, AD 161, Phone (407) 823-3000

The Undergraduate Admissions Office coordinates the admission and enrollment process of all undergraduate first-time-in-college, transfer, non-degree, and non-Florida state university transient students to the Orlando, Daytona, and Brevard campuses. The office seeks to identify, attract, and enroll the desired number of talented, diverse, and academically qualified students who can contribute to and achieve academic growth from the multitude of programs offered through the university and community we serve. Through managed communication, a data management system and scholarships, the Office is able to attract students who are motivated, challenged, and have the desire to achieve academic prominence.

Office functions include administering programs for prospective students, such as campus tours, open houses, area receptions, and high school and community college visits. Students, parents, and high school and community college counselors are consulted on a continual basis regarding all aspects of admission and provided with general information on the academic, social, and living components of the university. The Office is committed to providing accurate and timely information to all constituents.
The primary role of this office is to provide financial assistance to students and families, allowing them to participate fully in the total educational experience. We encourage all students to apply for financial assistance by completing the Free Application for Federal Student Aid (FAFSA). The following Financial Assistance policies and procedures are based upon federal, state, and university regulations current for the 1999-2000 academic year. 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. Some financial aid programs are available to part-time students; generally at least 6 credit hours enrollment per term is required. Pell Grants are available to some students attending for less than 6 hours.

The Student Financial Assistance Office encourages all students to apply for financial aid and to begin the process early. There are many grant, loan, and employment programs available. Most programs require the determination of financial need.

Financial need is calculated by a federal processor who uses 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) and minus any Veteran’s Educational Benefits or other expected resources available. Students and/or parents provide detailed financial information on a Free Application For Student Aid (FAFSA) which generates a need analysis form. The results are forwarded to the UCF Student Financial Assistance office by the federal processor.

MORE SPECIFIC ELIGIBILITY REQUIREMENTS ARE LISTED BELOW:
- The applicant must have a high school degree and must not be enrolled in an elementary or secondary school.
- The applicant must be admitted as a degree-seeking student at UCF in an eligible program.
- The applicant must be a U.S. citizen or an eligible non-citizen (e.g. resident alien).
- Eligible non-citizens include I-151, I-551 and I-688 cardholders as well as some I-94 classifications.
- The applicant must be maintaining Satisfactory Academic Progress toward his/her degree. See the Satisfactory Academic Progress Requirements.
- The applicant must not be in default on any Federal Student Loan and must not owe a repayment on any grant program.
- The male applicant must be registered with Selective Service (if applicable).
- Students may not receive aid in excess of the published "cost of attendance" (School Costs).
- The applicant must not have received Federal loans in excess of the established annual or aggregate limits.
- The applicant must show a financial need as computed on the FAFSA (for need based programs).
- The applicant must meet minimum hours of enrollment and other program-specific criteria.

UCF APPLICATION DEADLINES
OFFICE HOURS:
Mon: 9:00 AM to 7:00 PM
Tue/Wed/Fri: 9:00 AM to 5:00 PM
Thur: 1:00 PM to 7:00 PM
(For office hours during break weeks, please contact our office)
- To be considered for the full range of aid available for the academic year (beginning with the fall term), the need analysis report must be received from the federal processor by March 1 of the preceding spring
- Incoming students should not wait to be admitted to UCF before applying for financial aid
- All students must reapply yearly for financial aid
- Federal Pell Grants and Federal Stafford Loans are available on a year-round basis. Students may apply for financial aid in advance of any term and receive aid from these programs if eligible
- Students who apply for aid after July 15, should not expect their aid to be paid until well after the beginning of the Fall semester

APPLICATION PROCEDURES
The following steps can take 4 to 6 weeks to complete. Students should apply well in advance of the March 1 deadline of the year for which aid is being requested. Students who wish to enter UCF in spring or summer term must also apply by the March 1 deadline of the preceding Spring in order to be considered for the maximum aid available.

1. File a Free Application for Federal Student Aid
UCF requires that you complete the Free Application for Federal Aid (FAFSA) or Renewal FAFSA.
IMPORTANT: The results of your FAFSA must be in our office by March 1 for the next fall and spring semesters, to meet our priority deadline, so that you may be considered for all aid available.

Read the instruction booklet carefully as you fill out the form. Errors and omissions can prevent you from receiving aid for which you could be eligible. Keep copies of all documents filed. You may use our website to electronically complete the FAFSA.

Follow-up promptly on all corrections to your FAFSA. If your record is "rejected in analysis" by the federal processor, be sure to provide them with the information they request as soon as possible. Processing of your file will be held up until corrections are made.

2. Request Financial Aid Transcripts (in addition to academic transcripts)
Students applying for financial aid at UCF starting with the fall semester of any year are not required to provide financial aid transcripts. However, mid-year transfer students (i.e., those students who will not attend until spring or summer) must provide a financial aid transcript from every school attended during that school year, whether or not any financial aid was received.

To request financial aid transcripts, provide the school with your SSN and the name under which you attended that school. Ask them to make sure your SSN is on the transcript they send to UCF. Allow 2 to 4 weeks for processing. If you are enrolled at another institution at the time you are involved in the UCF application process, wait until you have completed that term of enrollment before requesting the financial aid transcript.

3. Follow-Through.
Your application will not be complete until all documents requested have been filed and reviewed in our office. Whenever you receive financial aid correspondence, review it thoroughly and follow directions promptly. Delays can be frustrating, as well as costly.

4. Verification
Federal regulations require that some students verify the information submitted on their applications. If selected for verification, you will be asked to provide additional information (such as copies of tax return forms, documentation of household size, untaxed income, etc.). It is not unusual for additional documents to be requested after the initial review of the file. Prompt response to requests for additional documentation will expedite completion of this process. Financial aid cannot be processed or received until verification is complete and all necessary corrections have been made.

5. Professional Judgment
Contact the Student Financial Assistance Office for an appointment with a counselor if you experience a circumstance that you were not able to state on your original FAFSA and might affect your financial situation.

6. Award Notification
Award and important additional information will be sent to you after we process your data. You may provide loan processing information at that time (AFTER APRIL 1999) by completing the Federal Stafford Loan Response Form.

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.
- Include student's name and SSN on all documents submitted to Student Financial Assistance.
- Maintain a current address in the REGISTRAR'S OFFICE; all financial aid correspondence is mailed to that address.
- Complete all items necessary to apply for both a Federal Pell Grant and a Federal Stafford Loan, even if it doesn't seem advantageous at the time. The law requires that students be considered for a grant before a loan is offered; choosing a lender now does not obligate the student to process a loan, but will make it easier if additional funds are needed.
- Access the UCF Internet homepage for additional information at http://pegasus.cc.ucf.edu/~finaid/
- If you have extenuating circumstances or run into major problems at anytime, call our appointment line, (407-823-5285), to meet with a counselor.

Office Hours:
- Mon: 9:00 AM - 7:00 PM
- Tue/Wed/Fri: 9:00 AM - 5:00 PM
- Thu: 1:00 PM - 7:00 PM

Call (407)823-2827 for other information or to speak to someone in the office.
ASSISTANCE PROGRAMS

STATUS

INDEPENDENT STUDENT

TRANSFER STUDENTS

Students transferring into UCF after the fall semester, (i.e., mid-year transfers) must provide UCF with a financial aid transcript from every post-secondary school attended in that academic year, whether or not financial aid was received. If you are eligible to receive aid at another institution for the academic year in question, please be aware that the only transferable programs are the Federal Pell Grant and the Florida Student Assistance Grant (FSAG). You must apply for a Federal Stafford Loan at UCF.

To apply for financial aid at UCF, complete all the application procedures listed with one exception. If a need analysis for the year in question has already been filed, the student need only request that the processor forward the information to UCF Code 003954 by utilizing Part II of your SAR.

To transfer the remainder of a Federal Pell Grant, students must contact the Federal Processor to request financial aid data be sent to UCF, Code 003954 by utilizing Part II of your SAR.

To transfer the remainder of an FSAG, send a copy of the state award letter and UCF’s name and address to: State of Florida, Office of Student Financial Assistance, Department of Education Center, Tallahassee, FL 32399. Please do this before their stated deadline.

DUAL ENROLLMENT

Students who have been approved to take classes at another institution may have those hours counted toward meeting financial aid requirements at UCF by:

- Submitting to the Student Financial Assistance Office a legible copy of a completed UCF Transient Student form with all required signatures. The form is available from the department of your major. This will confirm that the hours will be accepted by UCF toward your degree.
- Submitting a copy of your registration form and/or invoice confirming that you actually enrolled for the hours appearing on your Transient Student form.
- Dual enrolled students must make arrangements for paying tuition and fees at the visited school, since there is no deferral mechanism. In addition, it is the student’s responsibility to assure that the visited school promptly furnishes UCF with academic transcripts, confirming that the attempted hours are completed. Transcripts or grades should also be submitted to the Student Financial Assistance office. This will help avoid academic progress problems. Keep in mind, if you expect to receive funds under any of the Federal Loan Programs, you must enroll for a minimum of six hours at UCF in UCF classes to meet eligibility requirements.
- Also, please keep in mind that you may not receive financial aid from two institutions at the same time. You must decide which of the two institutions is your primary school at which you are degree-seeking and apply for aid there. Students will sometimes be paid aid at both schools if the schools are not aware of the dual application; however, a monitoring system has been put into place at the federal level to identify these students. This will result in a mandatory repayment back to one of the two schools for the overpayment.

INDEPENDENT STUDENT STATUS

The financial resources of parents/guardians do not have to be included in the determination of student’s financial need if the student is:

- 24 years of age or older as of the award year
- an orphan or ward of the court
- a veteran
- legally and financially responsible for dependents other than a spouse
- married
- accepted into a Graduate/Professional Program

UCF FINANCIAL ASSISTANCE PROGRAMS

First-time UCF students will receive an award letter. Other students will receive an award letter once their file is complete. Your admission to UCF must be finalized, you must be classified as Degree-Seeking, the verification process must be completed before a financial aid award will be disbursed, and you must be meeting the standards for Satisfactory Academic Progress. Other loan and employment programs not based on need are provided below.

Your awards will be based upon: your financial need (as determined by a federal formula applied to data provided on your applications), the amount of funds available to UCF, the number of UCF students who qualify for aid, as well as the date you complete the application process. The amounts listed on your award letter will be estimates based on full-time registration. Awards will be subject to change. Check the chart below to see in how many hours you must enroll for each semester in order to receive an award from each program. The results of the FAFSA will determine eligibility for these programs. It is the student’s responsibility to be aware of minimal hourly requirements for each program. When requirements are no longer met, it is probable that the award will be deleted with no notice to the student.
<table>
<thead>
<tr>
<th>Priority Deadline</th>
<th>Minimum Credit Hrs. Required</th>
<th>Available to Graduate Students</th>
<th>Second Undergraduate Degree Seeking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Federal Pell Grant</strong>&lt;br&gt;You must be considered for a Federal Pell Grant before other forms of aid will be offered; covers a maximum of two full-time semesters a year.</td>
<td>Before Jun 30 1999 (Prorated based on hours)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Federal SEOG (Supplemental Educational Opportunity Grant)</strong></td>
<td>Mar 1 (12)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>UCF Merit Award</strong></td>
<td>Mar 1 (12)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>FSAG (Florida Student Assistance Grants)</strong>&lt;br&gt;Read State information sheet, available from Student Financial Assistance, for residency requirements and application procedures; must maintain 2.0 GPA.</td>
<td>May 15 (12)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Federal College Work Study</strong>&lt;br&gt;On campus jobs; award earned as hourly wage. Not available to post-baccalaureate students.</td>
<td>Mar 1 (6)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>FWEP (Florida Work Experience Program)</strong>&lt;br&gt;Off campus jobs directly related to a student's major or career goal. Students work from 25-40 hrs/week and are paid an hourly wage. Program is administered by the Cooperative Education Office.</td>
<td>Varies (6)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Federal Stafford Loan Program,</strong> repayment may be deferred. Loan amounts vary as well as interest rates and repayments options.</td>
<td>Posted each term (6 at UCF in UCF classes)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Federal Perkins Loans</strong>&lt;br&gt;are currently made at 5% interest rate; loans deferred until 6 or 9 months after you graduate or drop below ½-time. Not available to post-baccalaureate students.</td>
<td>Mar 1 (6)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Scholarships</strong>&lt;br&gt;There is a broad range of scholarships available through federal, state, institutional, and private sources. Each has different eligibility criteria. Check with the Scholarship Office Handbook for more information. Inquire about ROTC scholarships at their office.</td>
<td>Varies year round</td>
<td>Varies</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Federal Unsubsidized Stafford Loans</strong>&lt;br&gt;These loans operate under the same terms as regular Federal Stafford Loans except that financial need is not necessary. In addition, the student is responsible for the payment of interest as it accrues, (alternatively the interest can be capitalized into the loan balance). This loan now replaces the Supplemental Loan for Students (SLS) previously available to independent students.</td>
<td>Posted each term (6 at UCF in UCF classes)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Federal Parent Loans to Undergraduate Students (PLUS)</strong>&lt;br&gt;These are loans which parents take out on behalf of their children (student must be dependent for financial aid purposes).</td>
<td>Varies (6 at UCF)</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Federal Family Educational Loans are made through private lenders. Undergraduate and degree seeking PostBac students must be enrolled a minimum of 6 credit hours at UCF in UCF classes at the time of disbursement to receive a loan check. Graduate students must take 3 credits. First-time borrowers at UCF must attend an Entrance Interview before a loan will be processed. The times and location of Entrance Interviews will be posted. Entrance Interviews may also be completed by accessing our website and going to Entrance Interviews. Exit interviews are required upon graduation, or when enrollment becomes less than one-half time at UCF. Half-time for Undergraduate and 5B students is 6 credits in UCF classes. Graduate students require 3 credits to maintain loan eligibility. Payment is deferred until students graduate or drop below ½-time enrollment at UCF. Once eligibility has been determined by a need analysis, students must complete and submit a Federal Stafford Loan Request Form by the dates printed below so that processing can be completed in time to receive funds during the term indicated.

- October 15 - Fall Term Loan
- February 15 - Spring Term Loan
- June 15 - Summer Term Loan

Federal 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 for undergraduate and 3 hours for graduate students. Jobs are on/off-campus and efforts are made to match job assignments with the student’s academic program. Awards are paid as an hourly wage.

The Florida Work Experience Program (FWEP) 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) 823-2667.

Cooperative 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) 823-2667.

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.

FICA and FUTA Exemption Guidelines for Undergraduate Students
The Internal Revenue Service (IRS) excludes certain types of student wages from the IRS definition of “employment” for purposes of Social Security and Medicare (FICA) and Federal Unemployment (FUTA) tax withholdings. The Internal Revenue Code (IRC) 3121[b][10][B] provides in part that wages paid by a university to one of its student employees who is enrolled full-time and regularly attending classes are exempt from the FICA and FUTA tax withholdings.

To be eligible for this IRC exemption, an undergraduate student must be (1) enrolled full-time at UCF, (2) regularly attending classes, and (3) employed for less than or equal to 20 hours/week as an undergraduate student assistant.

CRITERIA FOR EXEMPTION ELIGIBILITY
1. The Student Financial Assistance Employment Manual and Undergraduate Catalog provide definitions for determining full-time status of an undergraduate student. For the purpose of FICA and FUTA, in any given term, undergraduate students are considered full-time when they are registered for twelve hours in fall and spring terms, and nine hours in summer terms.
2. Undergraduate students are limited to working a maximum of 20 hours per week, regardless of the number of departments in which they are employed.
3. All undergraduate students who work more than 20 hour/week at UCF will continue to be classified as an "undergraduate student" but will be subject to employee FICA and FUTA taxes.

OTHER SERVICES
UCF Emergency Short Term Loans are available to currently enrolled students. Loans are granted at the beginning of the semester for books and emergencies. This is not for the payment of tuition and fees. A $5.00 non-refundable service charge will be assessed for processing the loan. This service charge, like other debts owed the University, will be deducted at the time of check disbursement. If the loan is canceled, or not picked up, the $5.00 service charge still must be paid. The specific repayment date of the loan is noted on the loan contract.

Food Service Loans are available to students who have already been awarded sufficient financial assistance to cover all debts owed the University and who live on campus. Food Service Loans are processed by Student Financial Assistance. A $5.00 non-refundable service charge will be assessed at the time of processing.
**SCHOOL COSTS**

Cost of Attendance 1999-2000 (Full Time for Fall and Spring)

<table>
<thead>
<tr>
<th></th>
<th>OFF-CAMPUS</th>
<th>ON-CAMPUS</th>
<th>WITH-PARENTS/RELATIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition/Fees</td>
<td>$ 2,200</td>
<td>$ 2,200</td>
<td>$ 2,200</td>
</tr>
<tr>
<td>Books/Supplies</td>
<td>772</td>
<td>772</td>
<td>772</td>
</tr>
<tr>
<td>Room/Board</td>
<td>5,721</td>
<td>4,607</td>
<td>1,813</td>
</tr>
<tr>
<td>Personal Exp.</td>
<td>1,867</td>
<td>1,867</td>
<td>1,867</td>
</tr>
<tr>
<td>Transportation</td>
<td>1,878</td>
<td>437</td>
<td>1,878</td>
</tr>
<tr>
<td>Total (In State)</td>
<td>$12,438</td>
<td>$ 9,883</td>
<td>$ 8,530</td>
</tr>
<tr>
<td>Out-Of-State Fee</td>
<td>7,100</td>
<td>7,100</td>
<td>7,100</td>
</tr>
<tr>
<td>Total (O/S)</td>
<td>$19,538</td>
<td>$16,983</td>
<td>$15,630</td>
</tr>
</tbody>
</table>

**DEFERRALS OF TUITION AND FEES**

Financial assistance awards will normally result in the student being granted a deferment of tuition and fee payments. This process occurs automatically if the student has enrolled for sufficient hours, is meeting all general eligibility requirements, and is making satisfactory academic progress. This program makes up for the time lag that normally occurs between the date that tuition and fees are due and the date on which financial aid disbursements are made, which is normally three (3) to four (4) weeks after the semester begins. Students registering for classes during Early Registration must pay or be deferred for tuition and fees EARLY, prior to the beginning of classes. Students who do not pay their fees or have a valid deferment before the early due date will be dropped from their classes.

- Your fee invoice (class schedule) reflects the dollar amount of your deferment at the time of printing. You should use the Direct Access Phone System to obtain up-to-date information. If the total amount of your tuition and fees exceeds the amount of your deferment, the difference must be paid by the due date on your fee invoice (class schedule). Different financial assistance programs require different hours of enrollment for eligibility. Make sure you are registered for the required number of hours. Students must register for at least 12 hours during the fall or spring to receive a FSAG, FSEOG, and UCF Grants; 6 hours to receive a Federal Pell, Federal Stafford, and Federal Perkins award. (Note: Undergraduate and 5B students must have 6 hours at UCF in UCF classes for the Federal Stafford loans. Graduate students need 3 credits.) Some students may receive a Pell Grant with less than 6 hours. Summer enrollment requirements may be less.

- The following programs are not included in the Automatic Deferral Program: work study programs, third party deferrals, other waivers, and direct-pay scholarships.

- Since awards are subject to change, deferments are also subject to change.

- Deferments based on estimated Stafford loans will be canceled if the student does not complete the loan process.

- Financial aid deferments based on federal or state programs that require a FAFSA will not be available to students who do not complete a FAFSA in time for the results to be in UCF's computer system by fee deadline dates. Federal loans cannot be processed without FAFSA data on line to support the award.

**FUND DISBURSEMENTS**

Financial assistance disbursements are not available at the time of registration. Funds will be disbursed after the third week of classes. Therefore, students should make themselves aware of the Automatic Deferral policies and procedures and be prepared to use personal savings or a UCF Short Term Loan for books and other expenses anticipated. Late applicants (those who apply after June 30) will likely find themselves caught up in a processing backlog that could dramatically delay the disbursement of their aid. These individuals should be prepared to cover their own living expenses out-of-pocket well into the semester.

Financial assistance funds for most programs are mailed directly to the student by the UCF Office of Student Accounts. Initial disbursements should take place after the third week of each semester. Most grant and scholarship checks go through a "net checking" process in which debts owed to the University are deducted from the available assistance. Federal Stafford Loan disbursements will also go through the "net checking" process, if two conditions are met: 1) the student has authorized Electronic Funds Transfer (EFT) on the promissory note and, 2) the student's lender participates in
UCF's EFT program. All of the lenders on UCF's preferred lender list participate in the EFT program. Federal Perkins Loan checks must be picked up at the Cashier's Office upon notification by Student Accounts.

For most students who do not participate in EFT, Federal Stafford checks will be held at the cashier's office for pick-up by the student to facilitate any deduction for debts owed to the University. It is the student's responsibility to pay outstanding debts to the school within 21 days of the date of the notification that funds have been disbursed to avoid a late charge. Undergraduate and PostBac ("SB" certification only) students must be enrolled in at least 6 credit hours at UCF in UCF classes at the time of disbursement of each Federal Stafford Loan check. Graduate students need 3 credits. Borrowers under the Federal Stafford program who have not yet successfully completed their first year of undergraduate study cannot receive their initial checks until 30 days into the semester.

NOTE: The verification process must be complete before financial assistance funds will be released. Students on Financial Assistance Cancellation will not receive funds.

Federal Stafford Loans
Your student loan check(s) or EFT disbursements will be sent to the University of Central Florida after your lender has received a completed application/promise note approved by UCF. We strongly suggest that you follow-up with your lender if you have not received your loan check within 20 days of mailing your promissory note or notification by the UCF Financial Assistance Office of a problem. Please note to estimate when your Federal Student Loan funds will be mailed, refer to the Disclosure Statement from your lender; it indicates a date the lender intends to send the funds to UCF. If that date is before the semester starts, please allow 10 working days from the first day of classes before inquiring about your funds. If the date is after the semester begins, please allow 10 working days from the disbursement date for UCF processing. LOAN CHECKS OR FUNDS WILL BE DISBURSED AFTER THE BEGINNING OF CLASSES, USUALLY AFTER THE THIRD WEEK OF CLASSES.

First-time borrowers at UCF: Must attend an Entrance Interview at UCF before the loan award can be made. The times and location of Entrance Interviews will be posted. Sessions may also be available at orientation and at our website: http://pegasus.cc.ucf.edu/~finaid/

Two-term loans: To receive the second half of a two-term loan, you must have received the first disbursement, and be enrolled for at least 6 hours at UCF (graduates-3 hours) for the second semester to receive the second check. If you did not accept your first term loan disbursement, you cannot receive the second term disbursement. You must cancel the original loan request and reapply for a new loan through Student Financial Assistance.

One-term loans: Disbursement of a one-term loan will be divided into two payments. You must maintain eligibility throughout the term to be eligible for each disbursement. The second disbursement cannot be made until at least ½ of the term is over.

Students who have not successfully completed their first year of undergraduate study (i.e., First Year Freshman=F, F) will not receive their funds until 30 days after classes have begun.

Summer Term: Undergraduate students must have a minimum of 6 hours at UCF in UCF classes to receive assistance. If your hours include Summer B hours which are needed to meet the minimum requirements, funds will not be disbursed until Summer B term. Graduates require 3 credits.

EXIT INTERVIEWS ARE REQUIRED UPON GRADUATION OR DEPARTURE FROM UCF. BE SURE TO FILE ADDRESS CHANGES WITH THE REGISTRAR'S OFFICE AS THEY OCCUR IN THE IMMEDIATE AND DISTANT FUTURE.

AWARD NOTIFICATION

In the spring of each year, most students will be notified of the estimated awards they should receive in the coming school year. Award notices may not go out to students who were selected for verification, and have not completed that process, since verification corrections often alter award eligibility. Notification will also not go out to students who have been canceled from financial assistance due to a problem with academic progress. Award letters which are sent out anytime prior to the beginning of the semester will disclose estimated awards based on the enrollment information provided by the student on the FAFSA. If the student enrolls for less than 12 hours, some estimated awards may change. In addition, new information brought to the attention of our office (such as third party benefits, waivers or deferrals, prepaid tuition plans, or newly awarded scholarships) can cause a reduction in the amount of previously estimated need-based assistance.

Award letters are eventually sent out to students who miss the application priority deadline once there is enough information on file to make an awarding decision. Verification students will receive their award notifications once that process is complete. Regardless of when the notification is sent out, it will be accompanied by a comprehensive information insert. Students should read this insert carefully and follow the instructions.
Only students receiving Perkins Loans are required to return signed appropriate documents of receipt to acknowledge acceptance of the award. Please note that although an estimated Federal Stafford loan may appear on the award letter to notify students that they are eligible for that form of assistance, a student must still apply for the loan by completing the requested information on the Federal Stafford Loan Response Form.

Awarding of a financial aid package involves matching your student budget with the Estimated Family Contribution (EFC) which is calculated from your FAFSA information. We attempt to award you as much of the difference (your unmet need) as possible. From time to time, we will establish an aid package for a student and later the budget or EFC changes or aid will come in from some unexpected source (such as a scholarship). This may result in what is called an Overaward. If no adjustment to the aid package occurs and the financial aid is actually paid, this is called an Overpayment. State and federal regulation require adjustment or repayment of overawards and overpayments for many programs. If you receive notification of scholarship or other third-party payment after receipt of your award notice, please notify us. We may be able to correct an overaward before it becomes an overpayment. If an overpayment does occur, we will notify Student Accounts and you will be required to work with them on a repayment.

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

Repayment
A portion of the financial assistance disbursed to the student for non-instructional costs may have to 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 assistance repayment will not be allowed to receive further financial aid funds until the repayment is paid in full. In addition, academic transcripts will be withheld until repayment is complete.

### Fall and Spring Terms

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

### Summer A, B and C Terms

<table>
<thead>
<tr>
<th>Week of withdrawal</th>
<th>Amount of repayment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st week</td>
<td>100% of total aid* received</td>
</tr>
<tr>
<td>2nd week</td>
<td>75% of total aid* - book allowance - tuition and fees</td>
</tr>
<tr>
<td>3rd week</td>
<td>50% of total aid* - book allowance - tuition and fees</td>
</tr>
<tr>
<td>4th week or later</td>
<td>No repayment due</td>
</tr>
</tbody>
</table>

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

Students should schedule an appointment with or come to the Student Financial Assistance Office prior to withdrawing from classes to confirm the consequences of that withdrawal. The appointment number is (407) 823-5285.

You must enroll for a minimum of six (6) semester hours. Three hours are required for graduate students to receive Federal Stafford Loans. Twelve hours are required for some programs including FSAG and most Scholarships. However, Pell Grants may be paid on less than six hours of enrollment.

You must maintain UCF’s standards for Satisfactory Academic Progress (following section).

You agree to inform us of any additional assistance you receive beyond that listed on your award.
Satisfactory Academic Progress Policy

Federal regulations require the University to establish standards of Satisfactory Academic Progress as a general eligibility requirement for financial assistance. A student must maintain Satisfactory Academic Progress in a course of study regardless of whether the student was a previous recipient of financial aid. Students who are unclear about these policies should schedule an appointment. For enrollment certification purposes, all post-baccalaureate and other non-degree students will be considered as undergraduate students to remain in good standing. The factors required to measure satisfactory progress are as follows:

1. Grade Point Average - GPA is monitored at the end of each term.

Undergraduate

A. GPA

Freshman/Sophomore

No minimum GPA is required as long as the student is not disqualified or excluded by the Registrar's Office. (See Academic Policies)

Junior/Senior/Second Degree/Certification

A minimum GPA of 2.0 is required and the student must not be disqualified or excluded by the Registrar's Office.

B. Disqualified/Excluded

When students are disqualified or excluded by the Registrar's Office, they will automatically be placed on Financial Aid Cancellation. Upon readmission to UCF, students MUST appeal separately to the Student Financial Assistance Office to be considered for Financial Aid reinstatement.

Graduate

A GPA of at least 3.0 is required for those courses specified in the graduate student’s program. See Academic Standards in the Graduate Catalog.

2. Hours Completed - At the end of each academic year, hours completed are monitored for the previous three terms (summer, fall, and spring). Students are required to complete a specified number of credits as determined by their enrollment status. (See chart below):

<table>
<thead>
<tr>
<th>Undergraduate, Post-Baccalaureate, and Other Non-Degree</th>
<th>Attempted Hours</th>
<th>Required to Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full time</td>
<td>12 or more</td>
<td>10</td>
</tr>
<tr>
<td>3/4 time</td>
<td>9, 10, 11</td>
<td>8</td>
</tr>
<tr>
<td>1/2 time</td>
<td>6, 7, 8</td>
<td>5</td>
</tr>
</tbody>
</table>

Graduate

<table>
<thead>
<tr>
<th>Attempted Hours</th>
<th>Required to Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full time</td>
<td>6 or more</td>
</tr>
<tr>
<td>1/2 time</td>
<td>3, 4, 5</td>
</tr>
</tbody>
</table>

Successful completion of a class is defined as earning a grade of A, B, C, D or S. Unsuccessful completion is defined as earning a grade of F, W, I, WP, WF, X, N, U, or NC.

3. Time Limit - When a student meets or exceeds the number of allowed Overall Attempted Hours, they will be placed on Financial Aid Cancellation at the end of the term. (Even if financial aid was not received during previous terms.)
<table>
<thead>
<tr>
<th>Classification</th>
<th>Time Frame Allowed for Completing Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>180 Overall Attempted Hours (including transferred hours)</td>
</tr>
<tr>
<td>Second Degree</td>
<td>60 Overall Attempted Hours (including all Post-Bac hours)</td>
</tr>
<tr>
<td>Master's</td>
<td>70 Overall Attempted Hours (including all Post-Bac hours)</td>
</tr>
<tr>
<td>Specialist</td>
<td>100 Overall Attempted Hours (including all Graduate and Post-Bac hours)</td>
</tr>
<tr>
<td>Doctorate</td>
<td>120 Overall Attempted Hours (including all Graduate and Post-Bac hours)</td>
</tr>
</tbody>
</table>

**PROBATION**

If students are placed on Financial Aid Probation, they must complete the following requirements for the term in which they are on probation. Failure to do so will result in Financial Aid Cancellation at the end of the probationary term. Students on probation must complete the minimum required hours as defined above in "2." for that term, with a minimum Term GPA of 2.0.

**PROCEDURE FOR APPEALS**

If students do not meet the above standards, they will be placed on Financial Aid Cancellation. When students are on Financial Aid Cancellation, they are not eligible for aid, nor a deferment, until reinstated through the appeal process. Any student with extenuating circumstances who is placed on Cancellation may appeal to the Financial Aid Review Committee. To appeal, the student must:

1. Complete the Satisfactory Academic Progress Appeal Form before the established deadline.
2. Submit acceptable documentation supporting the extenuating circumstances.

After a thorough evaluation of the written request and all documentation, the Financial Aid Review Committee will notify the student of its decision in writing. Aid remains canceled unless the student receives written notification of reinstatement.

**RE-ESTABLISHING ELIGIBILITY**

Students may re-establish financial aid eligibility by enrolling, on their own, for at least 6 hours at UCF or any other accredited institution and complete required hours (see chart above) with a minimum TERM GPA of 2.0. Students will need to appeal at the end of that term for reinstatement of aid for the following term.

**FINANCIAL ASSISTANCE FOR GRADUATE STUDENTS**

There are several sources of financial assistance available to UCF graduate students. Federal Perkins and Federal Stafford loans and the Federal College Work Study Program described previously, require that financial need be established by filing the FAFSA.

Out-of-State Tuition Waivers are offered by each college and the Office of Multicultural Student Services to 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 respective Dean’s Office in the College of Business Administration or Education or the department’s graduate coordinator in the College of Arts and Sciences, Engineering, or Health and Professional Studies.

There are also scholarships available to graduate students. Check the monthly scholarship listing posted on the bulletin board outside the Student Financial Assistance Office.

Federal Perkins and Federal College Work Study are available only to students who are fully admitted into a Graduate Program. Post-Baccalaureate students are not eligible for these assistance programs.

**STUDENT RIGHTS AND RESPONSIBILITIES**

- Students have the right to full information about the financial aid programs available at UCF, our application procedures and deadlines, and the criteria used to determine a financial package.
- Students have the right to appeal decisions made by the Student Financial Assistance Office.
- Students have the right to equitable treatment of their financial assistance 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 students’ 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 assistance. Misrepresentation is a violation of the law.
The Undergraduate Admissions Office coordinates the admission and enrollment process of all undergraduate first-time-in-college, transfer, non-degree, and non-Florida state university transient students to the Orlando, Daytona, and Brevard campuses. The office seeks to identify, attract, and enroll the desired number of talented, diverse, and academically qualified students who can contribute to and achieve academic growth from the multitude of programs offered through the university and community we serve. Through managed communication, a data management system and scholarships, the Office is able to attract students who are motivated, challenged, and have the desire to achieve academic prominence.

Office functions include administering programs for prospective students, such as campus tours, open houses, area receptions, and high school and community college visits. Students, parents, and high school and community college counselors are consulted on a continual basis regarding all aspects of admission and provided with general information on the academic, social, and living components of the university. The Office is committed to providing accurate and timely information to all constituents.

CAMPUS TOURS

Tours of campus are available to all interested individuals and are an excellent way to view first hand the facilities offered at the university. Campus tours are conducted by trained student volunteers and last approximately one (1) hour. Appointments are not necessary.

Tours leave from the information booth on the second floor of the Administration Building at 11:00 a.m. and 2:00 p.m., Monday-Friday, except holidays. Group tours or special requests may be scheduled by calling Undergraduate Admissions at (407) 823-5830.

Students are invited to participate in an information session held immediately after each campus tour. These sessions provide general information about the university and the application process. Personal interviews are also available, and are encouraged for those students who are finalizing their college plans. Appointments for personal interviews can be made by calling the Undergraduate Admissions Office at (407) 823-3000.

APPLICATION FOR ADMISSION

All interested applicants should complete the state university system application for admission, and include a 20 dollar (US$), non-refundable application fee. Students may also apply on-line at our web site, www.ucf.edu. Students should apply several months in advance of an anticipated start date. Mail admission applications to: Undergraduate Admissions Office, University of Central Florida, P.O. Box 160111, Orlando, FL 32816-0111. Questions concerning admission requirements and applications should be forwarded to the same address or by calling (407) 823-3000.

Applications for admission will be accepted up to one year prior to the start of the term desired. The priority application deadlines are July 15 for the Fall semester, November 15 for the Spring semester, and April 15 for the Summer term. The priority deadline for most financial assistance and scholarships is March 1. Information and an application for university housing are sent at the time of acceptance into the university. Requests for housing are subsequently reviewed by date of the receipt of the housing application. The university encourages applications from qualified persons of both sexes and from all cultural, racial, religious, and ethnic groups. The university does not discriminate on the basis of disability for admission.

Applicants should understand that this catalog outlines minimum requirements to be considered for admission and that admission to the university is selective. The satisfaction of minimum requirements does not automatically guarantee admission. Conversely, Florida Board of Regents (BOR) policy allows the university to admit students to any semester as exceptions to the minimum requirements. The Undergraduate Admissions Office and the Admissions and Standards Committee are responsible for the admission of all undergraduate students under this policy.

Applicants should request official transcripts from each educational institution attended to be forwarded directly to the Undergraduate Admissions Office. All supporting admissions documents must be received directly from the issuing institution or testing agency to be considered official. All final supporting documents (official transcripts and test scores) must be received by Undergraduate Admissions no later than 10 days after the first day of classes.
IMPORTANT: Furnishing false or fraudulent statements in connection with an application for admission or residency affidavit may result in disciplinary action, denial of admission, and invalidation of credits or degrees earned.

Those students who have not submitted completed records by the deadline will be placed on administrative hold. Students with incomplete records will not be permitted to register for a future term until all transcripts and other required documentation have been received. Students whose records are not satisfactory may be placed on academic probation, have their admission status changed to non-degree or transient, may become ineligible for financial assistance, and may, in some cases, be withdrawn from the university. In addition to the required documentation mentioned above, students must have a satisfactory conduct record at all schools attended.

REACTIVATION

Students who have submitted an application to UCF and did not attend, may reactivate the original application within one year of the term for which they first applied. To update the application, students should request and complete a reactivation form by the published deadline. This form is available in the Undergraduate Admissions Office or by calling (407) 823-3000. This process reactivates the application only; students will be reevaluated for admission to the new term for which they are applying.

LIMITED ACCESS PROGRAMS

Admission to the university does not guarantee admission to a limited access program. Some majors at the university limit the number of students who may enroll. Limited access status is justified when student demand exceeds available resources, such as faculty, instructional facilities, or equipment, or when specific accrediting requirements apply. Criteria for admission are selective to include: indicators of ability and indicators of performance, creativity, or talent to complete required work within the program. For admission to limited access programs, community college transfer students with Associate of Arts degrees from Florida public community colleges are given equal consideration with UCF students. Admission to such programs are governed by A-10.24(8), the Articulation Agreement, and by 6C-6.01, FAC, of the Board of Regents rules.

ORIENTATION

All undergraduate degree-seeking students are required to attend orientation prior to enrollment. Information on orientation is mailed to all students once accepted to the university.

ADMISSION CATEGORIES

Students may make application to the university in one of the following categories:

A. Freshman (first-time-in-college)
B. Dual Enrollment (includes early admission and dual enrollment, on- or off-campus)
C. Transfer
D. Second Bachelor's Degree
E. Transient (one term enrollment only, not from a Florida public university)
F. Non-Degree Seeking

FRESHMAN APPLICANTS

Any first-time-in-college (FTIC) student who meets the minimum admission requirements is encouraged to submit an application. The university will do everything possible to accept all qualified applicants who apply by the priority deadline date. If the number of qualified applicants exceeds the number 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, counselor recommendations, and personal achievements and honors 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. The university reaffirms its Equal Educational Opportunity (EEO) commitments and seeks to increase the enrollment of multicultural students.

HIGH SCHOOL DIPLOMA

Freshmen who are applying for admission to the university are required to have a high school diploma or a General Equivalency Diploma (GED).

ENTRANCE EXAMINATION SCORES

All applicants for admission must submit test scores from the Scholastic Aptitude Test (SAT I) or from the American College Test (ACT). In addition, any student whose native language is not English may be required to submit a Test of English as a Foreign Language (TOEFL) score.

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. A grade
point average (GPA) will be computed only on academic courses. Grades in honors courses, advanced courses, International Baccalaureate, and Advanced Placement (AP) courses will be given additional weight in the computation of the academic GPA. The high school academic unit requirements are as follows:

**ACADEMIC SUBJECT** | **UNITS REQUIRED**
--- | ---
• English (three of which must have included substantial writing) | 4
• Mathematics (at or above the Algebra I level) | 3
• Natural Science (two of which must have included substantial laboratory requirements) | 3
• Social Science (included: history, civics, political science, economics, sociology, psychology, and geography) | 3
• Foreign Language (both credits must be in the same language) | 2
• Additional academic electives from the above five subject areas and courses recommended by the Florida Assn. of School Administrators, or other groups, and courses recommended by the Articulation Committee, and approved by the Dept. of Education | 4

**TOTAL 19**

**APPLICANT ELIGIBILITY**
All applicants must meet the following State University System (SUS) minimum eligibility index standards to be considered for Admission:

<p>| If the High School GPA is: | Test scores must be: |</p>
<table>
<thead>
<tr>
<th>HS GPA</th>
<th>SAT I or</th>
<th>ACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>1140</td>
<td>25</td>
</tr>
<tr>
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<td>1110</td>
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<td>1000</td>
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<tr>
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<td>970</td>
<td>20</td>
</tr>
<tr>
<td>3.0</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

* No minimum score required.

- Admission into the university is limited by space availability. The degree of competition for space depends on the number and qualifications of those who apply for admission. To increase the chance of admission, high school students should present credentials which are stronger than the minimum requirements for consideration as listed above. If the number of qualified applicants exceeds the number that the university is able to enroll, a waiting list will be established.
- A student applying for admission who does not meet established requirements may bring to the university other important attributes or special talents and may be admitted if, in the judgment of the Admissions and Standards Committee, 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.
- Students who have been enrolled in dual enrollment courses will be required to have a "C" average (2.0 GPA) for all dual enrollment course work attempted.
- Any student admitted without two years of one foreign language in high school or the equivalent (minimum 8 semester hours) at the post-secondary level, must satisfy this admission requirement prior to earning 60 semester hours of credit.

**DUAL ENROLLMENT APPLICANTS**

High School students who have demonstrated exceptional academic ability may be permitted to enroll as university students while completing their high school programs. There are three types of dual enrollment programs:

1. **Early Admission** is for students who have completed their junior year in high school and would like to enroll at the university as full-time students for their senior year of high school. Students must submit an application for admission by the published deadline. In addition the following information is required:
   - official copy of high school transcripts
   - official copy of Scholastic Aptitude Test (SAT I) or American College Test (ACT)
   - written letter of recommendation from high school counselor
   - written permission from parents or legal guardian
TRANSFER APPLICANTS

UCF welcomes transfer applicants to the university. Students should submit either the State University System application or apply on-line at www.ucf.edu, and arrange to have official transcripts sent from all colleges attended. The Undergraduate Admissions Office computes a grade point average for each institution attended, as well as a cumulative grade point average on all college courses attempted. This computation does not recognize plus or minus grades, and only recognizes grade forgiveness when it is used as part of an Associate of Arts degree from a Florida public community college or Florida public university, with the exception of courses taken previously at UCF. Applicants must have a minimum cumulative grade point average of 2.0, and must have a minimum grade point average of 2.0 and be eligible to return as a degree seeking student to the last institution attended to be considered for admission to UCF.

Transfer students are required to complete 30 hours in residence at UCF to earn a bachelor's degree. In addition, students must complete 48 hours in residence at UCF to be eligible to receive baccalaureate honors recognition at time of graduation.

Transfer students are encouraged to review the current edition of UCF's Transfer Counseling Manual available in Florida public community college counseling offices. The manual provides the recommended community college course requirements for all majors as well as other helpful information.

TRANSFER APPLICANTS WITH FEWER THAN 60 CREDIT HOURS

All college transfer applicants with fewer than 60 semester hours of acceptable credit must meet freshman high school unit entrance requirements, the high school academic grade point average, and minimum SAT or ACT scores (as listed on previous page); have at least a 2.0 GPA on a 4.0 system for all college-level academic courses attempted; and be in good standing (minimum 2.0 GPA) and eligible to return as a degree-seeking student to the last institution attended.

TRANSFER APPLICANTS WITH AN A.A. DEGREE FROM A FLORIDA PUBLIC INSTITUTION

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 except for limited access programs, 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 transfers directly to UCF, who has completed the university parallel program, and who has received the Associate of Arts degree which included all of the following:

- At least 60 semester hours of academic work exclusive of occupational courses and basic required physical education courses
- An approved general education program of at least 36 semester hours
- A grade point average of at least 2.0 on a 4.0 system for all college-level academic courses attempted. (Only the final grade received in courses repeated by the student shall be used in computing the average.)
- 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 for exemption as defined below may be admitted to the university on a provisional basis.
- Students who received an Associate of Arts degree from a Florida public community college prior to September 1, 1989.

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.

Florida Community College Associate of Arts graduates are guaranteed the following rights under the Statewide Articulation Agreement (State Board of Education Rule 6A-10.024):

1. Admission to one of the ten (10) state universities, except to "limited access" programs (programs that have additional admission requirements)
2. Acceptance of at least 60 credit hours by the state universities toward the baccalaureate degree
SECON D BACHELOR'S DEGREE APPLICANTS

SECOND BACHELOR'S DEGREE APPLICANTS are processed by the Undergraduate Admissions Office or the Registrar's Office. Guidelines for which office students should make application to are outlined as follows:

A. Students who have never attended the University of Central Florida as degree seeking undergraduate students must apply to the Undergraduate Admissions Office. Students should complete the regular undergraduate application form.

B. Students who have attended the University of Central Florida as a degree-seeking undergraduate student should apply through the University Registrar's Office. These students complete the Readmission Application Form.

CREDITS FROM A PREVIOUS BACCALAUREATE DEGREE

Graduates from other regionally 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). Students must meet all transfer grade point average requirements. 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.

INTERNATIONAL APPLICANTS

The University of Central Florida is authorized under the Federal law to enroll non-immigrant alien students. All International candidates applying for admission to UCF must submit a State University System Application Form. Because of additional processing time needed for International Students, students should submit the application as early as possible, but no later than May 1 for the Fall Semester, and September 1 for the Spring Semester. To complete the application, please follow the steps below.

- Submit the completed UCF application form with the required $20.00 application fee. An on-line application is available on our web site at www.ucf.edu.
- Students who attended an international secondary school that uses a grading and evaluation system different from the U.S. system will need a document-by-document evaluation of the secondary school record. This record, which should include performance evaluations, grades for work completed over a period of at least three years, as well as any certificates earned, should be sent to one of the agencies listed below. They will translate it if necessary, evaluate it, and then send their evaluation directly to UCF. A grade point average should be calculated on this evaluation.
- If the student has attended any international universities, a translation and evaluation of work completed at each institution will be necessary. Transcripts should be sent to one of the agencies below for a course-by-course evaluation. Please note that if 60 or more semester hours have been earned at a post-secondary institution, it will not be necessary to submit the secondary school records.
- Results of the TOEFL (Test of English as a Foreign Language) may be required of students whose first language is not English. Information about this examination can be obtained from TOEFL, P.O. Box 6151, Princeton, New Jersey, 08541-6151.
- Results of the SAT or ACT will be required if the student has earned less than 60 semester hours of college credit. Information regarding these examinations may be obtained from the College Board, P.O. Box 592, Princeton, NJ, 08540 or from ACT, P.O. Box 414, Iowa City, Iowa, 52243. While there are no specific minimum score requirements on these examinations, they are used in conjunction with other required credentials, and students should prepare sufficiently to achieve the highest possible score.

3. Transfer of equivalent courses under the Statewide Course Numbering System
4. Acceptance by the state universities of credit earned in accelerated programs (e.g., CLEP, AP, PEP, Dual Enrollment, Early Admission and International Baccalaureate)
5. No additional General Education Core requirements
6. Advanced knowledge of selection criteria for limited access programs
7. Equal opportunity with native university students to enter limited programs

Should any guarantee be denied, students have the right of appeal through the Office of Transfer Services.

TRANSFER APPLICANTS - MORE THAN 60 HOURS, HAVE NOT RECEIVED AN A.A. DEGREE FROM A FLORIDA PUBLIC INSTITUTION

Undergraduate transfer applicants who wish to be admitted as upper division students must have met all of the following requirements:

- A minimum of 60 semester hours of academic course work
- The English and Mathematics requirements of the Gordon Rule
- A minimum of eight semester hours of college instruction in a single foreign language. (This requirement applies to those students without the required two units of a single foreign language in high school.)
EDUCATIONAL TRANSLATIONS AND EVALUATIONS

Foreign diplomas must meet the requirements specified in Florida Statutes, section 229.814. UCF will accept translations and evaluations of academic credit from these agencies:

World Education Services
P.O. Box 745
Old Chelsea Station
New York, NY 10113-0745
(212) 966-6311

Josef Silny & Associates
P.O. Box 24823
Coral Gables, FL 33124
(305) 666-0233

Applicants must file a Confidential Financial Statement with the International Student Services Office confirming availability of finances for the first year of study. This statement must be on file prior to the issuance of the appropriate immigration papers. The Undergraduate Admissions Office may require additional documents and/or transcripts before an admission decision is made.

INTERNATIONAL STUDENT MANDATORY HEALTH AND ACCIDENT INSURANCE

Each international student accepted for admission shall, prior to registration for classes, submit proof of compliance with the State University System of Florida's mandatory health and accident insurance requirement. Minimum coverage limits may be obtained from the office of International Student Services. Written proof of insurance must also be provided. If insurance is issued by a foreign carrier or underwriter, a statement must be provided in English to assure that the policy meets the State of Florida minimum levels of insurance coverage.

The university reserves the right to refuse registration to any international student who fails to comply with this insurance requirement or is unable to supply satisfactory proof of insurance. The university also reserves the right to withdraw from classes any international student who fails to maintain insurance coverage, cancels insurance coverage, or avoids in any way the responsibility to comply with the insurance requirement.

TRANSIENT STUDENT APPLICANTS

Students in good standing with a 2.0 grade point average at the last regionally accredited institution attended 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 to the university. A transient student must submit an official transcript from the last institution attended. Transient student applications must be received by the appropriate application deadline. If a student's last school of attendance is a Florida public university, please refer to the Registrar's section of this catalog. Transient students are not eligible to receive financial aid. Registration is permitted on a space available basis.

NON DEGREE-SEEKING APPLICANTS

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 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
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. 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
6. Non-degree students are not eligible to receive financial aid nor to participate in intercollegiate sports

TRANSFER CREDIT - ALL APPLICANTS

All grades from 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 UCF record. The university recognizes an even grading system (plus or minus is not used). In addition, grade forgiveness is honored only if it has been awarded as part of an AA degree from a Florida public community college. Credit is not awarded based on job descriptions, CLEP scores below the 50th percentile, life experience, or course work that is non-academic.
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 School, 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

The accreditation status of all foreign institutions must be evaluated through either Josef Silny and Associates, Inc., or World Education Services.

All college level credits earned for which official transcripts have been submitted will be compiled into a Transfer Summary Report (TSR) soon after the student is admitted. Some credits listed on the TSR may not be applicable toward graduation course requirements. The TSR will be the basis for constructing a SASS Audit, which applies earned credits to the intended degree program. This provides the student with an assessment of which degree requirements have been met and what remains to be satisfied. Although all college-level course work transferred from a regionally accredited institution is shown on the TSR and the UCF transcript, applicability of the course toward a degree is determined by the college or department of the major.

GENERAL EDUCATION TRANSFER CREDITS
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 that institution. Transfer applicants with incomplete general education programs will have their credits evaluated on a course-by-course basis.

CREDITS FROM PRIVATE AND OUT-OF-STATE INSTITUTIONS
Transfer credit 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." Petition procedures vary by college. 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 so the accepted transfer courses are clearly understood by the student and the faculty advisor early in the student's program.

CREDITS FROM 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. While credit may be granted when courses are equivalent to those offered by the university, recommendations by the A.C.E. are not binding upon the university.

Military credit is not accepted through transfer unless used as part of an Associate of Arts degree from a Florida public community college. Even though military records may have been evaluated by another regionally accredited institution, it is important to have official credentials sent to the university for evaluation. Credit is not awarded for basic training.

BACCALAUREATE HONORS
Transfer students should be aware that eligibility for graduation with Baccalaureate Honors requires the completion of a minimum of 48 semester hours at UCF. For more details, refer to the discussion of Academic Honors in the section titled Undergraduate Degree Requirements.

ADMISSIONS AND STANDARDS COMMITTEE
The Admissions and Standards Committee is composed of representatives from throughout the University including representatives from the Faculty Senate, Multicultural Student Services, Student Development and Enrollment Services, the Student Body, and International Student Services. 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.
The Registrar's Office is primarily responsible for the registration of all students, safe keeping and control of all student records, maintaining the student database, developing the Schedule of Classes and the assignment of classrooms, and coordinating graduation and commencement activities. The office contributes to the enhancement of student enrollment and retention and ensures that the appropriate administrative support services are available to contribute to the academic experiences of students who are attending or have attended the university.

The Registrar's Office is comprised of five units: Records, Registration, Student Data Base Control, Room Scheduling, and Graduation and Commencement. The office operates as a cohesive unit in providing registration, enrollment services for students, faculty, and staff, coordination of the commencement ceremony, and room scheduling for academic purposes. All units operate as student service units whose primary function is providing administrative services to all students of the university. All units of the office work closely with the other units of Enrollment and Academic Services as well as other university departments. The office is integral to the mission of the Division of Student Development and Enrollment Services and the university in general. The Registrar's Office is located in the Administration Building (AD) 161, phone (407) 823-3100, FAX (407) 823-5652, email: registrar@mail.ucf.edu.

ADDRESS CHANGES
The address the university utilizes for students is taken from the application for admission or readmission. It is the students' responsibility to make appropriate changes to their address. Address changes can be made in the Registrar's Office, on Polaris, or at any of the kiosks located on campus. Address changes can also be made by writing the Registrar's Office. Written requests must be signed and the student number provided. Verify changes at a kiosk.

AUDIT REGISTRATION
Audit students are those who wish to attend class(es) without receiving academic credit. Audit registration is on a space available basis during the last hour of Regular Registration or at any time during Add/Drop. Late registration fees will apply. Audit requests for students who register prior to this time will be denied. Students may not change to audit status after Add/Drop, but must remain in the course or withdraw through normal withdrawal procedures.

New students must be accepted for admission. Senior citizens, see Senior Citizen Audit section for details. Audit forms, available in the Registrar's and college advising offices, must be signed by the instructor and presented at the time of registration.

CHANGE OF MAJOR
The university assigns the major that the student indicated on the application for admission or readmission. It is the student's responsibility to make appropriate major changes. Major changes can be made in the Registrar's or college advising offices or by mail. Written changes must include the student's identification number and signature.

ENROLLMENT CERTIFICATIONS
To confirm enrollment in the university, students should come to the Registrar’s Office, AD 161. A picture identification is required. Enrollment certifications for a current term are available after Add/Drop.

Terms and Credit hours
The University of Central Florida academic schedule consists of three semesters a year, Fall, Spring, and Summer semesters. A semester hour of credit or credit hour 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. During this shortened 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.

Enrollment Status
Undergraduate

<table>
<thead>
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<th>Status</th>
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<tr>
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<tr>
<td>Half</td>
<td>6, 7, 8, 9, 10, 11</td>
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<tr>
<td>LTHT</td>
<td>less than 6</td>
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</tbody>
</table>

NOTE: Graduate and post-baccalaureate students please refer to the graduate catalog for enrollment status policies.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)
FERPA affords students certain rights with respect to their education records. They are:
(1) The right to inspect and review the student’s education records within 45 days of the day the university receives a request for access.
Students should submit to the Registrar, dean, head of the academic department, or other appropriate official, written requests that identify the record(s) they wish to inspect. The university official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the university official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

(2) The right to request the amendment of the student's education records that the student believes are inaccurate or misleading.

Students may ask the university to amend a record that they believe is inaccurate or misleading. They should write the university official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading.

If the university decides not to amend the record as requested by the student, the university will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

(3) The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.

One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the university in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the university has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

(4) The right to file a complaint with the U.S. Department of Education concerning alleged failures by a State University to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

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

GRADE CHANGES

The changing of a grade that has been previously assigned by a faculty member can only be made by that faculty member. Change of grade requests are submitted by the academic department with dean's approval.

GRADE FORGIVENESS

Grade forgiveness forms are available in the Registrar's Office. Requests must be submitted no later than the last day of Add/Drop for the term in which the student has registered for the course being repeated. Grade forgiveness is limited to two courses during the student's postsecondary career.

HOLDS

Holds may be placed on a student's records, transcripts, grades, diplomas or registration because of financial or other obligations to the university. Satisfaction of the hold is required before a release can be given. In order to obtain an immediate release for financial holds, payment to the Cashier's Office must be made in cash, cashier's check or money order. Credit cards are not accepted.

NAME CHANGES

Official Name Change forms, available in the Registrar's Office, must be submitted in order to change your legal name on your student record. Obtain a notary public seal and attach copies of legal name change documents (i.e., marriage certificate, divorce decree, etc.). Submit to the Registrar's Office, AD 161.

READMISSION

An application for readmission is required if a student was academically dismissed from the university (disqualification or exclusion) or if the student has not enrolled for two consecutive terms (not including summer). See section on Readmission as an Exception to University Policy. The Readmission Application is available in the Registrar's Office, AD 161, or on the World Wide Web at http://www.ucf.edu/registrar/readmit.html.
If the student has attended another regionally accredited institution, the student must request an official transcript be sent to the Registrar’s Office. If the student was previously admitted to a limited access program, they will be placed in “pending” status of that major and must be readmitted to the program by the department or college. If the student has left the State of Florida for at least one year, the student may be required to complete the Florida Residency Affidavit.

Any readmitted student whose all-college or UCF cumulative grade point average is less than 2.0 (C average) at the time of last enrollment with the university, will be readmitted on academic probation. All applicants seeking readmission who have attempted course work at another regionally accredited institution since last attending the university will normally be required to be in good standing (minimum 2.0 grade point average) with no allowance for grade forgiveness and be eligible to return to the last institution attended.

Students who have previously attended the University of Central Florida as degree-seeking students and wish to pursue a second bachelor’s degree, must apply by completing the Readmission Application. This application is available from the Registrar’s Office or on the World Wide Web at http://www.ucf.edu/registrar/readmit.html.

**READMISSION AS AN EXCEPTION TO UNIVERSITY POLICY**

Immediate or early readmission (readmission as an exception to university policy) following disqualification or exclusion is the responsibility of the Admissions and Standards Committee. The contact for the committee is the Registrar’s Office, AD 161, phone (407) 823-3100.

- Students seeking immediate or early readmission must complete the Application for Readmission as an Exception to Policy form in the Registrar’s Office
- Students are required to request six (6) UCF transcripts (at student’s cost) from the Registrar’s Office
- Students may not make a personal appearance before the Admissions and Standards Committee when seeking immediate or early readmission
- Appeals of decisions made by the Admissions and Standards Committee are made to the Interim Vice President for Student Development and Enrollment Services, AD 282.

**REGISTRATION**

During each academic semester, registration is held for all new, currently enrolled, degree-seeking and non-degree seeking students for the following semester. Registration sessions consist of Early Registration (held after the mid-term of the current semester for the next semester), Regular Registration (held immediately before the start of the semester), and Late Registration and Add/Drop (held during the first week of classes for each semester). Spring Early Registration is held following mid-term for the fall semester. Summer and fall Early Registrations are held concurrently immediately following the mid-term of the spring semester. Registration is available over the World Wide Web (using the POLARIS system), by telephone (with an 800 number as well as a local number), in the college advising offices, and at walk-by. The dates and times for each registration period are included in the Schedule of Classes which is published for the summer and fall semesters and spring semester.

**RESIDENCY RECLASSIFICATION**

Enrolled students who are classified as non-Florida residents for tuition purposes and who believe they may qualify for in-state tuition, may submit a Residency Reclassification form available in the Registrar’s Office. Supporting documentation is required to substantiate residency for tuition purposes.

If denied Florida residency for tuition purposes by the Registrar’s Office, the student may appeal. Information on the appeal process can be obtained from the Registrar’s Office, AD 161, (407) 823-3100.

**SCHEDULE OF CLASSES**

The Schedule of Classes is published two times each year. One edition contains the summer and fall terms and the second edition contains the spring term. The schedule of classes is distributed by the colleges and departments.

**SENIOR CITIZEN AUDIT**

Senior Citizens (60 years of age or older) who have been residents of the State of Florida for one year as of the first day of classes, may enroll tuition free as audit students (i.e., no academic credit) on a space-available basis. Forms to be completed include the Residency Affidavit, the Student Health History, and the Special Non-Degree Registration Form. These forms are available in the Registrar’s Office, AD 161. It is necessary to complete the required forms no later than noon of the day prior to the last day of Regular Registration as noted in the Schedule of Classes. Expenses after the completion of registration include the campus (ID) card, automobile parking decal and textbooks.

**STATE EMPLOYEE AND STEP (NATIONAL GUARD) REGISTRATION**

State of Florida employees and State Tuition Exemption Program (National Guard) students register on the last day of Regular Registration. These registrations are on a space-available basis only. State employees are required to submit the Employee Tuition Fee Waiver Form which may be secured from
Human Resources, AD 230. Registrations before the time specified in the Schedule of Classes will result in the student being assessed regular fees. The tuition fee waiver cannot be used for courses which require increased costs, including, but not limited to courses offered through the Center for Continuing Education, independent study, supervised research, supervised teaching labs, thesis hours, dissertation, internships, co-ops, practicums, or applied, individualized instruction in Music, Art, or Dance. Eligible members of the active Florida National Guard may receive a waiver of 50% of tuition and material and supply fees. Registration is on a space-available basis on the last day of Regular Registration at the prescribed time. STEP students must present "Certification" letter to the Student Accounts Office (AD 112) to receive waiver of eligible fees.

STATE UNIVERSITY SYSTEM OF FLORIDA (SUS) TRANSIENT STUDENTS

An SUS transient student is a student who is seeking a degree from one of the other public Florida universities and wishes to take courses with the University of Central Florida. Students must complete the SUS Transient Application which is available at all SUS institutions. No application fee is required. The SUS Transient application must be completed each semester and should be mailed or delivered to the Registrar’s Office, by the application deadline noted in the academic calendar. Students should contact the Registrar’s Office for registration information, phone: (407) 823-3100.

UCF STUDENTS ATTENDING ANOTHER STATE UNIVERSITY SYSTEM OF FLORIDA INSTITUTION

UCF students who wish to attend another SUS institution as a transient student may secure the SUS Transient Application form from their college advising office or Registrar’s Office. The prior permission of the department and college advising office is required to ensure that the courses attempted at another institution will transfer and meet the UCF Degree/General Education requirements.

UCF STUDENTS ATTENDING A NON-SUS INSTITUTION

Degree-seeking UCF students who wish to enroll at a non-SUS post-secondary institution as a transient student must complete the Transient Approval Form. This form is available from the department or college advising offices. The prior permission of the department and college advising office is required to ensure that the courses attempted at another institution will transfer and meet the UCF Degree/General Education requirements.

STUDENT RECORDS

Student records submitted to the university become the property of the university and cannot be returned to the student or released to a third party. Copies of student records will be released only upon written request signed by the student. Student records are stored in paper form. Once the student has been absent from the university for three academic years, records are transferred to optical disk storage and the paper copies are destroyed.

TRANSCRIPT REQUESTS

Unofficial transcripts are available from the kiosks or Polaris. Requests for official transcripts are made through the Registrar’s Office (in person or by mail or fax). A student’s academic record can be released only upon written authorization signed by the student. Telephone and e-mail requests are not accepted. Transcripts cannot be released if the student is on hold due to a financial obligation to the university.

Transcript requests must include the student’s signature, full name, identification number, and the name and complete address to whom transcripts are to be sent. If final grades or degree statement are needed, indicate that the transcript request is to be held until all data are posted.

The first two transcripts are provided at no cost. There is a $5 per transcript charge for each subsequent transcript request. Enclose a check or money order (made payable to UCF) with each transcript request. Cash payments can be accepted only by the Cashier’s Office during regular business hours. Mail written requests for transcripts to: Registrar’s Office, Attn: Transcripts, P. O. Box 160114, Orlando, FL 32816-0114, or fax to (407) 823-5022.

WITHDRAWALS

Students may withdraw from courses after the end of Add/Drop. The withdrawal period begins the first business day after Add/Drop through the withdrawal deadline specified on the Calendar. This is normally the mid-point of the semester. Students wishing to withdraw from a class must present their picture identification card and sign the withdrawal form in the Registrar’s Office. Withdrawals may be accomplished by mail, but mail requests must be postmarked no later than the withdrawal deadline. Students who wish to withdraw after the published deadline must file a petition in the Academic Services Office, AD 210, (407) 823-2691.
TUITION AND FEES

SCHEDULE OF FEES

A student's basic expenses at the university will be for registration and course related fees, room and board, textbooks, 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 Florida residency for tuition purposes is on the following page.

Students are encouraged to obtain a fee invoice/schedule to confirm fees and course registration. Fee invoice/schedules are available on the POLARIS web system, from student's college advising offices, and in the Registrar's Office. Students should obtain a new fee invoice/schedule after making any course changes or schedule adjustments.

All university fees must be paid at or before the end of the Add/Drop registration period. Tuition not paid by the payment deadline date for each term will result in late fees.

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

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) ......................................................... $20.00

B. Registration Fees per semester are shown below for main campus, area centers, and continuing education courses. Zero hour registration students are assessed one credit hour at the Florida Resident Tuition rate at the course level for which the student is registered.

1998-99 Fee Schedule
(1999-2000 fees not available at time of publication)

<table>
<thead>
<tr>
<th>Category</th>
<th>Florida Resident U-Grad (0000-4999)</th>
<th>Florida Resident Graduate (5000-7999)</th>
<th>Non-Florida Resident U-Grad (0000-4999)</th>
<th>Non-Florida Resident Graduate (5000-7999)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fees per Credit Hour:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matriculation*</td>
<td>$46.99</td>
<td>$113.03</td>
<td>$46.99</td>
<td>$113.03</td>
</tr>
<tr>
<td>Non-Resident Fee</td>
<td>-0-</td>
<td>-0-</td>
<td>211.30</td>
<td>327.20</td>
</tr>
<tr>
<td>Financial Aid Fee</td>
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<td>5.65</td>
<td>2.34</td>
<td>5.65</td>
</tr>
<tr>
<td>Non-Res Financial Aid Fee</td>
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<td>-0-</td>
<td>10.56</td>
<td>16.36</td>
</tr>
<tr>
<td>Building Fee</td>
<td>2.32</td>
<td>2.32</td>
<td>2.32</td>
<td>2.32</td>
</tr>
<tr>
<td>Capital Improvement Fee</td>
<td>2.44</td>
<td>2.44</td>
<td>2.44</td>
<td>2.44</td>
</tr>
<tr>
<td>UCF Activity &amp; Service Fee</td>
<td>6.95</td>
<td>6.95</td>
<td>6.95</td>
<td>6.95</td>
</tr>
<tr>
<td>UCF Athletic Fee</td>
<td>6.50</td>
<td>6.50</td>
<td>6.50</td>
<td>6.50</td>
</tr>
<tr>
<td>Total per Hour</td>
<td>$67.54</td>
<td>$136.89</td>
<td>$289.40</td>
<td>$480.45</td>
</tr>
</tbody>
</table>

* Repeat Course Surcharge: Beginning with the fall term, 1997, a student enrolled in the same undergraduate college credit course more than twice shall pay matriculation at 100% of the full cost of instruction.

* Excess Hours Surcharge: The per credit hour charge to the student will be increased by 50% for any credit hours beyond 115% of the credit hours to be earned at the university as required for the degree exclusive of those credit hours and students exempted by Board policy.

Other Fees: Resident and Non-Resident Students

UCF Health Fee (per term-main campus-course offerings) 47.30
UCF Health Fee (summer term-main campus-course offerings) 35.20
UCF Mat & Sup Fee (approved courses only-varies per course) 2.00-15.00
Repeat Course Fee 153.06
Campus Card Fee 10.00
Campus Card Replacement Fee 15.00
Late Registration Fee (see "E" below) 50.00
Late Payment Fee (see "E" below) 50.00

Returned Check Fees:
- Check amounts up to $50.00 25.00
- Check amounts over $50.00 and less than $300.00 30.00
- Check amounts over $300.00 40.00*

* or 5%, whichever is greater

C. Room and Board (Based on accommodations and meal plan selected)
- Residence Hall Rooms (per semester) $1095-1600.00
- Board plans (approx.). contact Food Services (407) 823-2651 $825-950.00
- Charge for late housing payment $50.00

D. Books and supplies (estimated) per semester $300.00
E. Late Registration and Late Payment Fees
   - $50 late registration fee will be assessed all students who register during the Late
     Registration period and pay fees by the deadline.
   - $50 late payment fee will be assessed all students who pay fees after the deadline.
   - Both a $50 Late Registration fee and a $50 late payment fee will be assessed all students
     who both register late and pay fees after the deadline.

All payments accepted after class cancellation notices are mailed, approximately the
third week of classes, must be cash, cashier's check, or money order. Personal checks
will not be accepted.

F. Vehicle Registration (required of everyone operating a motor-powered vehicle on campus)
   per calendar year for all students. Student's decal fee $78.00

G. Student Health Fee
   Mandatory fee assessed to all students except those enrolled at area campuses, (UCF-
   Brevard, UCF-Daytona Beach, Professional Development Center at South Orlando) and
   exclusively in Continuing Education courses.

H. Transcripts - First two provided at no charge. Each additional copy $5.00.

APPEALS

Students who wish to appeal a Late Registration, and/or Late Payment, may make their appeal to the
Fee Appeals Committee by initiating a student petition (Form 41-561 ). This form can be obtained from
Student Development and Enrollment Services, University Cashier, or the Student Accounts Section
of Finance and Accounting. Students must submit their petitions to Student Accounts, Room 112,
Administration Building, and may appear (not mandatory) before the Committee.

PAST-DUE ACCOUNTS

All financial obligations to the University must be met if good standing is to be maintained. Failure
to meet obligations can result in the withholding 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. All costs of collection, including attorney's fees, are borne by the debtor.

PAYMENT PROCEDURES

Payment may be made in the Cashier's Office, AD 108. Hours are Monday and Thursday, 8:30 a.m.
to 7:00 p.m., Tuesday, Wednesday, and Friday, 8:30 a.m. to 4:00 p.m. Credit cards are not accepted.
Payments (NO CASH) may be placed in the Cashier’s night depository on the north (pond) side of the
Administration Building. INCLUDE SOCIAL SECURITY NUMBER ON CHECK OR MONEY
ORDER.

Mailed payments (check or money order only) must be postmarked no later than the payment
deadline to be considered on time and avoid the late fee. Address Payment to: Cashier's Office,
University of Central Florida, P.O. Box 620000, Orlando, FL 32891-8449.

Do not assume your registration will be canceled if you do not pay fees or attend classes.
Payment guidelines for off-campus registration are contained on the off-campus registration form.

REFUND OF FEES

A refund of fees will be made under the conditions noted below. A written appeal for a refund or other
appeal action must be submitted to the University within six (6) months of the close of the semester
to which the refund or other appeal action is applicable. Any debts to the University will be deducted
from the refund, up to the full amount.

A. A full refund when:
   1. Any class is dropped before the end of the Add/Drop period
   2. Cancellation of the course by the University
   3. Student is denied admission to an offered course for whatever reason

B. Partial refund due to complete withdrawal from the University: For the fall and spring
   semesters, a twenty-five (25%) percent refund of tuition is available for students who completely
   withdraw from the University by the end of the fourth week of classes. For the summer semester,
   complete withdrawal from an individual session must occur before the first quarter of classes has
   elapsed for that session. Each session in the summer semester is considered individually for partial
   refund purposes. No refund will be made unless requested by the student from the Student Accounts
   Office, Room 107, Administration Building. The exact withdrawal deadline dates for each semester
   may be obtained from the Student Accounts Office.

C. Refunds for exceptional circumstances at any time upon withdrawal from one or more
courses. Up to 100% of tuition and registration fees due to circumstances determined by the
University to be exceptional, including but not limited to sickness, death, involuntary call to military
service, or administrative errors created by the University.

D. Pro rata refunds for first term at UCF students: Between 40% and 90% of tuition and dorm
   charges for students who fully withdraw before 60% of the term has elapsed. Applies only to first term
   at UCF students. An administrative fee defined as the lesser of 5% of all charges or $100 will be
deducted from the refund.
TUITION FEE WAIVERS FOR STATE OF FLORIDA EMPLOYEES

State employees, faculty, and staff who utilize a tuition fee waiver for course work (up to 6 credit hours) 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. It is the responsibility of the employee to register only on a space-available basis during the prescribed time as indicated by the Registrar, which is normally the last hour of Regular Registration. In addition, the tuition fee waiver cannot be used for courses which require increased costs. These courses include, but are not limited to: courses offered through the Center for Continuing Education, independent study, supervised research, supervised teaching lab, thesis hours, dissertation, internships, co-ops, practicums, or applied, individualized instruction in music, art, or dance, etc. State employees utilizing employee tuition waivers to enroll in graduate courses are liable for federal income tax and FICA tax on the value of the waiver for these courses.

TUITION FEE WAIVERS FOR SENIOR CITIZENS

Persons 60 years of age or older who meet Florida residency requirements may register to audit classes on a space-available basis without payment of tuition and application fees. Registration is on a space-available basis; see the current schedule of classes for dates and times. The tuition fee waiver cannot be used for courses which require increased costs (such as thesis, dissertation, directed individual study). A Florida Residency Affidavit is required in order to establish Florida residency. A completed Student Health History must be filed prior to registration. Inquiries should be directed to the Registrar's Office, Administration Building 161.

STATE TUITION EXEMPT PROGRAM (STEP)

Eligible members of the active Florida National Guard may receive a waiver of 50% of tuition and material and supply fees. Registration is on a space-available basis on the last day of Regular Registration at the prescribed time. STEP students should present FNG form 621-5-2 to the Student Accounts Office (AD 107) prior to the fee payment deadline.

FLORIDA PREPAID COLLEGE PLAN

For any student enrolled who has a Florida Prepaid College Plan, the University will automatically defer the portion of the tuition covered under the plan. The plan does not cover the local UCF fees which include the athletic fee, activity and service fee, health fee, campus card fee and material and supply fee. IF YOU DO NOT WISH TO UTILIZE THE FLORIDA PREPAID COLLEGE PLAN, PLEASE NOTIFY THE STUDENT ACCOUNTS OFFICE, AD 107, BY THE FEE PAYMENT DEADLINE. NOTE: THESE FEES MAY CHANGE EACH ACADEMIC YEAR.

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's 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:

- 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)

- 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
c. 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 bonafide Florida resident, including the age and general circumstances of the individual

• No contrary evidence establishing residence elsewhere

• 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 Registrar’s Office, AD 161.

The Registrar’s Office may require additional documentation as necessary to accurately
determine the resident status of any student.
ACADEMIC POLICIES AND PROCEDURES

ACADEMIC BEHAVIOR STANDARDS

The University of Central Florida is committed to a policy of honesty in academic affairs. Examples of conduct for which students may be subject to academic and/or disciplinary penalties including expulsion are:

Cheating, whereby non-permissible written, visual, or oral assistance including that obtained from another student is utilized on examinations, course assignments, or projects. The unauthorized possession or use of examination or course related material may also constitute cheating.

Plagiarism whereby another's work is deliberately used or appropriated without any indication of the source, thereby attempting to convey the impression that such work is the student's own. Any student failing to properly credit ideas or materials taken from another has plagiarized.

NOTE: A student who has assisted another in any of the aforementioned breach of standards shall be considered equally culpable. In cases of cheating or plagiarism, the instructor may take appropriate academic action ranging from loss of credit for a specific assignment, examination, or project to removal from the course with a grade of "F". Additionally, the instructor may request disciplinary action through the Dean of Students Office as outlined in The Golden Rule.

UNIVERSITY OMBUDS OFFICE

The Office of the Ombuds Officer provides members of the University community assistance and advice regarding concerns related to the University. These services are available to every member of the university community—students, staff, faculty, and others. Any type of concern may be brought to the attention of this office: academic, financial, housing, consumer, work-related, or personal. The University Ombuds Officer is a neutral facilitator, and will listen to your concern, help you explore options, offer suggestion and advice, and assist in the resolution of your concern. Referral and direction to appropriate individuals and offices, and clarification of university policies and procedures are services of the office. All proceedings in individual cases will be held confidential by the Ombuds Officer unless otherwise authorized by the complainant, or otherwise required by applicable law, including without limitation, Chapter 119, Florida Statutes. The University Ombuds Office is located in the Administration Building, Room 338F. Appointments may be made by calling (407)-823-6440.

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 Golden 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. All post-baccalaureate students are considered as non-degree undergraduates for all university policies and procedures.
Graduate: Any student enrolled in graduate courses who has been admitted to a graduate program

Other student classifications:
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 DEFINED
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. During this shortened semester, two and a half class hours of work (or four or more laboratory hours of work) per week are required to represent a semester hour of credit.

DUAL USAGE OF CREDIT HOURS
Courses used to meet the requirements of an undergraduate degree cannot typically also be used to meet the requirements of a graduate program. Contact your advisor or college for specific program requirements or additional information.

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

GRADE SYSTEM
The University uses 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
NC — No Credit 0 grade point*
* Available only in ENC 1101, ENC 1102 and STA 2014.

Other Actions
I — Incomplete 0 grade point
N — No grade reported by professor 0 grade point
R — (followed by grade) Repeated course (grade forgiveness)
S — Satisfactory (w/credit)/Satisfactory Progress (Research, Thesis, or Dissertation) 0 grade point
T — (followed by grade) Subsequently repeated (no credit) 0 grade point
U — Unsatisfactory (no credit) 0 grade point
W — Withdrawn 0 grade point
WF — Withdrawn Failing 0 grade point
WH — Health Form Withdrawal 0 grade point
WM — Medical Withdrawal 0 grade point
WP — Withdrawn Passing 0 grade point
X — Audit (no credit) 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 NC, 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 Registrar's 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, except 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. A grade will not be changed after a degree has been conferred.

**EXCESS HOURS**

Excess hour surcharges are assessed when students enroll in courses that exceed 15% of the minimum credit hours required to complete the degree. For example, if the degree requires 120 hours of credit, then students are permitted to take 138 credit hours (120 hours + 18 hours) before they are assessed a surcharge for excess hours.

**THIRD ATTEMPT SURCHARGES**

All students enrolled in undergraduate courses for the fall 1999 term are subject to surcharges when they enroll in a course three or more times. Completed courses, withdrawals, and courses with incomplete grades are counted as attempts, including courses repeated in order to raise a GPA or achieve a specific grade.

**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
- **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 GPA drops below 2.0. Academic Probation will continue until the current term and UCF cumulative 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 is disqualified may not enroll at the University for two semesters following disqualification. Readmission after two semesters is not automatic. A disqualified student must submit an application for readmission supported by a letter indicating the reasons for previous academic difficulties and plans for achieving a GPA of 2.0 or better. The total record will be reviewed and action on readmission will be taken by the University Registrar. When the University Registrar cannot make a favorable decision, cases will be referred to the Admissions and Standards Committee.
- **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.

**RELIGIOUS OBSERVANCES**

It is the policy of the University of Central Florida to reasonably accommodate the religious observances, practices, and beliefs of individuals in regard to admissions, class attendance, and the scheduling of examinations and work assignments. A student who wishes to observe a religious holy day of his or her religious faith will notify all of his/her instructors and be excused from class to observe the religious holy day.

The Student will be held responsible for any material covered during the excused absence, but will be permitted a reasonable amount of time to complete any work missed. Where practicable, major
examinations, major assignments, and university ceremonies will not be scheduled on a major religious holy day.

Students who are absent from academic or social activities because of religious observances will not be penalized. A student who believes that he/she has been unreasonably denied an educational benefit due to his/her religious belief or practices may seek redress in accordance with Rule 6C7-5.0031, Student Grievance Procedure. Source: The Golden Rule

**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 requirements of the course. Effective with incomplete grades assigned in the fall semester, 1997 and thereafter, a student can not graduate from the University with an "I" on the transcript. The incomplete must be changed within twelve months of the last day of the semester or prior to graduation from the University, whichever comes first. Unresolved incomplete grades will automatically be changed to "F" by the Registrar.

**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 in the Registrar's Office, Administration Building 161.

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 Academic Services, Administration Building, Room 210. At the time of the request an Assistant Dean from Enrollment and Academic Services will ascertain from the instructor whether the student was passing or failing the course. If the student was passing, a "WP" will be recorded on the student's permanent record; if failing, a "WF" will be entered. Medical and late withdrawals are normally for all courses taken in the semester.

Students who seek withdrawal because they are ill must apply for the withdrawal within six months of the term 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 with the appropriate medical information, using the forms available in the Office of Academic Services. A medical withdrawal must be for all classes in the term.

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.
TRANSIENT 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/her respective college. Approval of courses for the General Education Program should be obtained from Academic Services. Credit earned without this transient approval may not be accepted. Because of graduation certification, students may not take courses in transient status during the term in which they expect to graduate. Transient forms are available in the college of the student's major. Transient credit cannot be used to reduce the last 30 semester hour residency requirement for a baccalaureate degree, the last 20 semester hour residency requirement for an Associate of Arts degree, or any departmental residency requirements.

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.
- Registration for grade forgiveness must be completed by the end of the Add/Drop period in the term in which the course is repeated.

If a student withdraws from a course repeated under the Grade Forgiveness Policy or receives an incomplete in the course, the attempt will count as one of the two allowable attempts. However, the original grade will not be replaced with the "I" or the "W" received in the repeat attempt. The student may not petition a second time for the same course.

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/she 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 replaced 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 Registrar's Office 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 Registrar's Office no later than the last day of Add/Drop. No petitions will be accepted after the deadline.

NOTE: Repeated Enrollment in Same Course: Beginning with the fall term, 1997, a student enrolled in the same undergraduate college credit course more than twice shall pay matriculation at 100% of the full cost of instruction.

Any questions about Grade Forgiveness should be directed to Academic Services, AD 210, Phone (407) 823-2691.

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 course work, and maintain a 4.0 GPA with no incomplete or "U" grades for the given term or who
complete 15 semester hours during any two 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 two 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 at UCF.

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 10% of the range established by all students graduating in the same college during the previous two years.

B. Attain at least a 3.2 overall grade point average.

C. Honors awarded will be:
1) Summa Cum Laude for those students in the upper 2.5%
2) Magna Cum Laude for those students in the upper 5%, but not in the upper 2.5%
3) Cum Laude for those students in the upper 10%, but not in the upper 5%

Records for the semester of graduation are incomplete at the time the commencement program is printed. 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 College Level Examination Program (CLEP), the Advanced Placement Program (AP), the International Baccalaureate, University Course Credit by Examination, and DANTES. State rules regarding accelerated mechanisms were under revision at the time the catalog was printed and may be subject to change.

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 minimum qualifying score.

Awarding of CLEP credit is subject to the conditions listed below.
- Credit may be awarded in the CLEP general examination, 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.
- 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/she 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, AP, IB, 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 requirements.

**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 &amp; AML 3051</td>
</tr>
<tr>
<td>Analysis &amp; Interp Lit***</td>
<td>6</td>
<td>51</td>
<td>ENC 1101 &amp; ENC 2000</td>
</tr>
<tr>
<td>Calculus w/Elem Functions</td>
<td>4</td>
<td>49</td>
<td>MAC 2311</td>
</tr>
<tr>
<td>Calculus w/Analytic Geo</td>
<td>3</td>
<td>49</td>
<td>MAC 2253</td>
</tr>
<tr>
<td>Clinical Chemistry **</td>
<td>4</td>
<td>50</td>
<td>MLS 4630</td>
</tr>
<tr>
<td>College Algebra</td>
<td>3</td>
<td>48</td>
<td>MAC 1105</td>
</tr>
<tr>
<td>College Algebra &amp; Trig</td>
<td>3</td>
<td>50</td>
<td>MAC 1114</td>
</tr>
<tr>
<td>College Comp w/Essay***</td>
<td>6</td>
<td>50</td>
<td>ENC 1101 &amp; ENC 1102</td>
</tr>
<tr>
<td>Info Sys &amp; Comp Apps</td>
<td>3</td>
<td>51</td>
<td>CGS 1060C</td>
</tr>
<tr>
<td>Educational Psychology</td>
<td>3</td>
<td>49</td>
<td>None</td>
</tr>
<tr>
<td>English Literature***</td>
<td>6</td>
<td>49</td>
<td>ENL 2012 or ENL 2021</td>
</tr>
<tr>
<td>Freshmen English w/Essay***</td>
<td>6</td>
<td>51</td>
<td>ENC 1101 &amp; ENC 1102</td>
</tr>
<tr>
<td>General Biology</td>
<td>6</td>
<td>49</td>
<td>BSC 1020</td>
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<tr>
<td>General Chemistry</td>
<td>6</td>
<td>50</td>
<td>CHM 1020 &amp; 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>4</td>
<td>51</td>
<td>MLS 3305</td>
</tr>
<tr>
<td>Human Growth and Development</td>
<td>3</td>
<td>51</td>
<td>None</td>
</tr>
<tr>
<td>Immunohematology **</td>
<td>4</td>
<td>50</td>
<td>MLS 4550</td>
</tr>
<tr>
<td>Introduction to Accounting</td>
<td>3</td>
<td>50</td>
<td>ACG 2001</td>
</tr>
<tr>
<td>Intro to Business Law</td>
<td>6</td>
<td>51</td>
<td>None</td>
</tr>
<tr>
<td>Intro to Management</td>
<td>3</td>
<td>49</td>
<td>None</td>
</tr>
<tr>
<td>Intro to Macroeconomics</td>
<td>3</td>
<td>50</td>
<td>ECO 2013</td>
</tr>
<tr>
<td>Intro to Microeconomics</td>
<td>3</td>
<td>50</td>
<td>ECO 2023</td>
</tr>
<tr>
<td>Intro to Marketing</td>
<td>3</td>
<td>50</td>
<td>MAR 3023</td>
</tr>
<tr>
<td>Intro to Sociology</td>
<td>6</td>
<td>50</td>
<td>SYG 2000</td>
</tr>
</tbody>
</table>
Language: French  6/9/12  44/49/56  Corresponding
German  6/9/12  43/52/55  1120 & 1121,
Spanish  6/9/12  45/48/55  2200* & 2201* & 2230 & 2231*
Microbiology (clinical)**  6  49  MLS 4405
Programming -
FORTRAN IV  3  48  COP 2200
Subj: Comp and Data Proc
Trigonometry  3  54  MAC 1114
(Duplicate CLEP Exam
Subj: College Alg & Trig)
Western Civilization I ***  3  49  EUH 2000
Western Civilization II ***  3  48  EUH 2001

**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.

ADVANCED PLACEMENT EXAMINATIONS

<table>
<thead>
<tr>
<th>Examination</th>
<th>Passing Score</th>
<th>Semester Hours Awarded</th>
<th>UCF Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>3-5</td>
<td>3</td>
<td>BSC 1020</td>
</tr>
<tr>
<td>Chemistry</td>
<td>3-4</td>
<td>4</td>
<td>CHM 2045C</td>
</tr>
<tr>
<td>Computer Sci A</td>
<td>5</td>
<td>7</td>
<td>CHM 2045C &amp; 2046</td>
</tr>
<tr>
<td>Computer Sci AB</td>
<td>4-5</td>
<td>3</td>
<td>CGS 1060C</td>
</tr>
<tr>
<td>Eng Lang &amp; Comp</td>
<td>4-5</td>
<td>3</td>
<td>no direct equivalent</td>
</tr>
<tr>
<td>Eng Lit &amp; Comp</td>
<td>4-5</td>
<td>6</td>
<td>ENC 1101</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>3-5</td>
<td>3</td>
<td>ENC 1101 &amp; 1102</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>3-5</td>
<td>3</td>
<td>LIT 2110</td>
</tr>
<tr>
<td>French Language</td>
<td>4-5</td>
<td>6</td>
<td>LIT 2110 &amp; general elective</td>
</tr>
<tr>
<td>French Literature</td>
<td>4-5</td>
<td>6</td>
<td>ECO 2023</td>
</tr>
<tr>
<td>German</td>
<td>3</td>
<td>3</td>
<td>ECO 2013</td>
</tr>
<tr>
<td>U.S. History</td>
<td>3</td>
<td>3</td>
<td>FRE 3420</td>
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<tr>
<td>European History</td>
<td>3</td>
<td>3</td>
<td>FRE 3420 &amp; general elective</td>
</tr>
<tr>
<td>Psychology</td>
<td>3</td>
<td>3</td>
<td>FRW 3100</td>
</tr>
<tr>
<td>Latin (Virgil)</td>
<td>3</td>
<td>3</td>
<td>FRW 3100 &amp; 3101</td>
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<tr>
<td>Latin Literature</td>
<td>3</td>
<td>3</td>
<td>GER 1120</td>
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<tr>
<td>Calculus AB</td>
<td>3</td>
<td>3</td>
<td>GER 1120 &amp; general elective</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>3</td>
<td>3</td>
<td>AMH 2010</td>
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<tr>
<td>U.S. Gov. &amp; Politics</td>
<td>3</td>
<td>3</td>
<td>EUH 2000</td>
</tr>
<tr>
<td>Comp. Gov. &amp; Politics</td>
<td>3</td>
<td>3</td>
<td>PSY 2013</td>
</tr>
<tr>
<td>Music Theory</td>
<td>3</td>
<td>3</td>
<td>no direct equivalent</td>
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<tr>
<td>Physics B</td>
<td>3</td>
<td>3</td>
<td>no direct equivalent</td>
</tr>
<tr>
<td>Physics C</td>
<td>4-5</td>
<td>3</td>
<td>MAC 2311 &amp; MAC 2312</td>
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<tr>
<td>(Mechanics)</td>
<td>5</td>
<td>3</td>
<td>MAC 2311, 2312, &amp; 2313</td>
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<tr>
<td>Physics C</td>
<td>3-4</td>
<td>4</td>
<td>POS 2041</td>
</tr>
<tr>
<td>(Electricity and Magnetism)</td>
<td>5</td>
<td>3</td>
<td>CPO 3103</td>
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<td>Spanish Language</td>
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<td>3</td>
<td>MUT 1111 &amp; 1241</td>
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<td></td>
<td>SPN 1120</td>
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<tr>
<td></td>
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<td></td>
<td>SPN 1120 &amp; general elective</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.

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Qualifying Score</th>
<th>Credit Awarded</th>
<th>UCF Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Design</td>
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<tr>
<td>Higher Level</td>
<td>4</td>
<td>3</td>
<td>ART 2300C</td>
</tr>
<tr>
<td></td>
<td>5,6,7</td>
<td>6</td>
<td>ART 2300C &amp; ART 2201C</td>
</tr>
<tr>
<td>Biology</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Subsidiary &amp; Higher Level</td>
<td>4</td>
<td>3</td>
<td>BSC 1020</td>
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<tr>
<td></td>
<td>5,6,7</td>
<td>6</td>
<td>BSC 1020 &amp; BOT 1000</td>
</tr>
<tr>
<td>Chemistry</td>
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</tr>
<tr>
<td>Subsidiary &amp; Higher Level</td>
<td>4</td>
<td>3</td>
<td>CHM 1020</td>
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<tr>
<td></td>
<td>5,6,7</td>
<td>6</td>
<td>CHM 1020 &amp; CHM 1032</td>
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<td>Computing Studies</td>
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<tr>
<td>Subsidiary &amp; Higher Level</td>
<td>4</td>
<td>3</td>
<td>COP 2213</td>
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<td>COP 2213 &amp; COP 2500</td>
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<td>Economics</td>
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<tr>
<td>Subsidiary &amp; Higher Level</td>
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<td>3</td>
<td>ECO 1000</td>
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<td>5,6,7</td>
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<td>ECO 2013 &amp; ECO 2023</td>
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<tr>
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<td>ENC 1101</td>
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<tr>
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<td>6</td>
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<td>ENC 1101 &amp; LIT 2110</td>
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<td></td>
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<tr>
<td>Environmental Systems</td>
<td>4,5,6,7</td>
<td>3</td>
<td>FRE 3420, SPN 3420, GER 3420</td>
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<td></td>
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<tr>
<td>Foreign Languages B</td>
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<tr>
<td>Higher Level</td>
<td>French, Spanish, German</td>
<td>4,5,6,7</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Other Languages B</td>
<td>4,5,6,7</td>
<td>3</td>
</tr>
<tr>
<td>Subsidiary Level</td>
<td>French, Spanish</td>
<td>4,5,6,7</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Other Languages</td>
<td>4,5,6,7</td>
<td>3</td>
</tr>
<tr>
<td>Geography</td>
<td></td>
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<tr>
<td>Higher Level</td>
<td>4,5,6,7</td>
<td>6</td>
<td>GEO 1200 &amp; GEO 2370</td>
</tr>
<tr>
<td>Subsidiary Level</td>
<td>4,5,6,7</td>
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<td>GEO 2370</td>
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<td>History</td>
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<td>Subsidiary &amp; Higher Level</td>
<td>4</td>
<td>3</td>
<td>WOH 2022</td>
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<td></td>
<td>5,6,7</td>
<td>6</td>
<td>WOH 2012 &amp; WOH 2022</td>
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<td>No direct equivalent</td>
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<tr>
<td>Info Tech in Global Society</td>
<td>4,5,6,7</td>
<td>3</td>
<td>MAC 1105</td>
</tr>
<tr>
<td>Mathematics</td>
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<td>Subsidiary Level</td>
<td>4,5,6,7</td>
<td>3</td>
<td>MAC 2311</td>
</tr>
<tr>
<td>Mathematical Methods</td>
<td>4</td>
<td>4</td>
<td>MAC 2311 &amp; MAC 2312</td>
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<tr>
<td>Subsidiary Level</td>
<td>5,6,7</td>
<td>4</td>
<td>MAC 2311</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Higher Level</td>
<td>4</td>
<td>4</td>
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<tr>
<td></td>
<td>5,6,7</td>
<td>8</td>
<td>MAC 2311</td>
</tr>
<tr>
<td>Music</td>
<td>Subsidiary &amp; Higher Level</td>
<td>4,5,6,7</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MUL 2010 &amp; MUL 2906</td>
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<tr>
<td></td>
<td>5,6,7</td>
<td>6</td>
<td>PHI 2010</td>
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<td></td>
<td></td>
<td>PHI 2010 &amp; PHI 2600</td>
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<tr>
<td>Philosophy</td>
<td>Subsidiary &amp; Higher Level</td>
<td>4,5,6,7</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PHY 2053C &amp; PHY 2054C</td>
</tr>
<tr>
<td>Physics</td>
<td>Higher Level</td>
<td>4,5,6,7</td>
<td>8</td>
</tr>
<tr>
<td>Subsidiary Level</td>
<td>4,5,6,7</td>
<td>8</td>
<td>PHY 2053C &amp; PHY 2054C</td>
</tr>
</tbody>
</table>
CREDIT BY EXAMINATION
Regularly enrolled* undergraduate students at the University of Central Florida may obtain credit for specific university courses through department 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 used to reduce the 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.

DANTES EXAMINATION CREDIT
The University will award credit to students presenting qualifying scores in DANTES examinations for the five subject areas identified below.

<table>
<thead>
<tr>
<th>Examination</th>
<th>Score</th>
<th>Semester Hours</th>
<th>Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astronomy</td>
<td>50</td>
<td>3</td>
<td>AST 2002</td>
</tr>
<tr>
<td>Beginning German I</td>
<td>50</td>
<td>4</td>
<td>GER 1120</td>
</tr>
<tr>
<td>Beginning German II</td>
<td>50</td>
<td>4</td>
<td>GER 1121</td>
</tr>
<tr>
<td>General Anthropology</td>
<td>50</td>
<td>3</td>
<td>ANT 2000</td>
</tr>
<tr>
<td>Introduction to Computers/Basic</td>
<td>50</td>
<td>3</td>
<td>CGS 1461</td>
</tr>
</tbody>
</table>
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) for all UCF course work attempted. Some majors require more than 120 hours.
- 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 25% of the total hours required for the degree in residence at UCF. For programs which require the minimum of 120 total hours, residency will be 30 hours. For programs which exceed 120 hours, the specific residency requirement increases proportionally and is listed with the requirements for the specific degree program.
- 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 requirements 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

COMPLETION OR GRADUATION RATE DISCLOSURES

The completion or graduation rate is the rate at which full-time, certificate-seeking or degree-seeking undergraduate students who are enrolling for the first time at the institution, and have not previously enrolled at any other institution of higher education, either complete or graduate from their programs. The retention rate for fall 1996 students is 71.3%. The information is publicized and available for review in the UCF Library and other student publications.

CHOICE OF CATALOG AND CONTINUOUS ENROLLMENT

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, or spring, summer, and fall). Continuous enrollment is automatically broken when a student moves from one transfer institution to another following academic disqualification or exclusion.

Effective May, 1999, students changing to a new major in the college of Arts and Sciences must move to the current year's catalog. Additional information is included in the A&S program descriptions. 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 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 decide to request a change, they should fill out a Catalog Change form in the Registrar's Office, Administration Building, AD 161.

GENERAL EDUCATION PROGRAM

The purposes of the UCF General Education Program (GEP) are to introduce students to a broad range of human knowledge and intellectual pursuits, to equip them with the analytic and expressive skills required to engage in those pursuits, to develop their ability to think critically, and to prepare them for life-long learning. The GEP curriculum provides students with the intellectual, ethical, and aesthetic foundations necessary to make informed choices; to accept the responsibilities of working and living in a rapidly changing world; and to lead a productive and satisfying life.

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 Enrollment and Academic Services. Students should consult both with an advisor and with Enrollment and Academic Services before submitting 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. Students enrolled in classes that use the "NC" grade must earn a grade of "C" or better.
### GENERAL EDUCATION PROGRAM COURSES
(36 semester hours required)

#### A. Communication Foundations

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>English Composition II PR: ENC 1101</td>
</tr>
<tr>
<td>SPC 1600C</td>
<td>Fundamentals of Oral Communication</td>
</tr>
<tr>
<td>SPC 1016</td>
<td>Oral Communication for the Engr &amp; Tech Professions</td>
</tr>
</tbody>
</table>

#### B. Cultural and Historical Foundations

1. **Take one of the following two-semester sequences:**
   - EUH 2000 Western Civilization I and EUH 2001 Western Civilization II
   - HUM 2211 Humanistic Tradition I and HUM 2230 Humanistic Tradition II
   - AMH 2010 U.S. History: 1492-1877 and AMH 2020 U.S. History: 1877-present
   - WOH 2012 World Civilization I and WOH 2022 World Civilization II

2. **Take one course from the following:**
   - ARH 2050 The History of Art I
   - ARH 2051 The History of Art II
   - MUL 2010 Enjoyment of Music
   - THE 1020 Theatre Survey
   - THE 2071 Cinema Survey
   - REL 2300 World Religions
   - PHI 2010 Introduction to Philosophy
   - LIT 2110 World Literature I PR: ENC 1102
   - LIT 2120 World Literature II PR: ENC 1102

#### 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 1105 College Algebra
2. MGF 1203 Finite Mathematics
3. CGS 1060C Introduction to Computer Science
4. STA 2014 Principles of Statistics
5. STA 1060C Basic Statistics using Microsoft Excel

#### D. Social Foundations

**Take one course from each group.**

1. ECO 2013 Principles of Economics I
2. ECO 2023 Principles of Economics II
3. POS 2041 American National Government
4. PSY 2013 General Psychology
5. SYG 2000 General Sociology
6. ANT 2000 General Anthropology

#### E. Science 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. PSC 1121* Physical Science PR: MAC 1105 or MGF 1203
2. PHY 2053C College Physics PR: MAC 1105 and MAC 1114
3. CHM 1020 Concepts in Chemistry PR: MAC 1105 or MGF 1203
4. BSC 1020* Biological Principles
5. BSC 1030* Biology and Environment
6. BOT 1000* Plant Science
7. GLY 1030 Geology & Its Applications
8. GEO 1200* Physical Geography
9. ANT 2511 The Human Species

---

* A one credit laboratory is also available for this course

1. A grade of "C" or better is required in this course
2. 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 Gordon Rule" in this section.
3. 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 AND OTHER REQUIREMENTS

The Student Academic Support System (S.A.S.S.) routinely coordinates the evaluation of transfer courses for the university's General Education Program and Foreign Language Proficiency requirements. When the transfer course work is entered into the UCF computer system (usually during the first semester at UCF), S.A.S.S. 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 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 decisions made by S.A.S.S. should be directed to Dr. David Dees, Assistant Dean, Academic Services, AD 210. Substitution requests for college or major requirements are processed within those administrative offices.

ALTERNATE COURSES - GENERAL EDUCATION PROGRAM

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

<table>
<thead>
<tr>
<th>GEP REQUIREMENTS</th>
<th>ACCEPTABLE SUBSTITUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 1105 (College Algebra)</td>
<td>MAC 1114, MAC 2233, MAC 2253,</td>
</tr>
<tr>
<td></td>
<td>MAC 2254, MAC 2311, MAC 2312,</td>
</tr>
<tr>
<td></td>
<td>MAC 2313</td>
</tr>
<tr>
<td>ECO 2013 (Macro Economics)</td>
<td>Any higher level ECO course which has ECO 2013 as a prerequisite ECO 2023 (Micro Economics)</td>
</tr>
<tr>
<td>PHY 2053C (Physics)</td>
<td>PHY 2048, PHY 2049, PHY 2054C,</td>
</tr>
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<td></td>
<td>PHY 2014C, PHY 5015</td>
</tr>
<tr>
<td>CHM 1020 (Chemistry)</td>
<td>CHM 2045C, CHM 1032, CHS 1440</td>
</tr>
<tr>
<td>BSC 1020 or BSC 1030 (Biology)</td>
<td>BSC 2010C</td>
</tr>
<tr>
<td>GEO 1200 (Geography)</td>
<td>GEO 2370</td>
</tr>
<tr>
<td>CGS 1060C (Intro to Computer)</td>
<td>CGS 2100, CGS 3422, COP 2200, COT 3100</td>
</tr>
<tr>
<td>STA 2014 (Statistics)</td>
<td>STA 2023, STA 3032</td>
</tr>
</tbody>
</table>

DIVERSITY REQUIREMENT

The University recognizes that communities are comprised of, and enriched by, people of diverse backgrounds. The study of diversity is encouraged to promote an understanding of the needs of individuals, the University, and society. Thus, all students completing their first bachelors degree from UCF must complete at least one course which explores the diverse backgrounds and characteristics found among humans, including: race/ethnicity, gender, social class/caste, religion, age, sexual orientation, and level of physical ability.

Students are exempt from this requirement if they completed an Associate of Arts degree or the General Education program at a Florida public state university or community college. Students who have previously completed a baccalaureate degree are also exempt.

The requirement is satisfied by the successful completion of a diversity course selected from the following list. Additional courses may be subsequently approved by the General Education Oversight Committee, so students should consult their departmental advisor for the most current listing.

General Education Courses:
ENC 1102 Composition II
SPC 1600C Fundamentals of Oral Communication
SYG 2000 General Sociology
ANT 2000 General Anthropology
POS 2041 American National Government
PSY 2013 General Psychology
WOH 2022 World Civilization II
LIT 2120 World Literature II

Other Courses:
AMH 3421 History of Florida to 1845
AMH 3423 Florida History 1845-Present
AMH 3562 Women in American History II
AML 3XXX Contemporary American Women's Fiction
AML 3XXX Harlem, Haiti, and Havana
ANT 3245 Native American Religions
ASH 4304 Women in East Asia: China and Japan
CCJ 4463 Cultural Diversity in Criminal Justice
EXIT EXAMS

FOREIGN LANGUAGE PROFICIENCY REQUIREMENT

Transfer work from other colleges and universities is evaluated by the student's major department to determine if courses meet the diversity requirement. Satisfaction of this requirement remains in effect if the student changes majors.

In order to measure their effectiveness, some departments and colleges may require graduating students to participate in an exit exam designed to measure the students' understanding of the discipline.

Students graduating with a Bachelor of Arts degree must demonstrate proficiency in a foreign language equivalent to one year of college instruction. 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. Students who have previously received a baccalaureate are exempt from this requirement.

For specific guidelines concerning proper placement in foreign language classes, please see section: Dept. of Foreign Languages and Literatures, under the heading, Placement and Proficiency.

Some Departments and Colleges have additional requirements. See "special college and/or departmental requirements" within each departmental listing.

1. This requirement is for proficiency and not a requirement for a particular number of hours of course work. For example, successful completion of only SPN 1121 (Elementary Spanish Language and Civilization II) would satisfy the B.A. requirement. Appropriate scores on Advanced Placement and CLEP examinations will also satisfy the requirement.
2. This is a university-wide requirement for all B.A. majors.
3. The Testing Administrator of the Office of Counseling and Testing will offer the Foreign Language Proficiency Examination periodically each semester. Students must register in advance with that office to take the examination (RS203).
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.

Students who have not satisfied the Foreign Language Admission Requirement at the time they are admitted to the University must satisfy this requirement prior to graduation. This requirement applies to all undergraduates and is separate from the University of Central Florida Foreign Language proficiency requirement. For detailed information on the Admission Requirement, see the Admissions chapter of this catalog.
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 four courses (12 semester hours) and to complete two 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
2. 12 hours of course work in which the student must complete 24,000 words of composition

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. Additional specific upper level courses may also be used to meet the Gordon Rule composition requirement. Consult the OASIS for information.

### GEP Courses Which Satisfy:
- 6 hours of English Composition
- 6-hour sequence of Western Humanities, World History, U.S. History, or Western Civilization

<table>
<thead>
<tr>
<th>GEP Courses Which Satisfy:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) college algebra or finite math</td>
</tr>
<tr>
<td>(2) statistics or computer science</td>
</tr>
</tbody>
</table>

### Gordon Rule Requirements:
1. 6 hours of math at the level of college algebra or higher
2. 12 hours of course work in which the student must complete 24,000 words of composition

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

<table>
<thead>
<tr>
<th>AMH 3402</th>
<th>History of the South to 1865</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMH 3403</td>
<td>History of the South Since 1865</td>
</tr>
<tr>
<td>AMH 3441</td>
<td>History of the Frontier: Eastern America</td>
</tr>
<tr>
<td>AMH 3442</td>
<td>History of the Frontier: Western America</td>
</tr>
<tr>
<td>AMH 4140</td>
<td>Jeffersonian America</td>
</tr>
<tr>
<td>AMH 3540</td>
<td>Military History</td>
</tr>
<tr>
<td>AMH 3560</td>
<td>Women in American History</td>
</tr>
<tr>
<td>AMH 3571</td>
<td>Black American History</td>
</tr>
<tr>
<td>AMH 3800</td>
<td>Canadian History</td>
</tr>
<tr>
<td>AMH 4110</td>
<td>Colonial America, 1607-1763</td>
</tr>
<tr>
<td>AMH 4130</td>
<td>The Age of the American Revolution 1763-1789</td>
</tr>
<tr>
<td>AMH 4170</td>
<td>Civil War and Reconstruction</td>
</tr>
<tr>
<td>AMH 4160</td>
<td>Jacksonian America</td>
</tr>
<tr>
<td>AMH 4201</td>
<td>Robber Baron Era</td>
</tr>
<tr>
<td>AMH 4231</td>
<td>United States History: 1914-1945</td>
</tr>
<tr>
<td>AMH 4270</td>
<td>United States History: 1945-Present</td>
</tr>
<tr>
<td>AMH 4311</td>
<td>American Culture I</td>
</tr>
<tr>
<td>AMH 4313</td>
<td>American Culture II</td>
</tr>
<tr>
<td>AMH 4510</td>
<td>Rise of the US to World Power, 1776-1914</td>
</tr>
<tr>
<td>AMH 4511</td>
<td>US as a Great Power: 1914-Present</td>
</tr>
<tr>
<td>ANT 3145</td>
<td>Archaeol of Complex Soc</td>
</tr>
<tr>
<td>ANT 3162</td>
<td>Archaeol of Mid &amp; S.Am</td>
</tr>
<tr>
<td>ANT 3163</td>
<td>Mesoam Arch</td>
</tr>
<tr>
<td>ANT 3168</td>
<td>Maya Arch</td>
</tr>
<tr>
<td>ANT 3930</td>
<td>Seminar in Arch Meth</td>
</tr>
<tr>
<td>ARH 4350</td>
<td>Baroque Art</td>
</tr>
<tr>
<td>ARH 4430</td>
<td>19th Century Art</td>
</tr>
<tr>
<td>ARH 3455</td>
<td>Art After 1945</td>
</tr>
<tr>
<td>ARH 4450</td>
<td>20th Century Art</td>
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<td>ARH 4655</td>
<td>Meso American Art</td>
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<tr>
<td>ASH 3300</td>
<td>Survey of East Asia</td>
</tr>
<tr>
<td>ASH 4404</td>
<td>China in 19th and 20th Centuries</td>
</tr>
<tr>
<td>ASH 4442</td>
<td>Modern Japan, 19th &amp; 20th Centuries</td>
</tr>
</tbody>
</table>
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 course work. All students seeking an Associate of Arts or Baccalaureate degree from UCF are required by the State of Florida to satisfy the CLAST requirement. There are several methods by which students may meet this requirement, but applicants for teacher certification may only satisfy the CLAST by earning passing scores on each subtest. Students who have completed 18 or more credit hours are eligible to take CLAST.

Transfer students with more than 60 credit hours who have not taken the CLAST or met the CLAST requirement may be admitted, but they must take the CLAST exam during their first term at UCF. If a student has not met the CLAST requirement by the completion of an additional 36 upper-division credit hours, enrollment in future terms at UCF will be restricted until the CLAST requirement has been satisfied.

Students with 60 or more hours of credit who have not taken the CLAST may be restricted from future registration. Students who have not passed all four subtests of CLAST may enroll for an additional 36 semester hours of upper-division credit. If the CLAST requirement has not been satisfied and the additional 36 hours of upper-division credit have been earned, enrollment in future terms at UCF will be prohibited until the CLAST requirement has been met. An appeal to continue enrollment must be approved by the University Admissions and Standards Committee.

CLAST is offered statewide once per semester. Students must register in advance at the Student Academic Resource Center (SARC), PCI-102, or at the UCF Registrar's Office, AD 161. Additionally, students may retake the English Language Skills, Reading, and/or Mathematics subtests on computer at the Counseling and Testing Center/Test Office, Student Resource Center, room 212. A fee will be charged for the computer-adapted CLAST. Information regarding preparation for the CLAST or Alternative criteria for meeting the CLAST requirement may be obtained from the Student Academic Resource Center (SARC), PCI-102, phone (407) 823-5130. Academic advising offices within each college and the Unit of Academic Development and Retention can also be of assistance.

SUMMER ATTENDANCE REQUIREMENT

A student entering the State University System with fewer than 60 semester hours of credit is required to enroll in a minimum of nine 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 Academic Services on the form supplied by Academic Services (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.)

GRADUATION APPLICATION DEADLINE

Students planning to graduate in the next semester must complete the Intent to Graduate form in their college during Early Registration for their last semester. Students who have not applied for graduation by the last day of classes in the semester preceding the graduation semester will not be listed in the graduation program. Graduating students are required to be enrolled at UCF during the term of graduation. Graduates may contact the Registrar's Office for commencement ceremony and guest ticket information.

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.
The University of Florida's Division of Continuing Education, Department of Independent Study by Correspondence administers all correspondence instruction for the State University System of Florida (SUS). College credit, high school credit, and continuing professional education courses are available through regular mail and fax (some by e-mail). Independent Study offers more than 150 courses to students who would like a flexible schedule or an opportunity to take extra classes. It is possible to enroll any time during the year.

In 1996 the state revised the General Provisions Rule 64-4.002, at the Bureau of Teacher Certification for the State of Florida. Any teacher in the state can now use credit correspondence courses, as appropriate, to apply toward the recertification of their teaching license. Moreover, there is no limit to the number of courses that may fulfill the requirements.

The current catalog details enrollment procedures, fees, and course information. A copy may be obtained at no cost by calling or writing to: University of Florida, Independent Study, Suite D, 2209 NW 13th St., Gainesville, FL 32609, Phone: (352) 392-1711, Ext 200; E-mail: learn@nervm.nerdc.ufl.edu. Home page: http://www.doce.ufl.edu/indstudy.

Initial certification requirements in Florida have included basic components for (Profession Certificate) full certification. The components are:

**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.

**Teaching Specialization**
Courses included in this category are normally classified as the Specialization area. Other subjects can be pursued if the specific requirements for Florida Teacher Certification have been met.

**Professional Preparation**
Students can complete 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, CLAST scores, and GPA.

b. Alternative Certification (i.e., a major in some other college) and admissibility to the professional phase of the program.

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

Beginning July 1, 1997, a Professional Florida Teacher's Certificate may be issued to persons meeting all requirements for the Temporary Certificate, satisfactory completion of the Professional Preparation, and passing scores on the Florida Teacher Certification Exam.
ACADEMIC ADVISING

RESPONSIBILITIES

The purpose of academic advising at the University of Central Florida is to assist students in their progress toward graduation. Although academic advisors assist students with academic planning, it is students' responsibility to complete the following:

NEW STUDENTS shall:
1. Return completed health form and proof of immunization (shot) records to Student Health Services prior to attendance at orientation
2. Return orientation reservation
3. Attend mandatory orientation program at the assigned time
4. Meet with academic advisors
5. Complete the course registration process. This is to be done in person
6. Secure a fee invoice after each registration transaction
7. Arrange for payment or deferment by the date posted on the fee invoice
8. Complete any changes in course schedule via touch-tone, POLARIS, or in person by the last day of add/drop
9. If it becomes necessary to withdraw from a class after the last day of add/drop, complete the appropriate paperwork available at the Registrar’s Office by the published deadline

CONTINUING STUDENTS shall:
1. Pick up a schedule of classes and your SASS degree audit with your registration appointment time as soon as they become available (approximately two weeks prior to registration)
2. Register on your scheduled appointment time by telephone or in person. Complete all changes to your schedule by the end of the published add/drop period
3. Pick up a copy of your fee invoice after each registration transaction. Make payment by the date printed on your fee invoice
4. Be aware of all important dates listed in the catalog and Schedule of Classes
5. If it becomes necessary to withdraw from a class after the last day of add/drop, complete the appropriate paperwork available at the Registrar’s Office by the published deadline
6. File your intent to graduate in your college when registering for the term in which you intend to graduate

There are a variety of academic advising systems available at the University of Central Florida in each of the six colleges and the Unit of Academic Development and Retention. These are described in the following sections:

FRESHMEN (FIRST TIME IN COLLEGE -- FTIC)

Academic Support and Advising Programs (ASAP) in the unit of Academic Development and Retention, Division of Student Development and Enrollment Services, primarily focuses on delivering support services to newly admitted freshmen or First Time in College (FTIC) students. ASAP focuses on academic advising, support, retention, and a successful progression for targeted student populations. Through a program of assessment, collaboration, and coordination, the unit provides leadership for academic orientation programs, academic advising services to freshmen, and academic success programming.

NEW FTIC STUDENTS can expect to:
1. Meet individually with a professional academic advisor from ASAP prior to or during orientation to:
   a. understand expectations for success at UCF
   b. assess high school grades, entrance and placement test scores
   c. become aware of key academic policies
   d. receive general education program advising
   e. plan and register for an appropriate schedule of classes
2. Connect to your assigned freshmen advising office and receive a letter of confirmation by the end of the first two weeks of the semester, according to the following designated order:
   a. Academic Services for Student-Athletes--if you are a student-athlete
   b. Student Academic Resource Center--if you are participating in the College Achievement Program (CAP) or Pegasus Program
   c. Multicultural Student Services--if you are a student of color (African American, Hispanic, Asian, Native American, or other)
   d. Academic Exploration Program--if you are uncertain about your program of study
   e. First Year Advising and Information Services--if you are not covered by any of the previous categories
3. Receive general education advising, academic support, registration assistance and ongoing information about university policies and procedures from your assigned advisor.

4. Receive updates on academic support, student services, and college major revisions through the "First Year Times" newsletter (published three times per year).

5. Participate in programs and advising activities that will promote a smooth transition from high school to the university experience.

6. Transfer to academic advising within the college of your major at the beginning of your sophomore year.

**COLLEGE OF ARTS AND SCIENCES**

Although students may have several advisors for varying reasons, majors within the College of Arts and Sciences must meet with their major department and their faculty academic advisor and/or the staff of the Office of Academic Support and Information Services (OASIS) as soon as possible in the first semester at the University of Central Florida.

**NEW STUDENTS** will:
1. Meet in a group setting with representatives from the College of Arts and Sciences to discuss college policies and procedures.
2. Meet with representatives of the department of the major to discuss major requirements and career opportunities, and plan a schedule of classes.
3. Refer OASIS any questions pertaining to general education requirements, AP credit, university policies and procedures, etc.
4. Register for classes at a central location.
5. Check their fee invoices to ensure accuracy of class schedule.

**CONTINUING STUDENTS** will:
1. Contact the department of their major and meet with a faculty advisor in the department during the first two months of any semester to review progress and plan a program of study.
2. Meet with their academic advisor in the department of their major prior to registration. Registration forms, classes schedules, and degree audits will be distributed in the department of the major each semester.
3. Continue to register for classes at a central location or via phone.
4. Refer to OASIS any questions pertaining to GEP, CLEP, AP credit, as well as policies and procedures.
5. Check their fee invoices to ensure accuracy of class schedule.

**COLLEGE OF BUSINESS ADMINISTRATION**

The College of Business Administration seeks to provide its students with the highest quality academic advising. The intent of the advising system is to assist prospective and current business majors in the development of an educational plan.

**NEW STUDENTS** will:
1. Meet college advising representatives in a group setting during orientation to discuss college policy, procedures, and degree programs.
2. At orientation, review degree requirements using the Student Academic Support Systems (SASS) audit and catalog to better understand degree requirements and learn how to read an audit.
3. If transfer student, meet with the transfer advisor in the Office of Student Support (OSS) during their first enrolled term to petition transfer work into degree program.
4. Register for classes at a central location in the College.
5. Meet with a faculty advisor in the department of your major to understand the career options of your major.
6. If Business pending student, be advised in the OSS.

**CONTINUING STUDENTS** will:
1. Meet with a faculty advisor or advisors in the OSS to review their academic progress and develop an academic plan. This plan should be reviewed prior to registration each term.
2. Pick up a schedule of classes and your SASS audit with your registration appointment time from the OSS. Check with the OSS or the TV monitors for dates each term.
3. Register at your scheduled appointment time in the OSS if you are "pending." Register by telephone or POLARIS if you are in your major. All changes to your schedule must be completed by the end of the add/drop period.
4. If pending student, complete all prerequisites prior to admission to upper division classes.
5. Meet with the graduation advisor in OSS during the semester prior to your graduation term. File your intent to graduate during the registration period for the term in which you plan to graduate.

**COLLEGE OF EDUCATION**

**NEW STUDENTS** will:
1. Meet college advising representatives in a group setting during orientation to:
a. Discuss College of Education admission requirements needed for enrollment in 3000/4000 level classes.
b. Review degree program requirements.
c. Understand expectations and responsibilities associated with a career in education.

2. Be assigned to a faculty advisor in the area of your major upon completion of College of Education admission requirements. The faculty advisor's name and telephone number appear on the audit.

3. Education pending students are advised in the College of Education Office of Student Services.

CONTINUING STUDENTS will:
1. Set up an appointment with your faculty advisor or the Office of Student Services, if a pending major, to review your academic progress and to develop an academic plan. Review this plan each term with your advisor prior to registration.
2. Pick up a schedule of classes and your SASS degree audit with your registration appointment time from the College of Education Office of Student Services as soon as they become available (approximately two weeks prior to registration).
3. Register on your scheduled appointment time by telephone, POLARIS, or in person in the College of Education Office of Student Services. Complete all changes to your schedule by the end of the published add/drop period.
4. File your intent to graduate in the College of Education during the registration period for the term in which you intend to graduate.

COLLEGE OF ENGINEERING

NEW STUDENTS will:
1. Meet with the Engineering Academic Affairs representative in a group setting during orientation to:
   a. review the Student Manual for Engineering Students
   b. discuss degree program requirements
   c. become aware of key academic policies
2. Meet with a faculty advisor in the department of your major to:
   a. understand the career options of your major
   b. plan an appropriate first term schedule
3. Engineering pending majors are advised in the Engineering Academic Affairs Office. They are encouraged to seek advisement on determining a major as soon as possible. Failure to declare a major by the end of your first year may result in excess hours and a delay of your graduation.

CONTINUING STUDENTS will:
1. See the department of your major during the first week of the term to be assigned a faculty advisor.
2. Set up an appointment with your faculty advisor to review your academic progress and to develop an academic plan. Review this plan each term with your advisor prior to registration.
3. Use the flow diagram or four year plan found in the student manual of your major to track your progress through your degree requirements.
4. Pick up a schedule of classes and your SASS degree audit with your registration appointment time from the department of your major as soon as they become available (approximately two weeks prior to registration).
5. Register on your scheduled appointment time by telephone, POLARIS, or in person in the Engineering Academic Affairs Office. Complete all changes to your schedule by the end of the published add/drop period.
6. Engineering students who have been placed on an engineering advisement hold will be required to submit a written schedule plan signed by their faculty advisor each semester. This plan must be submitted in person to the Engineering Academic Affairs Office each time a student uses the registration process.
7. File your intent to graduate in the Engineering Academic Affairs Office during the registration period for the term in which you intend to graduate.

CONTINUING STUDENTS will:
1. If accepted in a major, they should see their faculty advisor during the first few months of each semester to check progress toward graduation and selection of program courses. The faculty advisor’s name and phone number appear on the SASS degree audit each term.
2. **Pending majors** in limited-access programs should seek an advisor during the first few weeks of each semester in the COPHA Office of Student Support to check progress toward eligibility for application to the major.

3. Should pick up a schedule of classes and the SASS degree audit with the new registration appointment time from the Office of Student Support as soon as they become available (approximately one week before registration).

4. Students should file intent to graduate in the COPHA Office of Student Support during the registration period for the term in which graduation will occur.

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**THE HONORS COLLEGE**

**NEW STUDENTS will:**

1. Attend an Honors Orientation in the Spring semester immediately preceding their first semester of classes at UCF to discuss The Honors College course and GPA requirements. At this time, students will reserve Honors courses for their first semester at UCF.

2. Meet with an academic advisor from the department of their major (within the other five colleges) to select the remainder of their first semester courses.

**CONTINUING STUDENTS will:**

1. Contact the department of their major and meet with a faculty advisor in the department during the first two months of any semester to review progress and plan a program of study.

2. Meet with their academic advisor in the department of their major prior to registration. Registration forms, class schedules, and degree audits will be distributed in the department of the major each semester.

3. Make an appointment with an Honors Director to register for their Honors classes. Based on the recommendation of their academic advisor and the requirements for University Honors, an Honors Advisor will assist with their course selection.

4. Continue to register for classes at a central location or via phone.

5. Check their fee invoices to ensure accuracy of class schedule.

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**BREVARD CAMPUS**

**NEW TRANSFER STUDENTS** enrolled in majors offered at the Brevard Campus: Nursing, Public Administration, Criminal Justice, General Business Administration, Legal Studies, Communicative Disorders, Engineering Technology, Elementary Education, Exceptional Education, Psychology, and Liberal Studies, will meet with faculty advisors in a group setting during orientation to:

1. Discuss degree program requirements

2. Understand career options of the major program of study

3. Plan an appropriate first term schedule of courses

**CONTINUING STUDENTS may meet with their advisors on an on-going basis.**

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**DAYTONA BEACH CAMPUS**

**NEW TRANSFER STUDENTS** are most welcome to meet with the counseling/advising staff prior to applying to UCF at Daytona Beach to discuss programs and requirements. And, of course, students are welcome to meet with counselors at any time while enrolled.

Students may enroll in the following majors offered at the Daytona Beach Campus: Criminal Justice, Elementary Education, Exceptional Education, General Business Administration, Legal Studies, Liberal Studies, Nursing (RN to BSN), Psychology, and Social Sciences. Students also have the option of completing most of the course work in the following majors: Accounting, Economics, Engineering Technology, Finance, Management, and Marketing. Students will meet with faculty advisors in a group setting during orientation to:

1. Discuss degree program requirements

2. Understand career options of the major program of study

3. Plan an appropriate first term schedule of courses

Any student who has not been awarded their AA degree nor completed UCF general education requirements should make an appointment as soon as possible with the advising office to clarify university policies that will affect the student’s status and graduation.

**CONTINUING STUDENTS may meet with their advisors on an on-going basis.**
FLORIDA COMMUNITY COLLEGE TRANSFER GUIDE

Students with an AA degree from a Florida public community college are a protected population of students under the Florida Articulation Agreement law. Because they have received the Florida AA degree, students are guaranteed certain transfer rights and privileges.

The following guide is intended to help students successfully perform transfer responsibilities which will not only ensure a smooth and efficient transfer, but also maintain the provisions provided under the articulation agreement.

HOW WILL MY CREDITS TRANSFER?

All college level credits earned for which we have official transcripts are compiled into a Transfer Summary Report (TSR) soon after you are admitted. Some credits listed on the TSR may not be applicable toward graduation course requirements, i.e., some departments do not accept a transfer grade of “D.” You should review this carefully to ensure that all credits are included. The TSR is the basis for constructing your Student Academic Support System (SASS) Audit. This audit applies your earned credits to your intended degree program, providing you with an assessment of which degree requirements have been met and those remaining to be satisfied. You and your advisor use the audit to schedule courses that meet your remaining requirements.

You must make sure that all official college transcripts, including a final transcript from the last institution you attended, are submitted to the Undergraduate Admissions Office within ten days of the start of your first term at UCF. If we do not receive them, a hold is placed on your record, which makes it difficult for you to receive financial aid or register for a future term.

SHOULD I BE CONCERNED WITH POSSIBLE EXCESS HOUR SURCHARGES?

Yes. Transfer students who first enroll at a Florida State University System (SUS) institution in the fall semester, 1998, are subject to additional charges when they enroll in courses that exceed 15% of the “hours remaining for the degree.” At this time, the charge is set at an additional 50% of the cost of tuition. Transfer students whose first semester at a Florida SUS occurs prior to the fall semester, 1998, are exempt from the excess hour charges. This is not a catalog-based requirement but solely based upon the first semester of enrollment (fall, 1998).

Excess hours can include any hours earned or attempted after you enroll at UCF. Attempted hours shall include hours earned, failed, withdrawn with fee liability, incomplete hours, and repeated hours.

There are some categories of courses which are exempt from the above charges. Please check with an academic advisor to learn the exact courses.

WHAT IF I HAVE NOT TAKEN THE CLAST?

Students can be admitted without completing the CLAST. However, be aware that without the CLAST completed, students are not awarded the AA degree; therefore, privileges provided by the AA degree are not granted, i.e., grade forgiveness, Gordon Rule, and the completion of general education requirements. Students lacking one or more sections of the CLAST should request from the community college records office the following statement placed on their transcript: “General Education Requirements Met.” This statement will protect your general education requirements (including Gordon Rule courses). Without this statement you must satisfy UCF’s general education requirement and Gordon Rule courses. However, no grade forgiveness is given without the AA degree awarded. If your grade point average falls below a 2.0 (without grade forgiveness), you will not be admitted. Failure to complete the CLAST could also affect student financial aid decisions. Check with the Financial Assistance Office for more details. CLAST must be taken during the first term of enrollment at UCF.

We will accept all CLAST alternatives awarded by the community college. Also, you are eligible for all CLAST alternatives that you were eligible for at the community college.

Students entering the College of Education may not use waivers or alternatives to satisfy CLAST requirements. Education majors who have used alternatives or waivers should speak with an advisor.

WHAT ABOUT FOREIGN LANGUAGE REQUIREMENTS?

To be admitted to the university you should complete two credits/years of the same foreign language or American Sign Language in high school (document by submitting an official high school transcript) or 8-10 semester hours in the same language at the college level or pass a CLEP or other proficiency examination. Students admitted without this requirement must satisfy it prior to graduation.

To graduate with a BA degree students must demonstrate foreign language proficiency in the same language, either through college level course work or testing, equivalent to one year of college instruction. Some majors require additional proficiency. Consult the UCF catalog for graduation
WITH WHICH ACADEMIC POLICIES SHOULD I IMMEDIATELY BECOME FAMILIAR?

It is important that you are kept informed of all requirements to transfer to UCF. Your community college counselor/advisor is provided with a transfer counseling manual that lists all requirements to enter each program at UCF. This manual can help you to determine which classes you need to complete before transferring. Additionally, information for limited access majors that require special application deadlines, GPA requirements, testing, portfolios, letters of recognition, etc. will be listed.

HOW CAN MY COMMUNITY COLLEGE COUNSELOR/ADVISOR HELP ME?

Receiving your AA degree from a Florida public community college ensures you special benefits. The following are some of the advantages of receiving your AA degree:

- Acceptance of at least 60 credit hours toward the baccalaureate degree; no additional general education core requirements.
- Acceptance of all courses taken at your community college, if the same course with the same course number is offered at UCF.
- All accelerated programs (CLEP, AP, IB, PEP, early admission, and dual enrollment courses) within the AA degree from the community college will transfer into UCF.
- Advance knowledge of selection criteria for limited access programs; equal opportunity with UCF native students to enter limited access programs.
- All grade forgiveness awarded under the AA degree will be honored.
- As an AA degree graduate, you are guaranteed these rights under the statewide Articulation Agreement.

Students who do not complete the Florida public community college AA degree must complete UCF's general education requirements, which may be considerably different than your community college's. In addition, no grade forgiveness will be honored. All attempted credits will be averaged into your GPA. If you have less than 60 college credits, you must also submit high school transcripts and SAT or ACT scores to determine your eligibility for admission.

The best and most complete source for academic policy information is the UCF catalog. Students should refer to their catalog often. It is the students' responsibility to know the policies, rules, and regulations of the university.

Students transferring to UCF should pay particular attention to the following policies because they may affect initial registration:

1. Add/drop policy. Students are not dropped from a class for non-attendance; therefore, you will be financially obligated to pay for the class. PAYMENTS WILL BE AUTOMATICALLY DEDUCTED for financial aid recipients who have payments deferred and do not drop unwanted courses. Some students are not aware of the automatic deduction until the next semester when they are depending on their financial aid to pay fees. Add/drop occurs during the first week of classes and may be done by phone or at designated walk-by locations. (Please refer to the catalog for the entire add/drop policy).

2. Withdrawal policy. The withdrawal date is mid-semester. Please refer to the UCF catalog for exact dates each semester. You will not be automatically withdrawn from a class by your professor for non-attendance. All withdrawals take place in the Registrar's Office located on the first floor of the Administration Building. You cannot withdraw by phone. Approved late withdrawals are recorded as "WP" or "WF" on your transcript, depending on whether the professor states that you are passing or failing at the time of the petitioned withdrawal. Approved medical withdrawals are recorded as "WM." A "WF" is calculated into the grade point average as an "F." A "WP" or "WM" is not calculated into the GPA.

3. Forgiveness policy. Grade forgiveness is limited to two courses. If you have repeated two or more courses at a Florida public community college or Florida public university and have included those courses in the AA degree, no further grade forgiveness is allowed. NO GRADE FORGIVENESS IS HONORED FROM ANOTHER INSTITUTION UNLESS IT IS PART OF AN AA DEGREE FROM A FLORIDA PUBLIC COMMUNITY COLLEGE OR FLORIDA PUBLIC UNIVERSITY. The grade forgiveness request form must be returned to the Registrar's Office by the last day of add/drop for the term in which you repeat the course. (Please refer to the catalog for the entire forgiveness policy and appropriate deadlines).

4. Third attempt policy. All students enrolled in undergraduate courses in the fall 1997 term are subject to surcharges when they enroll in a course for three or more times. Completed courses, withdrawals, and courses with incomplete grades are counted as attempts, including courses repeated in order to raise a GPA or achieve a specific grade. When you enroll in a course for three or more times, you will be assessed a surcharge approximately equal to out-of-state tuition.
WHEN DO I PAY MY BILL? For students beginning their initial semester, tuition and fee payments are due within three (3) days after classes begin. A late payment fee of $50 will be assessed on all accounts not paid or deferred by the payment deadlines. Please note that you will not be sent a bill. It is up to you to pick up a fee invoice/schedule at your college advising office or the Registrar's Office. Payments may be made at the Cashier's Office (AD 108) or mailed to:

University of Central Florida
Cashier's Office
PO Box 620000
Orlando, FL 32891-8449

Please do not mail or place cash in the night depository. Please include your social security number on all checks and money orders. Credit cards are not accepted.

Financial Aid deferments will automatically be reflected on your fee invoice. If the total amount of your tuition and fees exceeds the amount of your deferment, the difference must be paid by the due date on your fee invoice. The following programs are not included in the automatic deferral program: work/study programs, third party deferrals and other waivers, and direct pay scholarships.

CAN TRANSFER STUDENTS PARTICIPATE IN THE HONORS PROGRAM? Community college transfers and other students who have completed their general education requirements may participate in the Honors in the Major program through the completion of departmental honors requirements, including an original research project. Transfer students who apply for admission to departmental honors programs must have a minimum GPA of 3.5. Successful completion of Honors in the Major will be noted on your transcripts. Call (407)823-2076 for more information.

WHAT ABOUT PARKING? To park on campus you must register your vehicle with UCF Parking Services and purchase a parking decal no later than the first week of classes. You will need to present a valid UCF ID and vehicle registration. Decals can be purchased for one, two, or three semesters and allow students to park in any student designated lot. Cars parked without valid decals or parked in a faculty/staff lot will be ticketed by Parking Services.

WHO DO I CALL FOR HELP? For additional information or assistance during the transfer process, contact the UCF Office of Transfer Services at 823-5959.

- Transfer Concerns and Questions
- Course Equivalencies
- Transfer Scholarships
- Common Program and Course Prerequisites
- Critical Academic and Transfer Policies
- Foreign Language Requirements
- Campus Tours and Events
- UCF Critical Dates and Deadlines
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 Academic Services, AD 210 and should be completed by the end of the first 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, Economics, English, Foreign Languages Combination, French, General Studies, History, Humanities, Interpersonal Communication, Journalism, Liberal Arts, Liberal Studies, Motion Picture Technology, Music, Music Education, Organizational Communication, Philosophy, Political Science, Psychology, Radio-Television, Sociology, Spanish, Theatre

Bachelor of Fine Arts (B.F.A.)
**Majors:** Art, Theatre

Bachelor of Music Performance (B.M.)

Bachelor of Music Education (B.M.E.)

Bachelor of Science (B.S.)
**Majors:** Biology, Chemistry, Computer Science, Forensic Science, Liberal Studies, Mathematics, Physics, Psychology, Social Sciences (interdisciplinary), Statistics

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

College of Education
Bachelor of Science (B.S.)

College of Engineering
Bachelor of Science (B.S.)

College of Health and Public Affairs
Bachelor of Arts (B.A.)
**Majors:** Communicative Disorders, Legal Studies, Public Administration

Bachelor of Science (B.S.)
**Majors:** Cardiopulmonary Sciences, Communicative Disorders, Criminal Justice, Health Information Management, Health Sciences, Health Services Administration, Legal Studies, Medical Laboratory Sciences, Molecular Biology and Microbiology, Public Administration, Radiologic Sciences, Physical Therapy

Bachelor of Science in Nursing (B.S.N.)
**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 admission requirements of the major department and the UCF residency requirement for that degree (see residency requirement discussion in the chapter, Undergraduate Degree Requirements). Students holding the baccalaureate degree from accredited U.S. institutions are considered to have completed CLAST, Gordon Rule, foreign languages, and General Education Program Requirements. Students who hold degrees from foreign institutions may be required by the Office of Academic Services 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.

If you plan to graduate with a minor, have that minor added to your audit during the Early Registration period. Contact the undergraduate records office of the college offering the minor for more information. All graduation requirements must be from a single UCF catalog for which a student is eligible.

### ACADEMIC MINORS

<table>
<thead>
<tr>
<th>College or Department Awarding Minor*</th>
<th>Name of Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Arts &amp; Sciences</td>
<td>African American Studies, American Studies, Canadian and Commonwealth Area Studies, Judaic Studies, Judaic Studies Certificate, Latin American and Iberian Area Studies, Psychology, Russian Area Studies, Women's Studies</td>
</tr>
<tr>
<td>College of Business Administration</td>
<td>Business Administration (for non-Business Administration majors), Economics (for Business and non-Business majors), International Business (for Business majors only), Hospitality Management, Management Information Systems (for Business and non-Business majors), Marketing (for Business and non-Business majors)</td>
</tr>
<tr>
<td>College of Engineering</td>
<td>Aerospace Studies, Military Science, Space Studies, Technology and Society</td>
</tr>
<tr>
<td>College of Health and Public Affairs</td>
<td>Communicative Disorders, Criminal Justice, Gerontology, Health Sciences, Health Services Administration, Legal Studies, Microbiology, Public Administration</td>
</tr>
<tr>
<td>Multidisciplinary</td>
<td>Space Studies</td>
</tr>
<tr>
<td>Department of Art</td>
<td>Art History, P.A.V.E., Studio Arts</td>
</tr>
<tr>
<td>Department of English</td>
<td>Technical Writing and Editing, Creative Writing, Literature,</td>
</tr>
</tbody>
</table>
GRADUATE PROGRAMS

Department of Foreign Languages
Department of History
Department of Philosophy
Department of Music
Department of Theatre
Department of Biology
Department of Chemistry
Department of Computer Science
Department of Mathematics
Department of Physics
Department of Statistics
Department of Aerospace Studies
Department of Military Science
School of Communication
Department of Political Science
Department of Psychology
Department of Sociology and Anthropology
Department of Economics

Linguistics, Writing
History
Environmental Studies, Humanities, Philosophy, Religious Studies
Music
Theatre
Biology
Chemistry
Computer Science, Applied Computer Science, Computer Science for Business Majors
Mathematics
Physics
Statistics
Aerospace Studies (Air Force ROTC)
Military Science (Army ROTC)
Interpersonal Communication, Organizational Communication, Mass Communication, Journalism AD/PR Track, Journalism News/Edit Track, Radio-TV Asian Studies, Political Science, Political Science/Pre-Law Clinical, Human Factors, Industrial/Organizational

*Contact the College/Department for the requirements for each minor.

See listing at the beginning of each college section. For further information on a particular program, contact the departmental office in the respective college or see the Graduate Catalog.

LINC PROGRAM
Program Coordinator: Dr. H. Sweet, CAS 191, Phone (407) 823-3253, email: linc@ucf.edu

The Learning in Communities program (LINC) at UCF is designed to enrich students' experience in select General Education courses. All of the GEP courses provide the intellectual foundation and communication skills needed to be successful. Those GEP sections which are joined in the LINC program provide additional benefit since they are connected into a single, six credit course which is jointly taught by two faculty.

Faculty teaching LINC sections work together to integrate their courses, thereby reinforcing the material presented in both. Students in the LINC sections form a greater bond, both among themselves and with the teacher. Studies indicate that students work together and improve their performance in both subjects. Although treated as a single class during the term, separate academic credit and grades are provided for both participating courses.

PRE-HEALTH PROFESSIONS ADVISEMENT OFFICE
Preprofessional Coordinator: Dr. O.M. Berringer, HPA 124, Phone (407) 823-2670, Email: buddb@pegasus.cc.ucf.edu

The Pre-Health Professions Advisement Office was established to function as a service to all students preparing for and seeking admission to professional schools of chiropractic, dentistry, medicine, osteopathic medicine, optometry, pharmacy, podiatry, and veterinary medicine. The services afforded students through this office are numerous and range from basic counseling in pre-health professions matters to providing a Composite Evaluation of the student (upon his/her request) to each professional school to which the student applies. However, in order to be considered for a Composite Evaluation, the student must have at least 30 semester hours of typical undergraduate pre-health professions courses taken at UCF by the end of the spring semester preceding his/her application to the professional schools (usually between the junior and senior year). If applying to allopathic medical schools (M.D. degree granting), you will need to show an overall GPA of 3.20 or better to qualify for a full Composite Evaluation packet. Additionally, all pre-health professions students are strongly encouraged to affiliate with and participate in the activities of one or more of the student-related organizations such as the Pre-Professional Medical Society (PPMS), American Medical School Association (AMSA), Student Wellness Advocate Team (SWAT), etc.
PRE-HEALTH PROFESSIONAL PLANNING
Admission to a health professional school is highly competitive. For this reason, pre-health professions students should pay close attention to the characteristics of successful applicants. Since pathways such as "pre-med" do not result in a degree, each pre-health professions student is urged to carefully select a degree-granting major. This will not only allow one 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 pre-health professions 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 pre-health professions courses to be obtained. Obviously, students are expected to be high achievers, and to obtain good grades with heavy credit hour loads and rigorous course combinations. 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. Sustained high-level performance while carrying 15 or more credit hours is one of the strongest predictors of success in professional school.

Preprofessional advisement should not be confused with academic advisement. Class scheduling and progress toward a given degree should be carefully monitored by the student's faculty (academic) advisor. Course selection and scheduling, as well as progress toward a given degree, should be carefully monitored by a student's degree track faculty (academic) advisor. Preprofessional advisement deals primarily with application and admission procedures.

CURRICULA GUIDELINES
All pre-health professions 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, applications, admission tests, interviews, admissions, scholarships, etc.) is explained in depth. Following this focus on awareness, students are prepared to make informed decisions relative to planning their pre-health professional studies and the application process. Concerning required courses, all pre-health professions 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, BSC 2011C
Genetics PCB 3063 and 3063L
General Chemistry CHM 2045C, 2046, 2046L
Organic Chemistry CHM 2210, 2211, 2211L
Microbiology MCB 3203
English Composition ENC 1101, 1102
Calculus MAC 2233 (although MAC 2233 is acceptable, the MAC 2311, 2312 sequence is preferable)
Physics PHY 2053C, 2054C (although the preceding courses are acceptable, the sequence PHY 2048, 2048L, 2049L may be preferable)
Statistics STA 2023

Additional required/strongly recommended courses not common to all preprofessional students are the following:

Premedical and pre-dental students should take:
Molecular Cell Biology PCB 3023
Comparative Anatomy ZOO 3713C or
Human Anatomy ZOO 3733C
Human Physiology PCB 3703C
Embryology ZOO 4603C
Histology ZOO 4753C
Microbiology MCB 3203
Immunology PCB 3233
Biochemistry I & II BCH 4053, 4054

Preoptometry students should take:
General Biological Sciences BSC 2010C
Microbiology MCB 3203 and it is strongly recommended they take
Human Anatomy ZOO 3733C and/or
Human Physiology PCB 3703C
**Prepharmacy** students should take:
- General Biological Sciences: BSC 2010C
- Microbiology: MCB 3203 and it is strongly recommended they take
- Histology: ZOO 4753C and
- Biochemistry: BCH 4053

**Preveterinary** students should take:
- General Biological Sciences: BSC 2010C
- Analytical Chemistry: CHM 3121C
- Biochemistry I: BCH 4053
- Microbiology: MCB 3203
- *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.*

It is strongly recommended they also take:
- Comparative Anatomy: ZOO 3713C
- Histology: ZOO 4753C
- Embryology: ZOO 4603C
- Biochemistry I: BCH 4053

**For Maximal Preparation:**
Additionally, the UCF courses Biochemistry I (BCH 4053), Histology (ZOO 4753C), Embryology (ZOO 4603C), Genetics (PCB 3063), Neuroanatomy (ZOO 5745C), Human Anatomy (ZOO 3733C), Human Physiology (PCB 3703C), and Endocrinology (PCB 5806) are strongly recommended for maximum preparation for the Basic Medical Sciences of most first year professional school curricula.

**Meaningful Electives:**
All pre-health professions students are strongly encouraged to make prudent selections of elective courses complementary to their pre-health professions preparation. Listed below are a number of appropriate courses from which elective selections can be made.

- ANT 4462 Medical Anthropology
- ANT 2511 The Human Species
- APB 3600 Introduction to Pharmacology
- APB 4652 Medical Pharmacology II
- COM 3011 Communication and Human Relations
- DEP 3464 Psychology of Aging
- HIS 3462 History of Science
- HSA 3122 U.S. Health Care Systems
- HSA 4121 History and Future of Health Care
- HSC 3640 Health Law
- HSC 3593 AIDS: A Human Concern
- HSC 4564 Health Care Needs of the Elderly
- HSC 4651 Health Care Ethics
- HSC 4550 Pathophysiologic Mechanisms
- LAT 1120/21 Elementary Latin Language and Civilization I and II
- LIT 3202 Death and Dying
- PHI 2101 Critical Thinking
- PHI 2600 Ethics
- PUP 4602 Politics of Health
- SOP 3724 The Psychology of Racial Prejudice
- SOW 3104 Assessing I: Human Development
- SOW 3111 Assessing II: Human Systems
- SOW 3203 Social Welfare and Community Resources
- SPA 3000 Detection and Prevention of Speech and Hearing Problems
- SPA 3002 Introduction to Communicative Disorders
- SPC 3301 Interpersonal Communication
- SPC 4331 Nonverbal Communication
- SYG 2010 Social Problems
- SYO 3410 Sociology of Mental Illness
- SYO 4400 Medical Sociology
- SVP 3510 Sociology of Deviant Behavior
- SVP 3530 Juvenile Delinquency
- SVP 3551 Sociology of Alcoholism
- SVP 4550 Sociology of Drug Abuse
- SVP 4730 Sociology of Aging
CHOOSING A MAJOR AND ACADEMIC ADVISEMENT

The advantage of declaring a major early is to be linked with a UCF faculty member who will serve as the student's academic advisor within his or her chosen degree track. Problems are less likely when students remain in contact with conscientious advisors.

Students are encouraged to investigate several degree pathways and to talk with a number of students who have selected those majors. Thorough investigation at the start of the student's academic career will help him or her in making a reasonable choice. The following information offers a general guideline in selecting an academic major.

Choice of Major: The aspiring pre-health professional student is expected to declare a major within one of the degree-granting departments of the University. Terms such as premed or prevet are simply descriptive labels, as UCF does not award pre-health professional degrees. This should not be confused with not offering premedical preparation. The institution offers a very strong premedical pathway with a highly organized support system for its applicants.

Students may elect any major described in the UCF Catalog. This includes such varied pursuits as Psychology, Engineering, or Liberal Studies.

Traditional vs. Non-Traditional Majors: Traditional majors for pre-health professionals are characterized by degree requirements which overlap most professional school admission requirements. Chemistry, Biology, Molecular Biology and Microbiology are the majors most often chosen at UCF, but others such as Psychology, Physics, and Mathematics are also appropriate choices.

Non-Traditional Majors: Such majors as English, Philosophy, Music, Engineering, and so forth, have the disadvantage of not overlapping with admission requirements. If a student elects a non-traditional pathway and does not complete more than the minimum science requirements, she or he will be expected to have accomplished an outstanding performance record in the science classes taken.

Ultimately, the choice belongs to the student. Professional schools are less concerned with what undergraduate major one chooses than with how well he or she performed and his or her choice of enrichment electives. Factors to consider are personal interests, finance for college, and career alternatives. The curriculum for the first two years is very similar for all pre-health professions students.

DATES OF IMPORTANCE

All pre-health professions students should be aware of registration deadlines and test dates for their specific admissions exam (DAT, MCAT, OAT, GRE, etc.). In addition, most four-year health professions schools subscribe to professional application services (AMCAS, ADDSAS, ACOMAS, etc.). The applicant must be aware of which schools are members of the service and thus require completion of a thorough application packet provided by the various Application Services. Some professional schools do NOT subscribe and therefore, the student applicant must deal directly with the admissions office of such schools.

The preprofessional screening process is initiated in February. Application packets are available at the Pre-Health Professions Advisement Office during the month of February. Dental and veterinary medicine applicants should return completed packets by the April 15. All other applicants (chiropractic, medical, optometry, podiatry, pharmacy, and veterinary) must return completed packets by May 1.

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-OAT, pharmacy-PCAT, podiatry-MCAT, veterinary medicine-GRE or VCAT). These examinations are generally offered twice each year, in the Spring and Fall. Pre-health professions 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 and review programs available to assist applicants with their preparation. All applicants are encouraged to maximize their preparation before registering to take any of these exams the first time. Taking an admissions exam on a trial basis is not recommended.

RELATED REFERENCES

Publications of special interest and usefulness to pre-health professional students include the following:

1. Admission Requirements of U.S. and Canadian Dental Schools, published by the American Associate 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 Medical School Admission Requirements in the United States and Canada, published by the Association of American Veterinary Medical Colleges, Betz Publishing Company, 351 West Camden Street, Baltimore, MD 21201-2436

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.

**Other Health Professions**
For Nursing and other Allied Health Professions, see College of Health and Public Affairs.

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**COOPERATIVE EDUCATION**

**Director:** Sheri Dressler, PH 208, Phone (407) 823-2667

University students actively plan their careers through participation in Cooperative Education. Co-op is an academic program combining on-campus classroom study with real-world work experience. Students work for multiple terms in progressively responsible, paid work assignments in industry, directly related to their major or career goal. Since this experience occurs while students are in the midst of completing their academic programs, co-op provides a means to test career goals, improve academic performance, develop personal and profession work competencies, generate income, and increase prospects for full-time employment upon graduation.

All co-op students are registered in co-op courses every term that they work at a co-op work site, either for credit or for zero hours. They may be registered for co-op credit when this credit counts toward their degree requirements. All co-op registration is done through the Co-op Office.

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. As an additional option, Co-op administers the Florida Work Experience Program (FWEP) through which qualified students have access to additional job opportunities.

Eligibility requirements for Co-op include 1) full-time enrollment in an undergraduate or graduate degree program at UCF, 2) completion of a minimum of 20 college semester hours at any accredited educational institution, 3) ability to make a minimum two semester work commitment, and 4) maintenance of a minimum 2.5/4.0 UCF grade point average. Students should apply one term before they want to participate to allow time to obtain appropriate learning opportunities.

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

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**THE HONORS COLLEGE**

**Dean:** Allyn MacLean Stearman, 202 Phillips Hall, Phone (407) 823-2076, Fax (407) 823-6583
**Associate Dean:** Stuart A. Lille
**Director of Honors Student Services:** Awilda Cintrón-Ríos
**Director of Honors Advising:** Christy Marks
**Office Manager:** Gloria Lambert
**Program Assistant:** Kerstin Colón Casey
**Senior Secretary:** Christine Breeze

The Honors College at UCF is designed to provide a challenging and exciting educational experience to academically talented students who have demonstrated an ability and desire to achieve scholarly excellence. The Honors College also seeks students with particularly exceptional talents. It is committed to diversity in both the composition of its student body and the programs which it supports.

The Honors College combines the atmosphere of a small college with the intellectual stimulation of a large research university. Honors students receive an education that prepares them to enter the best
graduate and professional schools as well as distinguished careers in business and public service.

Honors classes are small, and course work crosses traditional disciplinary boundaries to encourage critical thinking among Honors students. Beyond the classroom, special guest lecturers and presentations, field trips, and university-related service activities expand the horizons of Honors students.

Students in the Honors College are actively involved in social activities and course programming. Honors students have access to the Honors reading room and computer lab, and to housing in Citrus Hall. They also have early registration privileges.

Students may pursue Honors through two distinct programs, University Honors and Honors in the Major.

**University Honors.** Admission to University Honors is normally granted by The Honors College to incoming freshmen. Students who seek admission to University Honors must apply directly to The Honors College. It is the student's responsibility to obtain the appropriate Honors College admissions information from The Honors College Office and to follow the procedures necessary to enter the program. Prospective Honors students and their parents are encouraged to visit with the Honors staff if they have questions.

Acceptance: A student who plans to enter The Honors College and who is notified in writing of acceptance into University Honors must submit one-time, non-refundable membership dues of $75.00. The membership dues should be sent to The Honors College Office promptly to reserve one of the limited number of seats available each year. Reservations are made strictly on a first-come, first-serve basis. Once the student has completed the acceptance procedures, she or he will be provided with timely notice of Honors registration and orientation. The $75.00 payment will normally be by check or money order made out to: UCF Foundation-Honors. If for any reason any applicant cannot make this payment, he or she should discuss this with the Director of Honors Student Services. No student will be denied admission into the program because of inability to pay the membership dues.

A student who is not admitted into the program as an entering freshman may apply for admission after completing at least twelve (12) semester hours at the University of Central Florida with at least a 3.2 GPA. Non-traditional students who are returning to complete their university education after having been out of college for a period of several years, or who have never previously been enrolled in college, are especially encouraged to apply for admission to The Honors College after one semester of at least 3.2 GPA work at UCF.

Students must maintain a 3.2 overall GPA and a 3.0 GPA in Honors courses in order to remain in the University Honors. In addition to meeting the GPA requirements, to graduate with University Honors the student must: 1) complete 12 hours of course work in Honors sections of the General Education Program; 2) complete with a "Satisfactory" (S) grade Honors Symposium; and 3) meet upper division Honors course requirements determined by college or major.

Qualified students who transfer to UCF with an AA Degree with Honors from a Florida community college which has signed an Honors Articulation Agreement with The Honors College will be admitted into University Honors with junior standing. Further information on this program is available from the Honors Office.

Students who complete a semester abroad or receive six or more hours of upper-division credit for study abroad as part of the University Study Abroad 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 University Honors, the student must file a completed "Intent to Graduate with University Honors" form with The Honors College.

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.

**Summary Table of University Honors Requirements**

<table>
<thead>
<tr>
<th>GEP</th>
<th>Symposium</th>
<th>Upper Division Major</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 hours</td>
<td>1 hour</td>
<td>See requirements by College</td>
</tr>
</tbody>
</table>

**Honors in the Major.** Application for admission to the Honors in the Major program will be made
to The Honors College following consultation by the student with the Department Chair or Honors in the Major Coordinator in the student's major department. An Honors in the Major Handbook which outlines the procedures for completing this program is available in The Honors College Office. Requirements for admission to Honors in the Major are: the completion of at least sixty (60) semester hours of college credits including at least twelve (12) graded upper division hours at the University of Central Florida; at least a 3.5 within the major and at least a 3.2 GPA cumulative upper-division courses regardless of institution; approvals by the department from which Honors in the Major is sought; approval of the Associate Dean of The Honors College; and payment of one-time membership dues of $25.00.

Honors in the Major is awarded upon completion of an advanced Honors Project or Thesis, and the completion of at least three (3) but not more than six (6) hours of Directed Readings or Honors Seminar in the Major course work as determined by the academic department, and at least three (3) but not more than six (6) hours of Honors Thesis or Project work taken in the college or department of major. Departments or colleges may set additional requirements for Honors in the Major to be completed. The Honors Project or Thesis is to be completed under the direction of a committee of three faculty members, one of whom is the project or thesis Chair. This program is designed to encourage original and independent work by the student. A copy of the thesis, project, or creative work will be placed in the University Library with another copy remaining in the Honors Office.

By the end of the second week of the term in which a student plans to graduate with Honors in the Major, the student must file an "Intent to Graduate with Honors in the Major" form with The Honors College Office.

A student who completes all of the requirements for Honors in the Major will have the designation of "Honors in the Major in (subject area)" noted on the Diploma and the university transcript.

**Summary Table of Honors in the Major Requirements**

<table>
<thead>
<tr>
<th>Directed Readings or Seminar</th>
<th>Honors in the Major and Thesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 to 6 hours</td>
<td>3 to 6 hours</td>
</tr>
</tbody>
</table>

1 When a student has an exceptionally high number of dual enrollment, Advanced Placement, CLEP, or other work which is credited toward GEP required hours, she or he may consult with the Director of Honors Advising about substituting Honors Seminar credit for Honors GEP course work.

2 Honors Symposium is a one credit hour course offered in the Fall semester of each year. This course includes guest lectures, video and film presentations, and live performances by guest artists. A field trip is included as part of the Honors Symposium. Attendance at this series will be mandatory for all students seeking University Honors. Only one absence is permitted. The course is graded on a Satisfactory/Unsatisfactory basis.

3 These upper division requirements for the completion of University Honors are under review and revision by the professional colleges. The current requirements are as follows:

- **University Honors Upper Division Program Requirements I: Colleges of Arts and Sciences, Business Administration, and Education**

  Complete 6 credit hours of Honors Seminars (2 courses) and 3 credit hours (1 course) of Honors Lecture for a total of 9 hours.

- **University Honors Upper Division Program Requirements II: College of Engineering**

  1) Complete the Honors Seminar (3 hours). The seminar chosen by the Engineering University Honors student must be outside the student's department of major (although it may be within Engineering).

  2) Complete a minimum of two of the four Honors Engineering core courses (6 hours). The schedule for these courses is listed below:

  **Fall**

  - STA 3032H Probability and Statistics for Engineers
    Offered every year, Fall semester
  
  - EGN 3321H Engineering Analysis--Dynamics
    Offered every year, Fall semester

  **Spring**

  - EGN 3301H Engineering Analysis--Statics
    Offered every year, Spring semester
  
  - EGN 3371H Principles of Electrical Engineering
    Offered every year, Spring semester

  3) Complete the Honors Engineering Seminar (3 hours)

  - EGN 4931H Honors Seminar--Research
Offered every year, Spring semester

- **University Honors Upper Division Program Requirements III: College of Health and Public Affairs**

  1) Complete the Honors Seminar (3 hours). The seminar chosen by the COHPA University Honors student must be outside the student's department of major (although it can be within COHPA).

  2) Complete at least one Honors interdisciplinary seminar offered by the College of Health and Public Affairs within or outside the major (3 hours).

  3) Complete a third interdisciplinary Honors Seminar within or outside COHPA or an Honors section of the following selected core courses (3 hours):

  **Department of Major Honors Core Courses**

  The designated Honors sections of the core courses for each Department/Program are as follows:

  Communicative Disorders
  SPA 3002H Intro to Communicative Disorders

  Criminal Justice
  CCJ 4701H Criminal Justice Research Methods

  Legal Studies
  PLA 3203H Civil Practice and Procedure

  Micro and Molecular Biology
  PCB 4524H Molecular Biology II

  Nursing
  NUR 3165H Critical Inquiry

  Physical Therapy and Health Professions
  HSA 3122H U.S. Health Care Systems

  Public Administration
  PAD 3003H Intro to Public Administration

  Social Work
  SOW 3300H Generalist Practice in Social Work

  Microbiology Majors will complete the following requirements:

  1) Complete the Honors Seminar (3 hours). The seminar chosen by the COHPA University Honors student must be outside the student's department of major (although it can be within COHPA).

  2) BSC 3404H Honors Quantitative Biological Methods with a grade of B or better (4 hours).

  3) PCB 4524H Honors Molecular Biology II with a grade of B or better (3 hours).

If you have any questions about these requirements, please see a member of The Honors College advising staff or a member of the College of Health and Public Affairs advising staff.

4 An Honors Seminar normally is an upper division offering intended for all majors. Most seminars are strongly interdisciplinary, may be team-taught, and present cutting-edge topics by instructors who must present course proposals for consideration by the University Honors Committee. Enrollments are limited to 20 students. At least one of these seminars will form part of the revised University Honors upper division curriculum currently under adoption by each college or major.

5 It is the student's responsibility to obtain an Honors in the Major Committee Chair who will undertake the responsibility of directing the Honors Directed Readings and Thesis and in consultation with the student, form the Honors in the Major faculty committee. The student is responsible for filing with The Honors College Office an Application to complete Honors in the Major which must be signed by the Associate Dean of The Honors College, the Thesis Committee Chair, and the Chair or Honors Coordinator of the major department. A student must receive a grade of at least "B" in Directed Readings or Honor Seminar, and Thesis hours, to be awarded credit toward Honors in the Major.
The Division of Continuing Education is the unit within Academic Affairs which coordinates, in collaboration with colleges, the UCF continuing education programs. Programs include nonfundable credit courses and an array of noncredit programs including conferences, institutes, short courses, workshops, seminars, and camps. Many of these programs are awarded continuing education units.

**CENTER FOR MULTILINGUAL MULTICULTURAL STUDIES**

**Director:** Consuela Stebbins, TR 547, (407) 823-5515  
**Associate Director:** Myrna Creasman, TR 547, (407) 823-5515

Using contemporary teaching methodology and computer-assisted instruction, the Center for Multilingual Multicultural Studies provides English language instruction for international students. Four levels of instruction are offered which range from beginning to advanced, and special attention is given to preparing students for academic course work in their specialized fields of study. Full-time students enrolled at the advanced level may elect to take courses as nondegree-seeking students while enrolled in the Intensive English program. Students are required to take an entry placement test to determine their level of proficiency. Student (F-1) visas are extended to qualified applicants. The Center also offers English for Special Purposes for international business personnel.

**SOUTH ORLANDO CENTER**

**Director:** John R. Duryea, 7300 Lake Ellenor Drive, Orlando, FL 32809 Phone: (407) 856-6585

The South Orlando Center offers credit and non-credit educational programs designed to meet the professional development needs of individuals and organizations throughout the state and the region. Offerings include seminars, workshops, conferences, symposia, and certificate programs that enable practitioners to seek personal enrichment and/or professional advancement. Programs are developed in cooperation with the academic colleges and institutes, and university faculty and support services are utilized to bring maximum benefit to both non-traditional and traditional learners.

Working closely with business, professional, and service organizations, the Center designs the programs that best meet the needs of the working community. To substantiate the content of professional programs, as well as to offer credentials to verify a learner's participation, Continuing Education Units (CEUs) are offered to qualified and eligible participants.

The South Orlando Center is an access site for Distance Learning Classes including web-based, media enhanced, ITV, and FEEDS courses. For more information, contact the South Orlando Center. The Center is located in Orlando Central Park, a site convenient to students who live or work in southwest Orange County and north Osceola County.

**OFF-CAMPUS COLLEGE CREDIT PROGRAMS**

**Director:** Dr. Elizabeth Baab, 12424 Research Parkway, Suite 265, Orlando, FL 32826-3269, Phone: (407) 207-4916, Fax: (407) 207-4925

Off-Campus College Credit Programs assists in the administration and coordination of approved partnerships and other specially formatted credit courses and degree programs for the academic colleges. Registration is normally conducted on site at the various business, educational, or governmental locations served. **Course registration for nonadmitted students does not constitute regular admission to the University.**
The School of Optics is a graduate school for optical science and engineering education and research. It is one of only three independent optics academic departments in the nation offering graduate degrees in optics. CREOL -- The Center for Research and Education in Optics and Lasers -- is the school's research arm. The School of Optics/CREOL is the State University System of Florida's Center of Excellence for research and education in optics and lasers. CREOL was established in 1987 to provide the highest quality education in optics, lasers, and photonics; conduct scholarly fundamental and applied research, and aid in the development of Florida's and the Nation's technology based industries.

The School of Optics/CREOL has grown to an internationally recognized institute with 25 faculty members, 25 Ph.D. level research scientists, and 120 graduate students. The School of Optics/CREOL faculty are recognized to be among the best in the optics/laser/photonics field with two thirds holding the rank of Fellow in major national and international societies in their field. It is one of only three independent optics academic departments in the nation offering MS and Ph.D. degrees in optics. It is housed in a state-of-the-art 83000 sq. ft. building dedicated to optics, photonics, and laser education and research on the main campus. This facility houses ninety research laboratories equipped with over $35M of state-of-the-art equipment. Graduate assistantships, with stipends ranging from $14,000 to $18,000 are available to outstanding students pursuing graduate education in optics and photonics. Research training opportunities are available to undergraduate students through the Research Experience for Undergraduates (REU) program sponsored by the National Science Foundation and other research grants and contracts.

CREOL's research activities span the spectrum from basic science to prototype development. The faculty and research staff pursue joint research projects with industry, other universities, and government laboratories, and are always seeking new opportunities to work with industry to expose students to the industrial environment and to help in technology transfer. Current research areas include: linear and non-linear guidedwave optics and devices, high speed photonics telecommunications, semiconductor lasers, nonlinear optics, laser induced damage, quantum-well optoelectronics, photonic information processing, infrared systems, optical system design, image analysis, virtual reality, medical imaging, diffractive optics, optical crystal growth and characterization, high intensity lasers, x-ray optics, EUV sources, optical glasses, laser materials processing, free-electron lasers, and light matter interaction. These research programs are supported by over $6,000,000 of research grants and contracts from numerous federal and state agencies and industry.

CREOL has a very active Industrial Affiliate Program to facilitate strong cooperative relations with industry. The program provides businesses and manufacturers with benefits of cutting-edge research and with access to the expertise and facilities of CREOL. Faculty members are teaming with Florida-based small businesses to help them compete for federally-sponsored Small Business Innovative Research (SBIR) programs. The program provides industry with effective ways to contribute to and sustain the research and teaching of laser and electro-optic technology.

For additional information, please visit our web site: http://www.creal.ucf.edu or contact Dr. M. J. Soileau, Director School of Optics/CREOL at (407) 823-6800 or by e-mail : mj@creal.ucf.edu

The Institute for Simulation and Training (IST) was established to conduct research and develop technology that advances the state of the art in affordable and effective simulation capabilities and training systems. In April 1985 a State of Florida resolution recognized the institute as part of the Center of Excellence for Simulation and Training. Driven by a proven record of research achievement, IST has developed unique qualifications and is positioned to provide the enabling technologies and technical talent necessary for future simulation development.

IST is located in the Central Florida Research Park, adjacent to the UCF campus. The park also is home to the Army Simulation, Training and Instrumentation Command (STRICOM), the Naval Air Warfare Center Training Systems Division (NAWCTSD), and the Air Force Agency for Modeling and Simulation (AFAMS). The institute is one of over 150 Central Florida-located public and private entities specializing in simulation and training, the largest concentration of this expertise in the world. At the vanguard of the simulation and training research community, IST has committed its resources to advance and transfer simulation, modeling, training systems, and related education technologies.
IST's research staff consists of scientists, engineers, and students conducts basic and applied research for a broad range of training devices and programs. Research areas include:

**Multi-resolution simulation**
- Data transfer
- Interoperability
- Composability

**Computer graphics**
- Low cost commercial for M&S
- Data bases
- Correlated environments

**Information technology**
- Database connectivity
- M&S resource repository
- Advanced document storage and management
- List processor operations

Virtual environments
- Low cost virtual environments
- Performance studies

Computer generated forces
- Behavior modeling

M&S new application development
- Medicine
- Emergency management
- Embedded simulation research

Training and education
- Distributed training
- Education technology

Laboratories, work space, and administrative offices occupy nearly 38,000 square feet of floor space. Major laboratories include Visual Systems, Computer Generated Forces, Mathematics Simulation, Medical Simulation, and the Performance and Information Technology Groups.

IST actively assists UCF in the development of simulation-related curricula. The university was the first in the nation to offer a master's degree in simulation systems and a doctoral program is currently under study. IST pursues the development of modeling and simulation concepts in projects and proposals mutually beneficial to the institute, UCF, and industry. The institute annually employs more than 50 graduate and undergraduate students in a variety of research and support positions. For many outstanding graduates, IST is a springboard to a career in the simulation industry.

The institute includes in its efforts the development of research projects with potential commercial applications and adaptation of military technology to civilian markets. IST communicates the results of its research through seminars, publications, and workshops. In cooperation with UCF and the University of Central Florida, and with considerable participation from area corporations, IST researchers are helping to promote economic growth in the modeling and simulation industry along the I-4 corridor.

Contact: Dr. A. Louis Medin, Executive Director, 3280 Progress Dr., Orlando, FL, 32826-0544; Phone (407) 658-5000; FAX (407) 658-5059; e-mail: amedin@ist.ucf.edu; web page: http://www.ist.ucf.edu

The Florida Space Institute (FSI) offers a unique approach to space education and research. Recognizing the substantial investment in launch facilities and human resources in Central Florida, the proposal to form a center that would merge industry, education, and research in a real-world environment became a reality. Created by a formal agreement among the following institutional partners: Brevard Community College, Embry Riddle Aeronautical University, Florida Institute of Technology, NASA-sponsored Florida Space Grant Consortium, Spaceport Florida, and the University of Central Florida, FSI brings a permanent academic presence to the space center. As the "gateway to the universe," FSI provides space education and research to undergraduate and graduate students at the USAF Cape Canaveral Air Station.

FSI research involves undergraduate and graduate students in real space problems within the existing space industry environment of the space center. This environment permits students and faculty to interact with space center engineers and to use the facilities of the space center. FSI research projects are primarily conducted in its facilities at Building AM at Cape Canaveral. Other facilities at KSC are used as needed and which are made available. Research projects conducted by the FSI university/college partners on their respective campuses are considered "normal" proprietary projects of that particular university/college even though the project may be space related. FSI assists any university with its project if appropriate and within FSI capabilities. As an example FSI is partially financially supporting a FIT and a BCC/Brevard payload as well as assisting with support facilities at Building AM at Cape Canaveral.

The undergraduate curriculum at Cape Canaveral is the primary focus of FSI. This curriculum helps produce the prime "products" of FSI that will help build the labor pool for a new payload/satellite industry in Florida. Undergraduate students are offered practice-based courses and research projects conducted directly at the Cape. Students learn how to design and build payloads and receive hands-on experience with research projects that have impact on the entire world. FSI undergraduate students are part of research teams led by graduate students and faculty. This permits undergraduate students to participate in real and meaningful projects as opposed to the typical undergraduate laboratory
experience with contrived experiments. FSI is committed to bringing the space industry into the next century in the areas of remote sensing, communication, and deep space exploration.

Not only do the faculty from the partner FSI universities conduct classes on USAF Cape Canaveral Air Station, but each holds office hours at the FSI Building AM facilities for academic guidance and counseling of students. There is some small amount of overlap in the various education programs but generally FIT offers graduate programs in business management relevant to the launch business, BCC offers technology and training relevant to the launch business, and UCF offers engineering through its FEEDS program and executive Engineering Management MS programs.

Contact: Dr. Ron Phillips, MS: FSI, Kennedy Space Center, FL 32899, Phone: (407)730-2601, Fax: (407)730-3127, email: ronaldp@pegasus.cc.ucf.edu and fsi@cas@mail.ucf.edu.

The Center for Applied Human Factors in Aviation (CAHFA) has as its mission the enhancement of safety in the nation's airspace system through applied human factors research, systems design, and training strategies. Chartered in 1990, CAHFA is a research consortium established between UCF and Charter partner Embry-Riddle Aeronautical University, Daytona Beach, Florida. CAHFA's professional staff maintains offices on both campuses. The complimentary strengths of the two universities are combined to create a research resource that is without peer for solving a vast assortment of aeronautical human factors problems. CAHFA research initiatives are targeted to significantly reduce human factors related accidents and incidents by determining the efficacy of and by developing strategies for achieving improvements in human performance.

Contact: Dr. Jefferson M. Koonce, Director and Chief Scientist, Phone (407) 823-1011; FAX (407) 823-5862; Dr. Mustapha Mouloua, Associate Director, Phone (407) 823-1011; Fax (407) 823-5862.

The Florida Solar Energy Center is the largest and most active state-supported alternative energy research institute in the United States. Its new facilities are located on the Cocoa campus of UCF at Brevard Community College. FSEC has gained national and international respect for its programs on photovoltaics, hydrogen from renewables, pollutant detoxification, photocatalytic processes, energy-efficient buildings, advanced cooling technologies, and solar thermal systems. It operates the only certified solar equipment testing program in the country. FSEC's work encompasses research and testing programs of national interest for a variety of external sponsors. The yearly value of FSEC's external contracts exceeds its state support by a factor of two. Through its public information office, FSEC responds to more than 15,000 requests for energy information each year. The Center also conducts seminars and workshops for teachers and professionals statewide, and its technical library boasts one of the nation's most extensive holdings on solar and alternative energy. FSEC's new international Renewable Energy Training and Education Center is providing educational programs for government and industry leaders around the world. For additional information, contact the Florida Solar Energy Center, 1679 Clearlake Road, Cocoa FL 32922-5703.

Contact: Mr. Ken Sheinkopf, Phone: (407) 638-1007; Fax: (407) 638-1010.

The Florida Canada Linkage Institute assists in extending the undergraduate and graduate education experience at the University of Central Florida through curricular and other dimensions that provide a culturally diverse education. The linkage institutes were created by the Florida Legislature to assist in the development of stronger economic and social ties between Florida and strategic foreign countries. Linkage is developed through promotion of expanded public/private dialogue on cooperative research and technical assistance, cultural exchange, enhancement of language training, and student/faculty exchange programs. Culture, and trade between Canada and Florida. The institute serves the entire State University System. Persons interested in Canada or Canadian students studying in Florida are especially welcome to contact the institute offices at the University of Central Florida.

Contact: Dr. Warren McHone, Co-Director, Phone (407) 823-5789 (UCF Orlando), Institute's Phone (407) 823-5789, FAX (407) 823-3269. Address is The Florida Canada Linkage Institute, P.O. Box 161400, Orlando, FL 32816-1400.

The Florida Eastern European Linkage Institute (a Class II state-mandated activity) is a statewide effort hosted by the University of Central Florida in partnership with Lake Sumter Community College, and is designed to create and foster educational, commercial, cultural and social exchanges between the countries in central and eastern Europe and the State of Florida. The Institute, funded and administered through the Executive Office of the Governor and the Office of Academic Affairs and located in the College of Health and Public Affairs on the main campus of the University of Central Florida, promotes the development of linkage through expanded public/private dialogues on cooperative research and technical assistance, cultural exchanges, the enhancement of language
training, and student/faculty exchange programs. The institute administers the Out of State Tuition Fee Exemptions Program that is available for students from central and east European countries.

Contact: Dr. Jean C. Kijek, Director, UCF, HPB 350/D/E, P.O. Box 160155, Orlando, Florida 32816-0155. Voice Mail: (407) 823-3647/48. FAX: (407) 823-3649. E-mail: eeli@pegasus.cc.ucf.edu

**SMALL BUSINESS DEVELOPMENT CENTER**

The Small Business Development Center (SBDC) is part of a statewide organization designed to promote economic development by responding to the needs of the small business community. The SBDC, located in the College of Business Administration at the University of Central Florida, is responsible for a geographic area including Orange, Osceola, Lake, Citrus, Volusia, Flagler, and Sumter counties. Regional centers located at Daytona Beach Community College, Brevard Community College, and Seminole Community College assist small business in those areas. Assistance is provided through workshops and individual counseling in the following areas:

- Personnel
- Bookkeeping
- Business Tax
- Franchising
- Marketing
- Sources of Financing
- Product Innovation
- Business Plan Development

Additional programs provide assistance to clients in the areas of government contracting, energy conservation, and international trade.

Contact: Mr. Aloyse T. Polfer, Director, BA 309, Phone (407) 823-5554.

**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. Affiliated with the National Council on Economic Education and the Florida Council on Economic Education, the Center also conducts research in economic education.

Contact: Dr. Robert L. Pennington, Director, BA 325, Phone (407) 823-2870

**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 government agencies and private organizations.

Contact: Dr. Mark E. Johnson, Director, Phone (407) 823-2289.

**DICK POPE, SR. INSTITUTE FOR TOURISM STUDIES**

The mission of the Dick Pope Sr. Institute for Tourism Studies is to improve the quality of the tourism product and increase the benefits of tourism for the industry, the state, and the local community. To this end the institute is involved in a variety of research projects and educational programs.

The research includes the collection, development, and dissemination of information relevant to the tourism and hospitality industry in the areas of marketing, consumer behavior and visitor satisfaction, feasibility, economic, motivation, and forecasting. Some of the Institute's patrons include tourism promotion agencies at the state and local levels; tourism development commissions; professional associations; and private enterprises such as attractions, hotels, motels, food-service establishments, ground and air transportation companies, travel agencies and tour operators, and other related businesses. The Institute devotes significant efforts to educating the public about the tourism industry in Florida and internationally, and about its contribution to the social and economic welfare of the general public.

Contact: Dr. Abraham Pizam, Director, Phone (407) 823-6202

**SMALL BUSINESS INSTITUTE**

Business schools have for some years been interested in getting students out of the classroom and involved with real business problems rather than "textbook" situations. By sponsoring the Small Business Institute program, the University of Central Florida does not only satisfy this need, but at the same time provides free professional help to small businesses in need of managerial guidance.

The SBI program uses a team of senior-level undergraduate or graduate-level students who, under faculty supervision, provide management counseling and technical assistance to small business clients. Examples of these services are: general management audits, development of business plans, establishment of accounting systems, design of inventory systems, cost analysis, pricing strategies, and evaluation of alternative markets.
The major objective of the College of Business Administration at the University of Central Florida is to educate men and women for positions of productive responsibility in business and the professions. UCF's Small Business Institute program stresses analytic ability and the student's learning skills in recognizing and coping with change. The Small Business Institute program at the same time provides on-the-job experience and sound academic training for the student.

Contact: Dr. Ron Rubin, Director, Phone (407) 823-2682

The Institute of Government, an affiliate of the Florida Institute of Government, is part of the College of Health and Public Affairs and provides training and technical assistance to state and local government, governmental associations, and non-profit organizations. Training workshops, certification programs, conferences, seminars, applied research projects, citizen surveys, strategic planning, and organizational development programs are among the services offered by the Institute.

Director: Ms. Marilyn Crotty, Phone: (407) 317-7745, FAX (407) 317-7750.

The Institute for Technical Documentation offers a variety of services for client companies, including developing original technical documentation, translating documentation written in other languages, and providing seminars to assist clients in writing their own documentation.

The Institute also provides seminars on writing more effective e-mail, memos, letters, policies and procedures, manuals, and reports.

Experienced faculty, established facilities, and strong rapport with local industry enable the Institute to assist in a wide variety of documentation projects and seminars.

Contact: Dr. Dan Jones, Director, FA 307G, (407) 823-5160.

The University of Central Florida College of Business Administration is proud to serve as a partner in executive education to the local, state, national, and international business communities. The Center for Executive Development was established to provide leading executive education programs to both individuals and organizations.

The Center helps professionals from all industries become more dynamic leaders, more effective managers, and more valuable team members. Corporations benefit from participating in executive education programs by developing more productive and resourceful workforces that can meet the challenges of today's changing marketplace and tomorrow's opportunities.

The Center serves as a valuable resource in executive training and development by offering programs that address critical issues for managers and business leaders. These programs are offered in a variety of formats suitable for any individual or corporation through:

- Public enrollment programs
- Customized corporate programs
- Executive MBA Program
- Nationally renowned speakers

The UCF Center for Executive Development has a strong commitment to the business community. Both small and large organizations find our programs to be contemporary, challenging, and effective.

Contact: Mr. Donald C. Hoke, Director, (407) 823-2446

Since 1989, students and faculty of the University of Central Florida have benefited from its membership in Oak Ridge Associated Universities (ORAU), a consortium of colleges and universities and a management and operating contractor for the U.S. Department of Energy (DOE) located in Oak Ridge, Tennessee. ORAU works with its member institutions to help their students and faculty gain access to federal research facilities throughout the country; to keep its members informed about opportunities for fellowship, scholarship, and research appointments; and to organize research alliances among its members.

Through the Oak Ridge Institute for Science and Education, the DOE facility that ORAU manages, undergraduates, graduates, postgraduates, as well as faculty enjoy access to a multitude of opportunities for study and research. Students can participate in programs covering a wide variety of disciplines including business, earth sciences, epidemiology, engineering, physics, pharmacology, ocean sciences, biomedical sciences, nuclear chemistry, and mathematics. Appointment and program length range from one month to four years. Many of these programs are especially designed to increase
the numbers of underrepresented minority students pursuing degrees in science- and engineering-related disciplines. A comprehensive listing of these programs and other opportunities, their disciplines, and details on locations and benefits can be found in the Resource Guide and the Minority Research Education Programs brochure, which are available by calling the contacts below.

ORAU's office for University, Industry, and Government Alliances (UIGA) seeks opportunities for collaborative research and development alliances among ORAU's members, private industry, and major federal facilities. Current alliances include the Southern Association for High Energy Research, the Bioelectromagnetics Research Consortium, High Performance Computing, Bioprocessing, Pan American Association for Physics, Materials Science Forum, and international initiatives in support of the New Independent States in Central and Eastern Europe. Other UIGA activities include the sponsorship of conferences and workshops, the Visiting Scholars program, and the Junior Faculty Enhancement Awards. A copy of Especially for Members, which details UIGA's programs, is available from the contacts below.

For more information about ORAU and its programs, contact Dr. A. Louis Medin, ORAU Council member, at (407) 658-5000; or contact Beth Hutson, ORAU Corporate Secretary, at (615) 576-3306.
The College of Arts and Sciences, the largest academic unit in the University, includes the following departments: Art; Biology; Chemistry; English; Foreign Languages and Literatures; History; Liberal Studies, Mathematics; Music; Philosophy; Physics; Political Science; Psychology; Sociology and Anthropology; Statistics; and Theatre. The College also includes the School of Computer Science, as well as the Nicholson School of Communication. The latter includes the following divisions: Advertising/Public Relations, Interpersonal/Organizational Communication, Journalism, and Radio/Television.

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, arts, natural sciences, and social sciences. The departments collectively offer more than sixty baccalaureate, graduate, and preprofessional programs. For additional information concerning graduate programs, please refer to the Graduate Catalog.

In addition to providing academically strong degree programs in the areas noted above, the College of Arts and Sciences offers a wide selection of courses which are designed to complement the programs of the other four colleges of the University. These offerings include most of the courses necessary to satisfy the University's general education requirement.

A student enrolled in the College as an undergraduate must fulfill all University degree requirements including those for general education, as well as the particular requirements set forth within each area of specialization. Computer proficiency is determined within the student's department of major. Depending on the program, evaluation may be via a written test, relevant projects, specific exercises within a course, or an entire course dealing with computers. To be certified for graduation, a student must achieve at least a "C" GPA (2.0) in the courses of his or her major and/or minor. Some departments also require a 2.0 in each major course. Students are advised to consult their departmental advisor 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 coursework or an individual study program, consistent with the needs of the student, may be assigned and must be completed before the degree is granted.

PREPROFESSIONAL PROGRAMS

PRELAW PROGRAM
Prelaw Coordinator: Dr. Roger Handberg, FA 414, (407) 823-2608

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 suggested. Majors such as English, History, Legal Studies, Philosophy, 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 understanding 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.

General information pertaining to programs of study, the LSAT, careers, and law schools can be obtained from the Prelaw Coordinator.

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 Sciences or the College of Business Administration; emphasis in Legal Studies can be pursued in the Department of Criminal Justice and Legal Studies in the College of Health and Public Affairs.

PREHEALTH PROFESSIONS

The College of Arts and Sciences offers courses which fulfill admission requirements for professional schools in the Health Sciences. Refer to the Biology Preprofessional section for additional information.

ADVISEMENT

OFFICE OF ACADEMIC SUPPORT AND INFORMATION SERVICES (OASIS)
Director: Ms. Judith Boyte, FA 202, (407) 823-2492

The Office of Academic Support and Information Services (OASIS) is the primary office for undergraduate academic assistance in the College of Arts and Sciences. OASIS assists students in the College of Arts and Sciences with matters concerning College and University requirements, policies and procedures. The Office oversees General Education course evaluation and substitutions as well as evaluation and application of TSD credits (CLEP and AP) for Arts and Sciences students.

Questions concerning University and College academic policies affecting Arts and Sciences majors should be directed to the OASIS staff in FA 202 or by calling (407) 823-2492. Questions concerning the requirements within a major should be directed to the Department offering the degree. The student should contact the department early in his/her academic career.

Program Planning

Although suggested curricula are available in most areas, students will plan their program in consultation with a faculty advisor appointed by either the chair of the major department or the Dean of the 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 inter-institutional 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 are emphasized. Field trips and museum visits are common to both. For further information, consult the Office of International Studies at (407) 275-4397.

DEGREES

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<th>Title</th>
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<tr>
<td>Advertising/Public Relations</td>
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<tr>
<td>African-American Studies</td>
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<td>Art</td>
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<tr>
<td>Theatre</td>
<td>BA, BFA</td>
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<tr>
<td>Women's Studies</td>
<td>Minor</td>
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</tbody>
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DEPARTMENTS AND PROGRAMS

AFRICAN-AMERICAN STUDIES: PROGRAM
Director: Dr. Gladstone Yearwood, HFA 201, (407) 823-0026
The College of Arts and Sciences offers a minor in African American Studies, which gives students the opportunity to explore the African American experience from an interdisciplinary perspective. The program, which is designed to enhance and complement the student's major area of study, provides an overview of the main currents in African American arts, history, and culture. Courses in Caribbean Studies are also available to students. Each summer the Caribbean Study Abroad Program offers students the opportunity to study and explore cultures and societies of the Caribbean.

Degrees: None
Tracks: None
Minors: African-American Studies

AMERICAN STUDIES: PROGRAM
Contact: Dr. J. Fernandez, CAS 191, (407) 823-2573
The College of Arts and Sciences offers a minor in American Studies. This program requires students to select relevant restricted electives from literature, humanities, social sciences and history.

Degrees: None
Tracks: None
Minors: American Studies

ANTHROPOLOGY
(See Sociology and Anthropology)

ART: DEPARTMENT
E-mail: art@ucf.edu
Interim Chair: Dr. Joyce Lilie, VAB 117, (407) 823-2676
Faculty: Abraham, Collins, Chavda, Congdon, Francis, Gaudnek, Haran, Haxton, Lotz, Martin, Reedy, Rivers, Wahlman, Wellman

The Department of Art has 16 full-time and 12 part-time faculty members teaching studio arts, graphic design, and art history. The curriculum in Art provides professional preparation in art history, and in the studio concentrations of cel animation, computer animation, ceramics, drawing, fibers and fabrics, graphic design, painting, photography, printmaking, and sculpture. A Bachelor of Arts is offered in art history and both the Bachelor of Arts and the Bachelor of Fine Arts degrees are offered in the studio specializations. 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 and the Altrusa Club of Winter Park.

Degrees: Art (BA, BFA)
Tracks: Animation, Art History, Studio Art
Minors: Art History, Studio Art, Partners in Visual Art Administration

ASIAN STUDIES: PROGRAM
Acting Director: Dr. Robert Bledsoe, FA 415, (407) 823-2608
An interdisciplinary minor designed to enhance multicultural education by offering students both an overview of Asian civilization and a detailed study of its most significant features. The focus of the program is on India, China, and Japan. Course work will include upper-level classes from the curricula of participating programs (anthropology, art history, economics, foreign languages, history, humanities, philosophy, political science).

Degrees: None
Tracks: None
Minors: Asian Studies

BIOLOGY: DEPARTMENT
http://pegasus.cc.ucf.edu/~biology/
E-mail: biology@ucf.edu
Chair: D.H. Vickers, BL 210, (407) 823-2141
Faculty: Ehrhart, Kuhn, Lindbeck, Osborne, Rea, Snelson, Stout, Sweet, Taylor, Thaler, Vickers, von Kalm, Walters, Weishampel, Whittier, Ellis (Professor Emeritus), Koevenig (Professor Emeritus)
The Department of Biology offers a Bachelor of Science and a minor in Biology, and the Master of Science in Biology. The core
curriculum 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. Graduates are well prepared to further their education in professional or graduate schools. Selection of electives, in consultation with a faculty advisor, permits emphasis of a subspecialty. Careful selection of restricted and unrestricted electives allows students to satisfy requirements for admission to professional or graduate school while completing their B.S. degree in Biology. Research experience and exposure to specialized topics not taught through formal courses may be gained through independent study contracts.

Degrees: Biology (BS, MS)
Tracks: Biology Preprofessional (BS)
Minors: Biology

CANADIAN & COMMONWEALTH AREA STUDIES: PROGRAM
Director: Dr. E. Vittes, FA 415, (407) 823-2608
Canadian & Commonwealth Area Studies offers a minor degree. The program focuses on various aspects of Canada, the United Kingdom, and Commonwealth countries. Two tracks are offered to address more specific interests of students.

Degrees: None
Tracks: Canadian Studies, Commonwealth Studies
Minors: Canadian & Commonwealth Area

CHEMISTRY: DEPARTMENT
E-mail: chemistry@ucf.edu
Chair: G. Cunningham, CH 117, (407) 823-2246
Faculty: Ballantyne, Belfield, Clausen, Elsheimer, Fookes, Geiger, Hampton, Juge, Kujawa (Geology), Madsen, Matsui, McGee (Forensic Science), Miles, Phanstiel, Price, Richardson

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 also prepares students for 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.

Degrees: Chemistry (BS, MS), Forensic Science (BS)
Tracks: Chemistry, Forensic Analysis, Forensic Serology
Minors: Chemistry

COMMUNICATION: NICHOLSON SCHOOL
E-mail: communication@ucf.edu
Director: Mike Meeske, COM 238, (407) 823-2681
Faculty: Bagley, Barfield, Bledsoe, J. Butler, M. C. Santana, DeLorme, Fedler, Grieder, Hall, F. Johnson, Kat, Maunez-Cuadra, Meeske, Metz, Mitrook, T. Morgan, O'Hara, Pryor, R. Smith, Stansberry, Tanzi, Taylor, Wycoff, Young

The Nicholson School of Communication provides students with a balance of practical skills and philosophical aspects of mass and interpersonal communication. The programs prepare students to understand mass media as social institutions and train them for professional careers. The School is composed of four Divisions which offer five separate Bachelor of Arts degrees. The degrees are:

1. Advertising/Public Relations. Provides theory and practice in both advertising and public relations.
2. Interpersonal Communication. Provides knowledge, theory, and skills needed to understand and predict human communicative behavior.
3. Journalism. Provides theory and skills needed to gain employment in newspapers, magazines, and similar forms of mass communication.
4. Organizational Communication. Provides knowledge, skills, and theory to understand and predict human communicative behavior in organizational settings.

Minors are offered in Interpersonal Communication, Organizational Communication, Magazine Journalism, and Mass Communication.

A Master of Arts degree in Mass Communication is offered.

Facilities
The Radio-Television Division has fully-equipped audio and video production facilities, a complete multi-camera television studio, an AM radio station, and laboratories for interactive multimedia. The Journalism Division has computer writing rooms and both a traditional wet photography lab and a digital darkroom. The Advertising/Public Relations Division has a computerized graphics lab and a writing classroom. The Interpersonal/Organizational Communication Division has a presentation speaking classroom equipped for audio/video record/playback and computerized visual presentation. The Division also has a small group laboratory equipped with audio/video record/playback.

Degrees: Advertising/Public Relations (BA), Interpersonal Communication (BA), Journalism (BA), Organizational Communication (BA), Radio-Television (BA)
Tracks: None
Minors: Interpersonal Communication, Magazine Journalism, Mass Communication, Organizational Communication

COMMUNITY ARTS-PAVE: PROGRAM
Director: Dr. Joyce Litte, VAB 117, (407) 823-2676
A minor in Community Arts/P.A.V.E. is offered for the student who is majoring in Art, Music, Theatre, or English.

Degrees: None
Tracks: None
Minors: Community Arts

COMPUTER SCIENCE: SCHOOL
Director: E. Gelenbe, CSB 260, (407) 823-0345
Faculty: Allen, Bassiouni, Brigham, Cosgrove, Deo, Dutton, Enger, Frederick, Gelenbe, Gerber, Gomez, Guha, Hua, Hughes, Johnson, Lang, Leeson, Llewellyn, Lobo, Moshell, Mukherjee, Orooji, Parsons, Rogers, Rolland, Shah, Vemulapati, Wodiga, Workman.

The School 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 School offers a minor in Computer Science and a minor in Applied Computer Science.

The School 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 School conducts research in computational biotechnology, computational complexity, computer architecture, computer graphics, databases, analysis of algorithms, distributed computing, digital media, graph theory, machine learning, natural language processing, operating systems, parallel processing, computer vision, software engineering and VLSI design tools.
Network. The latter affords access to supercomputer cycles on the connections to the Central Florida Research Laboratories. This lab currently contains an NT based server connected to a cluster of Digital computers. These machines are connected with a modest library of AI related journals, technical reports and books. The Artificial Intelligence Laboratory contains four SPARCstations, and three Symbolics 3653 LISP machines. Each platform supports some flavor of LISP; Allegro CL on the Suns, and Symbolics LISP on the Symbolics. The lab is also equipped with a modest library of AI related journals, technical reports and books.

The Distributed Computing and Networking Laboratory consists of several heterogeneous machines including a SGI High Impact, SGI Indys, Sun SPARCstations, Macintosh and Pentium based computers. These machines are connected with a 10/100 Mb ethernet network to a Silicon Graphics Challenge S - server.

The Computer Vision Laboratory centers around Sun Ultra 2 Creator and SPARCServer 670MP connected to a network of high-end Sun and Silicon Graphics workstations. A large amount of equipment is available to support the capture and manipulation of digital images. A CRS-Plus five-degree-of-freedom robot arm is also available for machine vision experiments.

The Artificial Intelligence Laboratory contains four SPARC stations, and three Symbolics 3653 LISP machines. Each platform supports some flavor of LISP; Allegro CL on the Suns, and Symbolics LISP on the Symbolics. The lab is also equipped with a modest library of AI related journals, technical reports and books. The Distributed Computing and Networking Laboratory consists of several heterogeneous machines including a SGI High Impact, SGI Indys, Sun SPARCstations, Macintosh and Pentium based computers. These machines are connected with a 10/100 Mb ethernet network to a Silicon Graphics Challenge S - server.

The Digital Media Laboratory consists of twenty NCR PC compatible machines connected to an NT based server. These machines along with Sun and SGI workstations provide a platform for the development and testing of digital media software.

A new lab has been formed to support research in software engineering. This lab currently contains an NT based server connected to a cluster of Digital PC machines. These machines are currently used for research in distance learning, web authoring (e.g., Java), and GUI development.

Other Facilities
Other campus wide computing facilities available to students and faculty include a network of UNIX based IBM RS/6000 workstations, and several large clusters of Pentium class PCS interconnected via a Novell network. The campus network includes connections to the Central Florida Research Park and to the State Network. The latter affords access to supercomputer cycles on the

Cray Y-MP at the Supercomputer Research Institute in Tallahassee. In addition, the campus is directly lined to the Internet via a T1, affording on-line access to the other computer systems around the world.

Degrees: Computer Science (BS, MS, PhD)
Tracks: None
Minors: Applied Computer Science, Computer Science

CREAT: PROGRAM
crea@cas.ucf.edu
Director: Dr. J. Michael Moshell, CSB 234, (407) 823-5341
Artistic Director: Mr. David Haxton, VAB 117, (407) 823-3110

The Consortium for Research and Education in the Arts and Technology is an interdisciplinary program offered in the College of Arts and Sciences. Contributing academic units include the Departments of Art, English, Music, and Theatre; the Film Program; and the Schools of Communication and Computer Science. Students from any major may participate.

CREAT offers a certificate program in Digital Media which provides students an opportunity to study the evolving field, and to participate in junior and senior projects in partnerships with media professionals. Admission to the CREAT program requires the presentation of a portfolio of work which demonstrates the student's creativity and technical accomplishment in some artistic or technical domain.

Degrees: Certificate in Digital Media
Tracks: None
Minors: None

ENGLISH: DEPARTMENT
E-mail: english@ucf.edu
Chair: D. Trouard, FA 301, (407) 823-2212
Faculty: Adicks, Apell, Barnes, Bartkevicius, Bell, Brain, Campbell, Casmier-Paz, Davidson, Dombrowski, Donnelly, Flammia, Gillette, Greenberg, Hammons, Hemschmeyer, Hubbard, Jones, Kamrath, Kesler, Leiby, Lilllos, Logan, Marinara, Meehan, Omans, Puccio, Rushin, Schell, Schiffhorst, Seidel, Smith, Sommer, Stap, Young

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, or literature. 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, The Cypress Dome, and The Faulkner Journal.

An Honors in English program provides an enriched course of study for exceptional students, leading to graduation with honors. Program description follows concentration degree plans.

Degrees: English (BA, MA)
Tracks: Literature, Creative Writing, Technical Writing
Minors: None

FILM: PROGRAM
E-mail: film@ucf.edu
Action Program Director: Anthony Major, COM 218, (407) 823-3456
Faculty: Blum, Harpole, M. Johnson, B. Jones

The film program at the University of Central Florida offers majors in film production, screenwriting, and cinema studies. The Production and Screenwriting tracks concentrate on teaching live action filmmaking and screenwriting. In their junior year, students take required courses in Film Production, Screenwriting,
and Cinema Studies and are then asked to choose a specialization in their senior year. The capstone of the major is the production of a final film project, a final script project, or a final thesis, depending upon which specialization is selected.

The goal of the Production, Screenwriting, and Cinema Studies tracks is to produce graduates who understand the entire production process from page to screen. When they graduate, students are well prepared for jobs within the film industry and/or graduate education. Graduates who choose the film program may go on the seek careers as screenwriters, producers, directors, directors of photography, editors, critics, or educators.

Because this is a limited access program, students should pay close attention to the program admission requirements.

**Degrees:** Motion Picture Technology (BA)

**Tracks:** Film Production/Screenwriting/Cinema Studies

**Minors:** Film-Cinema Studies, Film-Screenwriting

### FOREIGN LANGUAGES AND LITERATURES: DEPARTMENT

E-mail: foreignlanguages@ucf.edu

Interim Chair: B. H. Decker, FA 523, (407) 823-2472

Faculty: Barsch, Castaneda, Cervone, Decker, Del-Rio, DiPierro, Fabery, Fernández, Horzen, Korosy, Leticéé, López, Maier, Martínez, Montgomery, Nalbone, Paparella, Redmon, Smith, Stebbins, Taylor, Micarelli (Professor Emeritus)

Language studies in the College of Arts and Sciences provide instruction in Arabic, Chinese, French, German, Hebrew, Italian, Japanese, Korean, Latin, Portuguese, Russian, and Spanish, with majors in French, Spanish, and a combination of two languages. The language combinations may consist of French, German, or Spanish as a first language, and any of these three, plus Italian, as a second language. 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 the 1000-level language sequence are required to utilize the Foreign Language Media Center 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 and Literatures.

**Degrees:** French (BA), Spanish (BA, MA), Foreign Language Combination (BA), ESOL (MA)

**Tracks:** None

**Minors:** French, German, Italian, Spanish

### FORENSIC SCIENCE: PROGRAM

e-mail: chemistry@ucf.edu

Director: W. W. McGee, CH 221, (407) 823-2788

Faculty: Ballantyne, Fookes, McGee

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 criminalistics. The principal job of the forensic scientist is to 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 a thorough laboratory examination of the evidence, the forensic scientist presents his/her findings in court. The goal of the Forensic Science program is to prepare the student for this demanding profession. Within the Forensic Science program, the student may choose one of two programs of study. The two areas of emphasis are the Analysis Track and the Serology Track.

**Degrees:** Forensic Science (BS)

**Tracks:** Forensic Analysis, Forensic Serology

**Minors:** none

### HISTORY: DEPARTMENT

E-mail: history@ucf.edu

Chair: Richard C. Crepeau, FA 544, (407) 823-2224

Faculty: Adams, Austin, Beiler, Doran, Evans, Fernandez, Frederickson, Greenhaw, Kallina, Leckie, Pauley, Velez, Walker, Zhang

History majors who are interested in a prelaw program should work closely with their departmental 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.

The History Department encourages its majors, especially those in American History, to develop their statistical and computer skills by completion of appropriate course work in the Department of Statistics.

The Department participates in the programs in Women’s Studies, American Studies, African-American Studies, Asian Studies, Canadian and Commonwealth Studies, Latin-American and Iberian Area Studies, and Russian Area Studies.

**Degrees:** History (BA, MA)

**Tracks:** None

**Minors:** History

### JUDAIC STUDIES: PROGRAM

E-mail: judaicst@ucf.edu

Program Director: Professor Moshe Pelli, FA 201, (407) 823-5039 or 823-5129

The Interdisciplinary Program in Judaic Studies offers both a Minor and a Certificate. The Program cooperates with the departments of English, Foreign Languages, History, Philosophy, Political Science, and Sociology/Anthropology, and with the Liberal Studies and Women’s Studies Programs.

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, Judaic Studies form an essential component of the university’s curricula.

The program enables students to acquire a foundation of knowledge of Jewish history; the Hebrew language; Jewish philosophy, culture, religious beliefs, and political aspirations; and to understand the contribution of Judaism to western civilization.

The courses incorporated highlight major aspects of Jewish civilization, focusing on its interaction with other cultures and on the bodies of human knowledge upon which it draws.

The program is designed to serve students pursuing careers in general or Jewish education, in international and Middle-Eastern affairs, in languages or liberal arts, in the ministry or rabbinate, and in the community at large.

**Degrees:** None

**Tracks:** None

**Minors:** Judaic Studies

### LATIN AMERICAN & IBERIAN AREA STUDIES: PROGRAM

E-mail: foreignlanguages@ucf.edu

Director: Dr. Jose Fernandez, FA 201, (407) 823-2573

The Latin American and Iberian Area Studies Minor is an interdisciplinary academic program whose objective is to provide students with an understanding of Latin American and Iberian
cultural, social, intellectual and political-economic dynamics. The minor provides students with a background that can be applied to careers in teaching, government, business, non-profit organizations, as well as international, inter-American and Peninsular Affairs.

Degrees: None

Tracks: None

Minors: Latin American and Iberian Area Studies

LIBERAL STUDIES: PROGRAM
E-mail: liberalstudies@ucf.edu
Program Director: Dr. Donald E. Jones

The Liberal Studies Program offers students the opportunity to pursue interdisciplinary studies through two different programs of study, the Liberal Arts Track and the General Studies Track.

Degrees: Liberal Arts (BA), General Studies (BA and BS)

Tracks: Liberal Arts, General Studies

MATHEMATICS: DEPARTMENT
E-mail: math@ucf.edu
Chair: Dr. John R. Cannon, PH 403, (407) 823-6284

The Department of Mathematics offers courses and programs which lead to a Bachelor of Science in Mathematics, a minor in Mathematics, a Master of Science in Mathematical Science and a Ph.D. in Mathematics. (See the Graduate Studies catalog for a description of the M.S. in Mathematical Science and the Ph.D. in Mathematics.)

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 advanced mathematics as a tool in their speciality 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.

The department does not award credit by examination for courses which are regularly taught. Students who feel they know the material in a given course are encouraged to take a more advanced class to fulfill their mathematics requirement.

A limited number of student assistantships are available for qualified graduate students.

Degrees: Mathematics (B.S., M.S., Ph.D.)

Tracks: Pure Mathematics, Applied Mathematics

Minors: Mathematics

MUSIC: DEPARTMENT
E-mail: music@ucf.edu
Chair: L. Eubank, FA 205, (407) 823-2869, FAX (407) 823-3378

Part-Time Faculty: Cedel, Fox, Hardy, A. Mascaro, J. Mascaro, Paxen, Swedberg

The Department of Music offers a Bachelor of Music degree with options in performance and piano pedagogy; a Bachelor of Arts Degree in music; and a Bachelor of Music Education Degree with specializations in instrumental, choral and elementary school music.

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. Master of Arts and a Master of Education degrees in Music Education are offered by the College of Education. The Music Department is fully accredited by the National Association of Schools of Music.

Music organizations on campus include Pi Kappa Lambda, Phi Mu Alpha, Sigma Alpha Iota, Tau Beta Sigma, Kappa Kappa Psi, University Vocal Society, Gospel Choir, MIDI User Group and a Student Chapter of Music Educators National Conference.

Degrees: Music (BA), Music Education (BME), Music Performance (BM)

Tracks: Music Performance, Music, Music Education

Minors: Music

PHILOSOPHY: DEPARTMENT
E-mail: philosophy@ucf.edu
Chair: J. Riser, FA 411, (407) 823-2273
Faculty: Hawkins, Jones, Kassim, Levensohn, Park, Riser

The Department of Philosophy offers a Philosophy major and a multicultural Humanities major, as well as minors in Philosophy, Humanities, Religious Studies, and Environmental Studies.

The Department requires Philosophy and Humanities majors to receive advisement prior to registering each semester. Majors should schedule appointments with their departmental advisor when picking up their registration form and schedule booklet.

For any course used to satisfy a requirement (including electives) of either the Philosophy major or the Humanities major, a grade of "C" or better must have been received.

Degrees: Philosophy (BA), Humanities (BA)

Tracks: Regular and Honors

Minors: Philosophy, Humanities, Religious Studies, Environmental Studies

PHYSICS: DEPARTMENT
E-mail: physics@ucf.edu
Chair: Dr. Brian Tonner, HPB 310, (407) 823-2325
Faculty: Bass, Barlow, Bohemian, Bose, Brennen, Chai, Chow, Delfyote, Elias, Hagan, Johnson, Llewellyn, Luo, Neibhor, Peete, Renken, Richardson, Saha, Schulz, Siffust, Soileau, Siegeman, Van Stryland, Zeldovich

The Department of Physics offers a multi-track program of study leading to the B.S. degree, giving students the flexibility to choose a suitable set of courses to prepare for their career goals. A common core of courses in theoretical and experimental physics will lead to a broad understanding of the general principles of physics. The different tracks allow students to specialize, applying problem-solving techniques in a certain area of interest; this also enhances their qualifications for employment in that area after graduation.

After graduation our students are prepared to enter advanced study in physics, engineering, medicine, environmental sciences, astronomy, and other related disciplines. They are also prepared to begin careers in positions are varied as engineering physics, computational physics, and physics education. Undergraduate physics majors benefit from small class sizes, and are encouraged to be involved in individually designed senior projects working with a faculty advisor.

The Department's research programs include optics and lasers, condensed matter physics, complex systems, biophysics, elementary...
The Department of Psychology offers a Master of Science degree and a Doctor of Philosophy degree.

**Degrees:** Physics (B.S., M.S., Ph.D.)

**Tracks:** General Physics, Device Physics, Optics and Lasers, Computational Physics, Astronomy

**Minors:** Physics

**POLITICAL SCIENCE: DEPARTMENT**

E-mail: politics@ucf.edu

Chair: R. L. Bledsoe, FA 415, (407) 823-2608

Faculty: Benson, Bledsoe, Bradford, Fine, Hamann, Handberg, Hewett, Kiel, Lanier, J. Lille, S. Lille, McCoy, Morales, Pollock, Sadri, Vettes, Wilson

The Department of Political Science seeks to (1) provide students with 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 students with a broad background in prelaw to facilitate their admission to law school; (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.

The Department of Political Science participates in the following programs:

- Asian Studies: Contact Dr. Robert Bledsoe.
- Canadian and Commonwealth Studies: Contact Dr. M. Elliot Vettes.
- Environmental Studies: Contact Dr. M. Elliot Vettes.
- Latin American and Iberian Studies: Contact Dr. Waltraud Q. Morales.
- Russian Area Students: Contact Dr. Houman A. Sadri.
- Space Studies: Contact Dr. Roger B. Handberg, Jr.
- Women's Studies: Contact Dr. Terri S. Fine.

**Degrees:** Political Science (BA, MA), Economics (BA)

**Tracks:** American Politics, International Relations-Comparative Politics, Prelaw

**Minors:** Political Science, Political Science/Prelaw

**PSYCHOLOGY: DEPARTMENT**

E-mail: psychology@ucf.edu

Chair: J. McGuire, PH 302B, (407) 823-2216

Associate Chair: D. Abbott, PH 305E, (407) 823-2216


Psychology is one of the empirical sciences in the College of Arts and Sciences. The Undergraduate Program in the Department of Psychology reflects the scientific nature of the field and has two primary missions. The first is to provide students with a rigorous preparation for graduate training in psychology and related fields. The second mission is to provide all students with skills they will need to apply the basic concepts and methods of psychology in their work, their communities, and their lives. The Department of Psychology grants both BA and BS degrees.

**Degrees:** Psychology (BA, BS, MA, MS, PhD)

**Tracks:** None

**Minors:** Psychology

**RUSSIAN AREA STUDIES: PROGRAM**

Contact Dr. R. Crepeau, FA 551, (407) 823-2224

Four UCF departments, Foreign Languages, History, Political Science, and Philosophy, have pooled their resources to offer a minor to students interested in a basic and well-rounded background in Russian Area Studies. 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.

**Degrees:** None

**Tracks:** None

**Minors:** Russian Area Studies

**SOCIAL SCIENCES: PROGRAM**

Contact Person: J. Boyte, FA 208, (407) 823-2492

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 Bachelor of Science degree with a major in Social Sciences.

**Degrees:** Social Sciences (BS)

**Tracks:** None

**Minors:** Social Sciences-Interdisciplinary

**SOCIOLOGY AND ANTHROPOLOGY: DEPARTMENT**

E-mail: anthroplogy@ucf.edu, sociology@ucf.edu

Chair: Dr. J. Corzine, FA 405, (407) 823-2227

Faculty: Baird-Olson, A. Chase, D. Chase, Cook, Corzina, Dees, Dietz, Gay, Huff-Corzine, D. Jones, Lynxwiler, Morris, Mustaine, Stearman, Wallace, Winton, Zorn

The Department of Sociology and Anthropology offers a Bachelor of Arts in Sociology and in Anthropology. Students should consult with their departmental advisor early in their academic careers to select an area of specialization within the Department or if they plan to pursue graduate work.

**Degrees:** Anthropology (BA, MA)

**Tracks:** Domestic Violence (MA)

**Minors:** Anthropology, Anthropology in Multicultural Studies, Sociology

**STATISTICS: DEPARTMENT**

E-mail: statistics@ucf.edu

Interim Chair: Dr. D. Nickerson, CCII 212, (407) 823-5562

Faculty: Cutchins, Hoffman, Jamshidian, Johnson, Nickerson, Pepe, Richardson, J. Schott, S. Schott, M. Wang, Zhang

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 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 particle theory, gravitation, atomic. The Department of Physics offers a Master of Science degree and a Doctor of Philosophy degree.
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.

Degrees: Statistics (BS, MS)
Tracks: None
Minors: Statistics

THEATRE: DEPARTMENT
E-mail: theatre@ucf.edu
Chair: Dr. D.W. Seay, THE 120, (407) 823-2861.
Faculty: Brasseux, Brotherton, Colangelo, Dunham, Earnest, Harris, Hart, Huaixiang, Kopf, Lartanoix, Major, Rinaldi, Ruscella, Rusnock, Seay, Smith, Siegfried, Woods

The Department of Theatre seeks to develop theatre artists of the highest quality by providing a select number of undergraduate students with the training, education, and experiences necessary for the successful pursuit of professional careers in theatre arts. In support of this mission and the liberal arts goals of the College of Arts and Sciences, the department seeks to provide its students with the knowledge and skills necessary to live full, rewarding and productive lives. Offering both the Bachelor of Arts and the Bachelor of Fine Arts degrees, the Department of Theatre undertakes to develop and graduate theatre artists who are sensitive, aware, and total human beings. Through its public performance programs, the department endeavors to serve as a cultural resource for the University, the community and the central Florida region. Striving to provide its students with a competitive edge, the department employs a faculty and staff of artists/teachers who work intensely with students in the classroom and in production. To supplement this education and training, professional guest artists are brought to the campus to work in production and in the classroom. Before graduation, BFA students are required to complete a professional theatre internship thus providing them with a unique and invaluable introduction to the real world of professional theatre. In all its endeavors, the Department of Theatre strives to create and maintain a professional environment necessary for the continued growth and development of its students, faculty, and staff.

Degrees: Theatre (BA, BFA)
Tracks: Performance, Design/Tech, Stage Management, Musical Theatre
Minors: Theatre

WOMEN'S STUDIES: PROGRAM
Director: Dr. Shelley Park, HFA 201, (407) 823-2269

The Women's Studies program offers an interdisciplinary minor in cooperation with several departments. The program examines women's situation and contributions in past and present societies, women's issues, and theories concerning women and gender.

Degrees: None
Tracks: None
Minors: Women's Studies
The mission of the College of Business Administration at the University of Central Florida is to provide quality business education programs, at the undergraduate, graduate, and executive levels, to the citizens of the state of Florida and to selected clientele nationally and internationally. In delivering these programs, the College places primary emphasis on excellent teaching and research with a strong commitment to developing mutually supportive relationships with the business community of Central Florida.

In pursuit of its mission, the College of Business Administration affirms its commitment to the University's focus on excellence and accent on the individual. Furthermore, the College pledges to deliver innovative and progressive programs to its clientele, and a commitment to service in the community, not only from its faculty but also its students. As the College approaches the twenty-first century, it has adopted "Driven by Excellence" as a motto and guiding force in achieving its goals and objectives. 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:

- Completion of the University General Education program, or an AA degree from a Florida Public Community College.
- See Common Program Prerequisites.

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 counselor in the College to outline a program of study.

Attendance at the first meeting of any College of Business course is mandatory. Students not in attendance at the first meeting may be dropped from the course. It is the responsibility of the student to take whatever steps are necessary to determine if they have been officially dropped from a course. This does not remove the student's responsibility for dropping courses they do not intend to complete.

**BE2000**

UCF Business...the Best Undergraduate Business Education in Florida. In 1993 the UCF Business faculty established a goal to deliver the best undergraduate business education in Florida. We call it Business Education 2000 (BE2000). The product of the alumni, faculty, business leaders, and students, the BE2000 curriculum focuses on four competencies that are integrated throughout all coursework: Teamwork, Communication, Creativity, and Adapting to Change. Faculty, working with representatives from the business community, help you develop these competencies as you work through the following required courses in the Common Body of Knowledge:

- GEB 3031: Cornerstone
- ECO 3401: Quantitative Business Tools I
- BUL 3130: Legal & Ethical Environments of Business
- ECO 3411: Quantitative Business Tools II
- FIN 3403: Business Finance
- MAN 3025: Management of Organizations
- MAN 3504: Quality and Productivity Management
- MAR 3023: Marketing
- GEB 4361: Business in the International Environment
- MAN 4720: Strategic Management

**Grade Point Average Requirements**

For graduation the student must have maintained a minimum 2.0 GPA in course work taken in the College of Business Administration and a minimum 2.0 GPA in the course work required in the major, except in Accounting, Finance, and Marketing where a "C" or better is required in each course and a minimum 2.0 is required overall.

**Student Load**

A student who is enrolled in 16 hour semester course work is considered to be carrying a normal academic load. Students in the College of Business Administration desiring to take more than 16 hours of course work must obtain permission from the College.

**Community/Junior College Transfers Notes**

1. Admission requirements can and do vary among the business and accounting programs at the ten universities comprising the State University System. To ensure that they have met all prerequisite course eligibility requirements, transfer students from Florida's community and junior colleges should complete the following courses as part of their Associate of Arts degree: ACG 2021 (or ACG 2001 and ACG 2011), ACG 2071, ECO 103, ECO 2023, MAC 2233, STA 2023, (or QMB 2100) and the relevant computer applications course. At UCF, students who have completed MAC 2233 and STA 2023 will be waived from ECO 3401 Business Quantitative Tools I. Students who have completed either MAC 2233 or STA 2023, but not both, must take ECO 3401. Completion of these courses will satisfy all prerequisite course requirements for all business and accounting degree programs and will ensure that a student will receive further consideration for admission.

2. Subject to the general grade and residence requirements, credit will be granted for transferred course work equivalent to that required in UCF's Business program. "D" grades do not transfer into program.

3. Florida Public Community College students are advised to complete the Associate of Arts Degree including:
   a. the general education requirements
   b. the one year Accounting and Economics sequence
   c. College Algebra.

4. 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.

5. A minimum of 12 semester hours must be completed at UCF within each individual major.

Recent legislation has mandated changes in program admission prerequisites, program length, and course levels. This document may not include the final versions of these changes. See your college advisor for current information.

**ADVISEMENT**

**OFFICE OF STUDENT SUPPORT (OSS)**

Director: Ms. Helen Y. Hill, BA 240, Phone (407) 823-2184

The Office of Student Support is the primary office for undergraduate and graduate academic assistance in the College of
Business. Degree requirements, registration, and any questions concerning University and College academic policies affecting Business majors should be directed to the Office of Student Support staff in BA 240 or by calling (407) 823-2184. Visit OSS's home page at: http://www.bus.ucf.edu/oss/

PROGRAMS AND DEGREES

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DEPARTMENTS AND PROGRAMS

SCHOOL OF ACCOUNTING

Director: A. Judd, BA 437, Phone (407) 823-2871
Assistant to Director: S. Smith, BA 438, Phone (407) 823-5678
Faculty: Bailey, Band, Bobek, Dwyer, Evans, Goldwater, Hunt, Johnson, Judd, Kelliker, Klintworth, L. Mahoney, Miller, Phillips, Potts, R. Roberts, Roush, J. Salter, M. Salter, Savage, Smith S., Tessitore, Veit, J. Welch, Zarzeski

Mission Statement

The mission of the School of Accounting is to provide high quality undergraduate, graduate, and professional educational programs responsive to the needs of students, community, and the profession. Teaching, research, and service are the means of accomplishing this mission.

The School offers rigorous programs emphasizing communication skills, critical thinking, ethical practices, interpersonal skills, and technical competence preparing graduates for entrance into the accounting profession.

The School encourages intellectual contributions by faculty through instructional development, applied scholarship, and basic scholarship.

The School provides service by participating in university governance, professional organizations, and professional educational programs.

(Adopted by the faculty on March 4, 1993, and revised by the faculty on January 10, 1997.)

To prepare for any business career, a strong foundation in accounting and taxation will provide the variety of skills necessary to succeed in today's complex financial world. An accounting degree prepares students for entry into the fields of industrial, managerial or governmental accounting, with a strong potential for career advancement.

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. The undergraduate degree also is the first step toward becoming a Certified Public Accountant. Certified Management Accountant and Certified Internal Auditor. The School of Accounting also offers master's degrees in accounting and taxation. These programs complete the education required to become a CPA.

A rigorous and comprehensive accounting curriculum at UCF focuses on the real-world challenges of accounting, emphasizing problem solving, information analysis and computer applications.

DISTINCTIVE BENEFITS

> Strong industry ties allowing for unique opportunities for placement and advancement.
> A competitive internship program that places graduate students in positions with major employers in the community.
> The opportunity to enroll in outstanding graduate programs in accounting and taxation.
> A very strong faculty known for their teaching excellence.
> Over a dozen scholarships available to advanced students.
> Active student organizations including the Student Accounting Society and Beta Alpha Psi.
> A faculty committed to the continuous improvement of the accounting and taxation programs.
> Outstanding pass rates on the CPA exam.

Degrees: Accounting (BSBA, MSA, MST)

DEPARTMENT OF ECONOMICS

Chair: R. Hofler, BA 325, Phone (407) 823-3266
Faculty: Agarwal, Braun, Co, Day, Elston, Euzent, Gallet, Gibbs, Hofler, D. Hosni, J. Lee, List, T. Martin, McHone, B. Moore, Pennington, Rungeling, B. Sen, Soskin, Tomlin, White, Xander
Faculty Advisor: D. Hosni, BA 321, Phone (407) 823-2069

Economic issues dominate today's news and public debates more than ever before. Inflation, unemployment, health care, economic growth, pollution, poverty, and international economic relations are a few of these issues. The primary strength of economics is that it provides a logical, ordered way of looking at most problems and issues. Undergraduate education in economics equips individuals to both better understand and seek solutions to these issues.

The Department of Economics participates in two undergraduate degree programs: a BSBA degree in the College of Business Administration and a BA 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 further 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 BA in Economics should refer to the Economics Major in the College of Arts and Sciences.

DISTINCTIVE BENEFITS

> Teaching quality - Over one-half of the department's faculty have received awards for teaching excellence. These faculty teach most of the economics major classes.
> Scholarships - several $500 scholarships are available.
> Flexible curriculum - economics electives allow students to tailor the program to meet their individual needs.
> Student organizations - Two active student organizations, Omicron Delta Epsilon and The Economics Club, host speakers, banquets, and other functions.

Degrees: Economics (BSBA, MAAE)

Minors: Economics

DEPARTMENT OF FINANCE

Chair: J. M. Cheney, BA 420, Phone (407) 823-3575
Faculty: Ajayi, Atkinson, Borde, Byrd, Cheney, Choi, Gilkeson, Greene, Michelson, Millican, Modani, Park, Porter, Ramanlal, Scott, S. Smith, Weaver, Wythe, Winters

The program in finance is designed to provide the student with broad knowledge in finance, including business finance, investments, financial institutions, international finance, 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.

**DISTINCTIVE BENEFITS**

- Students prepare for career opportunities in business and corporate financial management, commercial banking, real estate, investment management and counseling, investment banking, mortgage banking, multinational business, insurance and government.
- Students who major in finance are sought by both financial and non-financial firms.
- The rapidly changing domestic and international economies need individuals who have the skills to make sound financial decisions.

**Degrees:** Finance (BSBA)

**Minors:** International Business

**GENERAL BUSINESS**

**Faculty Advisor:** B. Moore, BA 325, (407) 823-5256

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 should seek advisement in the Department of Economics. An academic advisor will be assigned to assist each student in developing a meaningful program of study.

**DEPARTMENT OF HOSPITALITY MANAGEMENT**

**Interim Chair:** T. Ellis, BA 409, Phone (407) 823-2188

**Faculty:** Ashley, Ellis, LeBruto, Milman, Pizam, Upchurch

The hospitality industry currently represents the second largest employer in the United States and is the major part of the rapidly growing services sector of the economy. Because of its unique location in the premier tourist destination in the world, the Department of Hospitality Management is ideally situated to prepare students for managerial careers in the hospitality industry. Whether the student is interested in entering lodging, food service, travel and tourism, or conventions and destination services management, the Orlando and Central Florida area offers extraordinary opportunities. It is the destination for over 13 million tourists each year, has over 400 hotels with 80,000 rooms, 1400 restaurants, and 50 theme parks and attractions. The industry employs a half million people in the State of Florida and many are in the Central Florida area.

The leaders of this industry have helped design a program of study for the major that prepares both experienced employees and newly entering students to successfully compete for employment in the industry at the local and national levels. The educational mission of the department is to provide our students with the knowledge, skills, and ability to identify opportunities and challenges in the hospitality industry, to apply creative decision techniques in responding to those opportunities, and to lead the industry into the next century.

The major is designed to prepare students for a broad range of managerial roles across the hospitality industry. It provides both academic preparation and "hands on" experiences that students will need to enter and succeed in a hospitality management career. Students also have the opportunity to experience the work world in hospitality through the 800 hour cooperative education requirement and through extensive contact with leading hospitality managers in the Central Florida area.

The department also houses the Dick Pope Sr. Institute for Tourism Studies which was created and funded by the travel and tourism industry in Central Florida. The institute conducts research and gathers information that can help the entire Orlando area hospitality industry better understand and serve its many visitors and guests from around the world.

**DISTINCTIVE BENEFITS**

- Cooperation with and access to the many hospitality organizations which serve one of the premier tourist destinations in the world.
- Strong and extensive ties with the top leadership of the Orlando area hospitality industry, representing world-renowned organizations.
- A large number of scholarships made available through the generous support of the industry.
- A faculty committed to continuously improving their knowledge of the hospitality industry as well as continuously improving their ability to teach that knowledge to their students.
- A required work experience that provides students with "hands-on" experiences in the hospitality industry.
- Outstanding opportunities for internships.
- A state-of-the-art computer laboratory dedicated to the hospitality student and made possible through the contributions of the hospitality industry.
- A modern food production laboratory and teaching restaurant completely equipped to provide students with actual experience in food preparation.

**Degrees:** Hospitality Management (BSBA)

**Minors:** Hospitality Management

**DEPARTMENT OF MANAGEMENT**

**Chair:** H. Jones, BA 335, Phone (407) 823-2679

**Faculty:** Arnaud, Barringer, Becker, Bogumil, Callarmon, Connolley, Fernald, C. Ford, R. Ford, Goodman, Gowen, Harrison, Huseman, F. Jones, H. Jones, Leigh, Neubaum, Odieho, Pullin, Purvis, Pustchinski, Rainer, Spicer, D. Stone, Uhl-Bien, West

Tomorrow’s managers must be prepared to meet the challenges of a highly dynamic and rapidly changing business environment. The objective of the Management program is to prepare students for the excitement and challenge of management in the business environment of the 21st century.

To learn about management, students study the processes and techniques of leadership, planning, controlling and staffing of both small and large organizations. Courses are designed to demonstrate the impact of technological factors, the framework for decision-making, and human behavior, and the management of human resources on the overall effectiveness of the organization.

The Management major is designed in that students can choose to concentrate their course work in specialized areas of study, for instance, Human Resource Management, Quality and Productivity Management, and Management Information Systems. Further, students can choose an option in the area of General Management which allows them to take a broader variety of course work and prepares them for general management responsibilities.

The study of Management Information Systems involves learning how information technology can improve organizational effectiveness and efficiency. Courses are designed to give students "hands-on" skills in designing and developing relational databases, client/server systems, graphical user interfaces, queries and reports, and in project management.

**DISTINCTIVE BENEFITS**

- The ability to specialize in a career field: Human Resources, Information Systems, Quality and Productivity, General Management.
- Excellent faculty who are known for their creativity and enthusiasm for teaching.
- Active student organizations including: SHRM (Society for Human Resource Management), MISA (Management Information Systems), APICS (American Production and Inventory Control Society), and the Entrepreneurship club.
Internships throughout the Central Florida region.

Degrees: Management (BSBA)
Tracks: Human Resources, Management Information Systems, Production/Operations Management, General Management

Minors: Management Information Systems

DEPARTMENT OF MARKETING
Chair: R. Michaels, BA 317, Phone (407) 823-2108
Faculty: Allen, Arnold, Das, Davis, Eschambadi, Fuller, Ganesh, Gillett, Luckett, Michaels, Paul, Pimentel, Quaintance, Reynolds, Rubin, White

The department's curriculum, titled Impact Marketing 2000, provides students the opportunity to study marketing in a logical, sequential, and integrated manner. Students are provided the basic structure of the marketing system and environment in MAR 3023. In four additional courses students build competencies, skills, and knowledge in such areas as information acquisition, analysis, communications, customer behavior, and marketing research. Those four courses are precursors to two capstone courses in which students apply problem-solving and decision-making skills within the context of marketing programs and strategies. Recurrent themes throughout the curriculum are teamwork, communication, creativity, driving change, quantitative analysis, problem-solving/decision-making and global orientation.

Marketing has become a significant philosophy of doing business. The fact that a marketing orientation is a feature of most growing, dynamic companies is a real advantage to the graduate who enters the marketing arena. The training period may involve the graduate in a number of critical marketing areas such as sales, advertising, public relations and research.

The marketing profession can provide a direct route to upper management. The most successful graduate will be the one who develops competence in a number of marketing functions, such as research, quantitative analysis, sales and advertising, and at the same time, has obtained strong skills in strategic marketing management.

DISTINCTIVE BENEFITS
- Strong emphasis on undergraduate instruction.
- Opportunity for internships, independent projects and directed studies
- Senior professors teach the majority of undergraduate classes.
- Strong emphasis on preparing students for marketing management careers.
- Opportunity to participate in a national award-winning student chapter of Pi Sigma Epsilon.

Degrees: Marketing (BSBA)
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, 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 and private school settings.

The College of Education offers Bachelor of Science degrees with the following majors:
- Art Education
- Early Childhood Education
- Elementary Education
- English Language Arts Education
- Exceptional Student Education
- Foreign Language Education
- Mathematics Education
- Physical Education
- Science Education
- Social Science Education
- Vocational Education and Industry Training

**Office of Student Services**

The College of Education Student Services Office assists students with orientation, registration, academic advisement for Education Pending students, college and university academic requirements and graduation certification. Students are assigned a faculty advisor upon meeting College of Education admission requirements. Information regarding majors offered by the College of Education can be obtained in ED109.

Admission to the University of Central Florida does not imply admission to the College of Education. Students will be allowed to enroll only in the 3000/4000 level courses taught by the College of Education after they have been admitted to the College. Students admitted to the College of Education will need to meet additional requirements in order to be fully admitted to Teacher Education.

**Admission to the College of Education**

Admission to the College will be granted when students meet the following requirements:
- complete the University General Education program of its equivalent, i.e. an AA degree from an approved Florida community college or state university
- have on file in the University admissions office a score at or above the 40th percentile on the SAT (950) or ACT (20 enhanced) and a 2.5 overall GPA
- complete 3 parts of the CLAST examination (no alternatives are accepted)
- complete prerequisite courses

**Non-Degree Program (Initial Certification Only)**

All students who have earned a Baccalaureate degree from an accredited institution and who wish to be certified in elementary education must complete an undergraduate or master’s degree program in elementary education. For other certification areas for which the College has programs, students may elect to complete 1) an undergraduate degree 2) a graduate degree or 3) an alternative program as a post-baccalaureate student. Students must meet regular admission requirements for the College of Education and Teacher Education.

**Teacher Education Curriculum**

The professional teacher education curriculum is designed to provide students the opportunity to develop the professionalism 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 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 work with culturally diverse populations

**Common Body of Professional Knowledge**

Department of Educational Foundations, ED243, Phone (407) 823-2427

The following course work provides the foundation of professional knowledge and understanding and is required of all majors:
- EDG 4323 Professional Teaching Practices 3 hrs
- EDF 4603 Analysis of Critical Issues in Ed 3 hrs
- EDF 4214 Classroom Learning Principles 3 hrs

**CLINICAL EXPERIENCE**

**Director:** TBA, ED115, Phone (407) 823-2436

The clinical experience components of the professional program include early and continuous field experiences which provide students opportunities to develop skills and instructional competence. The clinical experience program provides students with a broad range of instructional experiences in various school settings which are developed through cooperative planning with local school administrators and teachers.

Clinical experience is an integral part of every degree program and consists of two major components. Placement of students is the responsibility of the College of Education. Students are placed in public schools that have been approved as Student Teaching Centers. However, students are not guaranteed a placement. Schools have the right to deny acceptance of a student in their school.

**Admission to Teacher Education**

Admission to Teacher Education will be granted when students who have been admitted to the College of Education meet the following requirements:
- have on file in the University admissions office passing scores on all parts of the College Level Academic Skills Test (CLAST)
- present an overall GPA of 2.5
- achieve a "C" or better grade in EDG 4323, Professional Teaching Practices, including successful completion of the tutorial component or equivalent
- complete a formal application for admission to a particular teacher education program
- submit a satisfactory portfolio
- be recommended by the faculty of the department of the student’s major
- meet any special departmental requirements
- have a grade of "C" or better in each methods course

Internship I is a six semester hour credit experience. Students are assigned to work with certified supervising teachers under the direction of a College faculty coordinator. The 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 a limited number of related professional courses during the experience with the consent of their department chair. Students must be aware: if they have been arrested for certain crimes, they may not be able to be hired as a teacher. Application is made through the Office of Clinical Experiences.
Admission to Internship I is restricted to those students who have been admitted to the Teacher Education Program. A 2.5 overall GPA is required when application is submitted and must be maintained throughout the semester. Students must also have satisfactorily completed a portfolio.

**Deadlines are as follows:**
- **Fall Semester:** February 15 (preceding semester)
- **Spring Semester:** September 15 (preceding semester)

Internship II is a twelve semester hour experience normally completed during the student's last semester. The student is placed in an approved teaching center under the direction of 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 clinical experience is considered a full-time experience, and students are permitted to enroll in other classes only with the consent of their department chair.

Admission to Internship II requires that the student has successfully completed requirements of Internship I and possesses a 2.5 GPA in the area of content specialization, a 2.5 GPA in the professional education sequence, and a 2.5 GPA overall. Students must also have completed all methods courses and most of their specialization courses. Some programs (such as Elementary Education) require all specialization courses to be completed prior to Internship II. Students must also be approved for admission by the faculty in the department of the student’s major and have satisfactorily completed a portfolio. (Dates and times for submission to be posted outside the Office of Clinical Experiences after the semester begins.) Internship II experience is completed locally. Guest student teaching will not be approved. Students must be aware: if they have been arrested for certain crimes, they may not be able to be hired as a teacher. Application is made through the Office of Clinical Experiences. **Deadlines are as follows:**
- **Fall Semester:** February 15 (preceding semester)
- **Spring Semester:** September 15 (preceding semester)

**Graduation Requirements for a Two-Year Temporary Certificate:**
To qualify for graduation, a student must have a 2.5 GPA in all course work, a 2.5 GPA in the area of content specialization, and a 2.5 GPA in the professional course sequence. All College of Education undergraduate curricula fulfill State of Florida academic requirements for temporary certification. College of Education graduates who desire to teach outside Florida must meet the 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 have passed the College Level Academic Skills Test (CLAST), the Professional Education Test, and a Subject Area Examination in the certification area.

**DEPARTMENT OF EDUCATIONAL FOUNDATIONS**
*Chair: Karen L. Biraimah, ED243, Phone (407) 823-2428*
*Assistant Chair: Marcella Kysilka, ED355, Phone (407) 823-2011*
*Faculty: Allen, Deets, Dziuban, Gustafson, Hatcher, Hiett, Holt, Hutchinson, Kaplan, Kubala, Lange, Loudermilk, Luckett, Miller, Sciorrino, Sullivan, Verkler, West, Wiens, Wilson, Wise, Wood*

The Department of Educational Foundations serves all students in the College of Education. The Department provides instruction in the core professional courses that address the competencies and skills needed by all undergraduate education majors. These courses emphasize learning theory, teaching strategies, and the social, philosophical and historical foundations. The Department also provides courses for all masters and doctoral programs in education, and coordinates the core courses for the Curriculum and Instruction doctoral program. Educational Foundations graduate courses provide opportunities for students to advance their knowledge and application skills related to research methods, data analysis, educational measurement, social, multicultural and psychological factors, curriculum and instructional theories, and the historical and philosophical factors that influence education.

**DEPARTMENT OF EDUCATIONAL SERVICES**
*Chair: TBA, ED318, Phone (407) 823-2596*
*Faculty: Balado, Baumbach, Bollet, Bozeman, Cornell, G. Gunter, R. Gunter, Hayes, Jones, Lee, Lynn, Meador, Middleton, B. Murray, K. Murray, Orwig, Pawlas, Robinson, Tubbs, Wilson*

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/Media. 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. Other doctoral options are available through the Curriculum & Instruction Program. The Educational Services Department is composed of graduate programs which are listed in the graduate catalog.

**DEPARTMENT OF EXCEPTIONAL AND PHYSICAL EDUCATION**
*Chair: Wilfred Wienke, ED214, Phone (407) 823-2401*
*Faculty: Angelopoulos, Blanes, Clark, Cross, Eason, Ezell, Fisher, Gergely, Higginbotham, Kazoroski, Klein, Little, Lue, Mahon, Martin, Miller, Mitchell, Olson, Pankaskie, Platt, Powell, Renner, Rohter, Smalley*

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 handicapped and (c) specific learning disabilities at the K-12 levels. The Physical Education program is a K-8 specialization. In addition, 6-12 secondary certification and coaching certification programs are available. Students are responsible for completion of program requirements and are encouraged to review their programs with an assigned advisor.

**DEPARTMENT OF INSTRUCTIONAL PROGRAMS**
*Chair: Jeffrey W. Cornett, ED346, Phone (407) 823-2939*
*Faculty: Allen, Armstrong, Atkins, Blair, Brewer, Brumbaugh, Buchoff, Camp, Clifford, Crawford, Everett, Gurney, Hopkins, Hudson, Hymes, Joels, Johnson, Ortiz, Palmer, Paugh, Phillips, Romjue, Siebert, Sorg, Sweeney, Verkler, Williams*

**Early Childhood Education**
Students who major in Early Childhood Education are qualified to teach Pre-kindergarten through grade 3 upon graduation and receipt of a Florida Teaching Certificate.

In addition to the College of Education and other department requirements, an early childhood education major should: (1) have a grade of "C" or better in each specialization course and (2) must have taken all methods courses and earned a grade of "C" or better before enrolling in Student Teaching.

**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. In addition to the College of Education and other department requirements, an elementary education student enrolling in Internship II must have a grade of "C" or better in each specialization course and must have taken all methods courses before taking Internship II.

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. Specialization is available in Art, Biology, Chemistry, English, Foreign Language, Mathematics, Physics, and Social Science.

Vocational Education and Training Development
The vocational education degree is for individuals in Industrial/Technical areas or selected Health Occupations who wish to be teachers in secondary or post-secondary schools (or trainers in industry or health care facilities). Through course examination, or licensure in an occupational specialization a student may receive a maximum of 30 semester hours of credit toward the degree. This degree also includes initial courses required for Florida Vocational Teacher Certification in selected areas.

*This catalog represents a significant change in program requirements from previous years. Students under earlier catalogs should carefully review all degree requirements before changing to this catalog.
COLLEGE OF ENGINEERING

Dean: M.P. Wanielista, ENGR 107, Phone 823-2156
Associate Dean: D.R. Reinhart, ENGR 107, Phone 823-2156
Associate Dean: R.N. Miller, ENGR 281, Phone 823-2455
Assistant Dean for Graduate Affairs: I. Batarseh, ENGR 281, Phone 823-2455
Coordinator, Academic Support Services: M. M. Orr, ENGR 281, Phone 823-2455
Director of College Honors Programs: A. J. Gonzalez, ENGR 407, Phone 823-5027

UNDERGRADUATE DEGREES
Aerospace Engineering
Civil Engineering
Civil Engineering - Construction Engineering Option
Computer Engineering
Computer Engineering - Software Engineering Concentration
Electrical Engineering
Electrical Engineering - Wireless Communication Concentration
Electrical Engineering - Microelectronics Concentration
Electrical Engineering Technology - Computer Systems Concentration
Electrical Engineering Technology - Electrical Systems Concentration
Electrical Engineering Technology - Information Systems Technology Concentration
Engineering Technology - Design Concentration
Engineering Technology - Operations Concentration
Environmental Engineering
Industrial Engineering
Mechanical Engineering - Energy Systems Option
Mechanical Engineering - Mechanical Systems Option
Mechanical Engineering - Materials Option

COLLEGE OF ENGINEERING VISION
As the College of Engineering progresses towards the 21st century, it envisions a community that offers undergraduate and graduate programs of the highest quality. We are a community that seeks to achieve excellence through a collaborative effort in teaching and graduate research resulting in increased national and international prominence. The College of Engineering will continue to foster a community of scholars in search of knowledge and a commitment toward promoting engineering as a profession. Interaction with our metropolitan partners will assure our success in becoming one of America's leading partnership communities. The College of Engineering's future includes an educational environment that is inclusive and diverse.

COLLEGE OF ENGINEERING MISSION STATEMENT
The UCF College of Engineering (COE) is committed to providing the highest quality professional undergraduate and graduate education possible. The COE will continue to achieve national and international recognition through state of the art classroom instruction and innovative research programs. In order to respond to the needs of the public, the COE will actively pursue partnerships with the local and global community. In pursuing our mission we are committed to promoting an environment that is inclusive and diverse in all of our endeavors.

COLLEGE OF ENGINEERING CORE VALUES
- Honesty: We tell the truth and are aboveboard and candid.
- Integrity: We foster trust and are consistent, always taking responsibility for our actions.
- Professionalism: We adhere to a professional code of ethics, continuing to learn while striving for excellence.
- Family: We pursue life outside of our professional environment, giving our family a priority.
- Altruism: We work as a team, help each other, and sacrifice for the common good. We understand that our work is part of a larger purpose and plan.

COLLEGE OF ENGINEERING GOALS
We as a community of scholars will:
- Modernize our classroom and research resources,
- Excel in operations to increase student and faculty satisfaction,
- Renew our curriculum,
- Increase our cultural diversity and recruitment efforts, and
- Target research with funding from external partnerships to maintain scholarly activity and student quality.

Students who seek a challenging technical career in research and development, design, technical sales, manufacturing, management, teaching, or other professions requiring a methodical, creative solution to problems should seriously consider pursuing an education in engineering or engineering technology. The internationally-recognized faculty of the College of Engineering, together with its strong curricula of undergraduate and graduate programs, provide an opportunity for ambitious, responsible men and women to become the leaders of our increasingly technological world. Because of the significance of science and technology to our everyday lives, today's engineer and engineering technologist must be aware of the impact of his or her creations on society. In addition to the public health and welfare, aesthetics, economics, and energy-use implications, engineers and engineering technologists also consider environmental, sociological, and other humanistic costs. The engineering or engineering technology degree is also recognized as a valuable asset to those entering other professional pursuits such as the medical or law professions, architecture, the military professions, or even politics.

COLLEGE ORGANIZATION
The College of Engineering is organized into three major divisions: the Engineering Division, the Engineering Technology Division, and the Reserve Officer Training Corps (ROTC) Division. The Engineering Division is divided into four departments: the Civil and Environmental Engineering (CEE) Department, the Electrical and Computer Engineering (ECE) Department, the Industrial Engineering and Management Systems (IEMS) Department, and the Mechanical, Materials and Aerospace Engineering (MMAE) Department. The Engineering Technology Division is comprised of the Engineering Technology (ENT) Department, and the ROTC Division is made up of the Aerospace Studies Department (Air Force ROTC) and the Military Science Department (Army ROTC).

Seven engineering programs are offered within the four Engineering Division departments. The Bachelor of Science in Civil Engineering (BSCE) and Bachelor of Science in Environmental Engineering (BSEnV) programs are offered by the CEE Department, and the Bachelor of Science in Computer Engineering (BScPE) and Bachelor of Science in Electrical Engineering (BS EE) programs are offered by the ECE Department. The Bachelor of Science in Industrial Engineering (BSEI) program is offered by the IEMS Department, and the Bachelor of Science in Aerospace Engineering (BSAE) and Bachelor of Science in Mechanical Engineering (BSME) programs are offered by the MMAE Department. In addition, there are several options or concentrations
that are available within each program. All departments in the Engineering Division also offer advanced studies leading to master's degrees and the Doctor of Philosophy degree; see the Graduate catalog for further information on these engineering graduate programs. All undergraduate engineering programs are fully accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET). ABET is recognized by the U.S. Department of Education as the sole agency responsible for accreditation of educational programs leading to degrees in engineering, engineering technology, and related engineering areas.

The Engineering Technology Division and Department offers baccalaureate concentrations in Design and in Operations, both leading to the Bachelor of Science in Engineering Technology (BSET) degree, and concentrations in Electrical Systems and in Computer Systems, both leading to the Bachelor of Science in Electrical Engineering Technology (BSEET) degree. Both the BSET and BSEET degrees are accredited by the Technology Accreditation Commission (TAC) of the Accreditation Board for Engineering and Technology (ABET).

The Engineering Technology Department also offers a Bachelor of Science degree in Information Systems Technology (BS). This degree is designed for students with a two-year degree in Computer Networking/Programming to obtain a BS degree.

The College houses the ROTC Division for those students wishing to pursue military training while earning their degree. The AFROTC program offers a minor in Aerospace Studies, and the AROTC program offers a minor in Military Science.

THE HONORS PROGRAMS IN THE COLLEGE OF ENGINEERING

The engineering leaders of tomorrow must not only have impeccable technical credentials, but must also be able to provide strong leadership within the general community in which they live. With this in mind, the Honors Program in the College of Engineering offers outstanding undergraduate engineering and engineering technology majors an enriched educational, technical, professional and cultural experience that significantly augments the basic Engineering curriculum. Honors students comprise academically superior students who commit, upon acceptance into the program, to do broad as well as advanced work in a chosen area.

The objective of the Honors Program is to provide exceptional students with an opportunity to express their creativity and problem-solving abilities through challenging coursework and participation in research projects. In addition, the program exposes students to a wide variety of issues dealing with the role of engineers and the impact of the profession on society. Honors students also participate in several programmed activities, such as lectures by distinguished scholars, engineers, and public figures, visits to local and regional industries and to governmental and military research facilities.

There are two programs available to eligible engineering students: 1) the University Honors Program (see the section on the University Honors Program found elsewhere in this catalog) and 2) the Honors in the Major Program.

The Honors in the Major Program

The College of Engineering Honors in the Major Program is designed for two types of students: 1) Highly qualified students who did not participate in the University Honors Program and would like to have the experience of an Honors curriculum, and 2) University Honors students who wish to continue the Honors curriculum beyond what the University Honors Program offers. The centerpiece of the Honors in the Major Program is the opportunity to undertake independent research as an undergraduate under the guidance of a faculty member in his/her major. The Honors in the Major represents a total of 6 semester hours of work. These credit hours are acceptable as technical electives by all programs except those within the ECE Department. Electrical and Computer Engineering students in the HIM program use the HIM credits in lieu of Senior Design. These six credit hours consist of an Honors in the Major Seminar (3 semester hours), plus three semester hours of Undergraduate Directed Independent Research. The latter will result in an undergraduate thesis which will describe the research done by the student. The student will defend his/her thesis before a committee of faculty in the field as part of an oral examination covering the honors work. A sponsoring faculty member is required to supervise the undergraduate thesis.

In order to be admitted to the Honors in the Major Program, the student must:
1. Have at least 60 semester hours of college credit, including at least 12 graded, upper division semester hours at UCF.
2. An overall GPA of at least 3.20 in all upper division courses.
3. A GPA of 3.50 or more in the Engineering option courses.
4. A recommendation by a sponsoring faculty member.

Exclusions to the eligibility criteria may be made by the College Honors Committee in individual cases, upon recommendation by a sponsoring faculty member.

To remain in the University Honors Program, students are expected to maintain a minimum 3.00 GPA in Core and Option courses. Successful candidates will be awarded an Honors in Engineering/Engineering Technology mention in the diploma and transcript, representing satisfactory completion of the program. Moreover, each department will award a limited number of graduate scholarships (with tuition waivers) to those who apply for graduate school and have successfully completed this program.

To successfully complete the HIM Program and receive said designation, the student must successfully defend the thesis and graduate with at least a 3.5 GPA in the option courses, and 3.2 overall at UCF. No exceptions made for graduation.

Application for admission to the Honors in the Major in Engineering/Engineering Technology Program must be made to the College of Engineering Honors Director, Dr. Avelino Gonzalez, Room ENGR 411, Engineering Building.

THE LEAD SCHOLARS PROGRAM IN THE COLLEGE OF ENGINEERING

Engineering and engineering technology students may also participate in the LEAD (Leadership Enrichment and Academic Development) Scholars Program (see the section on the LEAD Scholar Program found elsewhere in this catalog).

Additional Information on UCF Baccalaureate Engineering and Engineering Technology Programs

Information on each UCF engineering and engineering technology program follows, and more current information can be found on the College home page at http://www.engr.ucf.edu/, and on the home pages of each engineering department. For the home page associated with a particular engineering program, see the listing for that department on the following pages of this catalog.

COLLEGE OF ENGINEERING DEPARTMENTS

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

Chair: A.E. Radwan, ENGR 207, Phone (407) 823-2841, Fax (407) 823-3315

Faculty: Abdel-Aty, Al-Deek, Block, Chopra, Cooper, Dietz, El-Tawil, Hagen, Head, Hong, Kunnath, Kuo, Nnadi, Oloufa,
Onyemelukwe, Randall, Reinhart, J. Taylor, Wanielist, Wayson

The Civil and Environmental Engineering Department (CEE) offers baccalaureate degrees in both Civil Engineering (BSCE) and Environmental Engineering (BSEnvE).

The Civil Engineering Program

The Civil Engineering major is concerned primarily with fundamental civil engineering design and analysis in such areas as structures, geotechnical engineering, sanitary engineering, water resources, and transportation engineering. The civil engineering program has added a new option in construction engineering. Civil Engineering students are required to take a minimum of two Project Design Courses (out of 6 offered), which synthesize various prerequisite course offerings into a design project. These projects are usually “open-ended” and duplicate real world engineering problems. The students typically work in small design team groups. The pre-requisites needed for the various project courses vary.

For example, course work in Engineering Fluid Mechanics (CWR 3201), Hydraulics (CWR 4203C), and Hydrology (CWR 4101C) forms the basis for Water Resources Design (CWR 4812C) in which students work on water, stormwater, and sewer transmission system design. Course work in Mechanics of Materials (EGN 3331) and Structural Analysis I (CES 4100) as well as Steel Structures (CES 4605) or Reinforced Concrete Structures (CES 4702) prepares students to take the Steel Design (CES 4608C) or Concrete Design (CES 4709C) courses in which they do projects appropriate to these important structural engineering disciplines. Course work in Geotechnical Engineering (EGN 3331) and Geotechnical Engineering I (CEG 4101C) prepares students for foundation and earth retaining structural design in Geotechnical Engineering Design (CEG 4801C). Fundamentals learned in Transportation Engineering (TTE 4004) form the basis for traffic analysis and roadway design within Urban Systems Design (TTE 4601C). Course work in Introduction to Environmental Engineering (ENV 3001) and Environmental Engineering Process Design (ENV 4561) prepares the student for the water and wastewater treatment projects in Environmental Engineering System Design (ENV 4562C). Course work in the construction engineering option within the civil engineering major consists of Construction Materials, Construction Methods (CCE 4004), Construction Equipment and Productivity, and Construction Estimating and Scheduling. Some of these courses are in the planning stages and further details will be available in the future.

The Civil Engineering Program Mission Statement and Objectives

Mission

The Civil Engineering Program Faculty strives to create a high quality learning experience for our students. The principal goals include:
1. Provide a broad engineering education to our graduates that will prepare them for both current and future professional challenges.
2. Promote a commitment to continued scholarship and service among our graduates.
3. Foster a spirit of innovation so that our graduates are positioned to take advantage of new technology in our profession.
4. Promote an environment that is inclusive and diverse.
5. To attain prominence in key areas of Civil Engineering graduate education and research.

Educational Objectives

1. Produce graduates who have technical knowledge that is fundamental to the principles of critical areas of Civil Engineering.
2. Provide a professional engineering education that challenges our graduates to think critically and that will prepare them for a successful professional career.
3. Ensure that all our undergraduate students gain experience in applied engineering design within a broad curriculum.
4. Form and maintain partnerships with industry, government agencies, and professional organizations.
5. Develop awareness of the changing needs of society and local, state, national, and global environment and infrastructure.
6. Provide our graduate students with a strong knowledge base to enhance their professional skills and develop their abilities to perform credible research.

The Environmental Engineering Program

The Environmental Engineering major is concerned primarily with the interactions with humans and their environment and the planning, design, and control of systems for environmental quality management for water, land, and air environments. Environmental Engineering students are required to take a minimum of two Project Design Courses (out of 4 offered) which synthesize various prerequisite course offerings into a design project. These projects are usually “open-ended” and duplicate real world engineering problems. The students typically work in small design team groups. The pre-requisites needed for the various project courses vary.

For example, course work in Engineering Fluid Mechanics (CWR 3201), Hydraulics (CWR 4203C), and Hydrology (CWR 4101C) forms the basis for Water Resources Design (CWR 4812C) in which students work on water, stormwater, and sewer transmission system design. Course work in Introduction to Environmental Engineering (ENV 3001) and Environmental Engineering Process Design (ENV 4561) prepares the student for the water and wastewater treatment projects in Environmental Engineering System Design (ENV 4562C). Fundamentals learned in Solid Waste Management (ENV 4341) are used in Solid Waste Facility Design (ENV 4300C) in which students design a municipal solid waste landfill. The course work in Engineering Fluid Mechanics (CWR 3201) and Air Pollution (ENV 4121C) prepares students for the design of air pollution control equipment in Air Pollution Control Design (ENV 4122C).

The Environmental Engineering Program Mission Statement and Objectives

Mission

The Environmental Engineering Program Faculty strives to create a high quality learning experience for our students. The principal goals include:
1. Provide a broad engineering education to our graduates that will prepare them for both current and future professional challenges.
2. Promote a commitment to continued scholarship and service among our graduates.
3. Foster a spirit of innovation so that our graduates are positioned to take advantage of new technology in our profession.
4. Promote an environment that is inclusive and diverse.
5. To attain prominence in key areas of Environmental Engineering graduate education and research.

Educational Objectives

1. Produce graduates who have technical knowledge that is fundamental to the principles of critical areas of Environmental Engineering.
2. Provide a professional engineering education that challenges our graduates to think critically and that will prepare them for a successful professional career.
3. Ensure that all our undergraduate students gain experience in applied engineering design within a broad curriculum.
The mission statement and objectives for the Civil Engineering and Environmental Engineering programs are electronically posted and continuously updated. More information on the Civil and Environmental Engineering programs can be found on the CEE Department home page at http://www-cee.engr.ucf.edu.

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

Chair: W. B. Mikhail, EN 407, Phone (407) 823-2786, Fax (407) 823-5835
Faculty: Batarseh, Bauer, Belkerdid, DeMaria, Georgiopoulos, A. Gonzalez, F. Gonzalez, Haralambous, Jones, Kasparis, Klee, Linton, Liu, Malacha, R. Miller, Myler, Petrasko, R. Phillips, Qu, Richie, Shi, Sundaram, Wahid, Wallon, Weeks, Wu, Yuan, Zalewski

The Electrical and Computer Engineering Department (ECE) offers baccalaureate degrees in both Electrical Engineering (BSEE) and Computer Engineering (BScpE).

The curriculum provides an integrated experience including humanities and social sciences, mathematics and basic sciences, engineering core, computing, and design experience. The laboratory experiences appropriately combine theory and practice in the Electrical and Computer Engineering programs through a logical progression of courses. Design experiences start with the first circuits course, EGN 3373, and progress to the senior design capstone courses. This senior design experience is a two-semester sequence totaling six credit hours. Aspects of engineering economics, administration, oral presentation, professional issues such as ethics, safety, and environmental impact are also covered in the design courses. The design projects required in the design course sequence address real-life problems, and the students work in a team setting. Also, several projects are developed jointly with our industrial partners.

The Computer Engineering Program

The Computer Engineering program contains a minimum of 24 credit hours of design experience, which includes courses listed as Computer Systems Design I and II (EEL 4767C and EEL 4768C), Engineering Applications of Computer Methods (EEL 4832), Engineering Data Structures (EEL 4851C), and Introduction to Digital Circuits and Systems (EEL 3342C). Technical electives can give additional design experiences in specialty areas such as computer architecture, intelligent systems, networking, and software engineering.

Mission Statement and Objectives

Mission Statement and Objectives

Mission

The mission of the Bachelor of Science in Computer Engineering Degree Program is to educate students to become highly skilled in the principles and practices of computer engineering and develop computer engineers that meet market needs.

Objectives

1. Graduates will acquire sufficient academic competence in fundamental math, science, and engineering principles for employment in computer engineering.
2. Graduates will acquire sufficient academic competence for advanced graduate studies.
3. Graduates will demonstrate overall competence in the computer engineering discipline, including the ability to design systems and processes, conduct and analyze experiments, and learn and utilize computer skills.
4. Graduates will demonstrate overall competence in communication skills, computer skills, and problem solving skills, and the ability to work in interdisciplinary teams.
5. Students are recognized by their employers for their knowledge and skills in solving real world problems, and for their professionalism.

The Electrical Engineering Program

The Electrical Engineering program contains a minimum of 18 credit hours of design experience. This is achieved through such courses as Linear Control Systems (EEL 3657), Electronics I and II (EEL 3307C and EEL 4309C), Digital Signal Processing (EEL 4750), Signal Analysis and Communication (EEL 3552C), Computer Systems Design I (EEL 4767C) Electrical Networks (EEL 3122C) and Digital Circuits and Systems (EEL 3342C). Technical electives can give additional design experience leading to work in communications, controls, image and signal processing, microelectronics and solid state devices, microwaves and electromagnetics, optical engineering, and power/power electronics.

The mission statement and objectives for the Computer Engineering and Electrical Engineering programs are electronically posted and continuously updated. More information on the Computer and Electrical Engineering programs can be found on the ECE Department home page at http://www-ece.engr.ucf.edu.

Mission Statement and Objectives

Mission

The mission of the Bachelor of Science in Electrical Engineering Degree Program is to educate students to become highly skilled in the principles and practices of electrical engineering and develop electrical engineers that meet market needs.

Objectives

1. Graduates will acquire sufficient academic competence in fundamental math, science, and engineering principles for employment in electrical engineering.
2. Graduates will acquire sufficient academic competence for advanced graduate studies.
3. Graduates will demonstrate overall competence in the electrical engineering discipline, including the ability to design systems and processes, conduct and analyze experiments, and learn and utilize computer skills.
4. Graduates will demonstrate overall competence in communication skills, computer skills, and problem solving skills, and the ability to work in interdisciplinary teams.
5. Students are recognized by their employers for their knowledge and skills in solving real world problems, and for their professionalism.

DEPARTMENT OF INDUSTRIAL ENGINEERING AND MANAGEMENT SYSTEMS

Chair: Charles H. Reilly, EN 307, Phone (407) 823-2204, Fax (407) 823-3413
Faculty: Armacost, Chandra, Elshennawy, Hoekstra, Hosni, Kotnour, Kulonda, Lee, Malone, McAulley-Bell, Mollaghasemi, Mullens, Pet-Edwards, Practor, Ragusa, Sepulveda, Stanney, Thompson, Whitehouse, Williams

Industrial Engineers make things work better. They design systems which translate a specific product design into a physical reality in the most productive manner and with highest possible quality. 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 generally sought in industry, 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.

Elementary engineering design experiences are incorporated into many of the required industrial engineering core courses. For instance, students learn how to apply the principles of engineering design to production systems and cost estimation in EIN 3354, to work methods and process flows in EIN 3314, and to facilities design and plant layout in EIN 4364. The design experience concludes with a real-world system design in the two-semester capstone design sequence, EIN 4116 and EIN 4891.

Mission Statement and Objectives

Mission
To produce industrial engineering professionals and leaders who, working alongside their coworkers, can design and improve operations in industry, business, and government, making them more productive, more responsive, and producing goods and services of higher value to the customer for the global economy of the 21st century.

Objectives
1. BSIE graduates will demonstrate knowledge of math, science, and engineering fundamentals. Specifically, the student will have the ability to:
   • Demonstrate general design principles.
   • Use fundamental engineering techniques, skills, and tools for engineering practice.
   • Analyze and interpret data to produce meaningful conclusions and recommendations.

2. BSIE graduates will demonstrate competence in the professional practice of industrial engineering, effectively using both technical and qualitative skills. Specifically, the student will have the ability to:
   • Design Systems, components, and processes to meet desired needs.
   • Identify, formulate, and solve industrial engineering problems.
   • Use industrial engineering techniques, skills, and tools for engineering practice.
   • Be a productive member of multi-disciplinary teams.
   • Communicate effectively in both written and spoken presentations.
   • Incorporate contemporary issues into the practice of industrial engineering, including global communication.
   • Have the knowledge to become a Professional Engineer (PE) in the IE discipline.

3. BSIE graduates will understand the leadership responsibilities of a practicing engineer. Specifically, the graduate will understand the need to:
   • Make decisions in light of professional and ethical responsibilities.
   • Understand the impact of engineering solutions in a global and societal context.
   • Understand contemporary issues into the practice of industrial engineering.
   • Engage in life-long learning.

4. BSIE graduates seeking professional employment or admission to graduate education programs will be successful in doing so within six months of graduation.

5. IEMS students will receive relevant curriculum content in a learning environment that facilitates learning and retention.

The mission statement and objectives for the Industrial Engineering programs are electronically posted and continuously updated. More information on the Industrial Engineering program can be found on the Industrial Engineering Department home page at http://ie.engr.ucf.edu/.

DEPARTMENT OF MECHANICAL, MATERIALS, AND AEROSPACE ENGINEERING

Chair: Louis C. Chow, EN 381, Phone (407) 823-2416 Fax (407) 823-0208

Faculty: Bishop, Chen, Chew, Desai, Durance, Eno, Giannuzzi, Hagedoorn, Hasler, R. Johnson, Kapat, Kar, Kassab, K. Lin, McBrayer, Minardi, Moseley, Nayfeh, Nicholson, Nuckolls, Seal, W. Smith, Vrentz, Zhou

The Department of Mechanical, Materials, and Aerospace Engineering offers undergraduate degree programs in Mechanical Engineering and Aerospace Engineering.

The Aerospace Engineering program is designed to provide a broadly-based foundation in aeronautics and astronautics, including topics such as aerodynamics, propulsion, aerospace structures and materials, flight dynamics, and control and performance.

The Mechanical Engineering program is designed to provide a broadly-based foundation in thermo-fluids, mechanical systems and materials, including topics such as solid mechanics, machine design, vibrations, CAD/CAM/FEM, feedback control and mechatronics, fluid mechanics, heat transfer, and structure and properties of materials.

Both programs seek to convey an understanding of the fundamental principles of science and engineering, to stimulate curiosity and creativity, to provide hands-on experience in laboratories, and to prepare students to design systems which solve current and relevant societal problems. The design experience begins in the freshman computer graphics course and grows throughout the curricula with increased emphasis on student creativity, open-ended problems, materials selection, design methodology, feasibility considerations, alternative solutions, and concurrent design, and culminates in the senior capstone design courses. The use of computers and written and oral communication are part of the design experiences throughout the programs.

The mission statement and objectives for the Aerospace Engineering and the Mechanical Engineering programs are electronically posted and continuously updated. More information on the Aerospace and Mechanical Engineering programs can be found on the MMAE Department home page at http://www.mmae.engr.ucf.edu/.

DEPARTMENT OF ENGINEERING TECHNOLOGY

(The Engineering Technology Department (ENT) is located on the 4th floor of the Pavilion Building in the Central Florida Research Park approximately 0.7 mile (1.1 km) due South of the main campus. LASER shuttle bus service runs between the main campus and the Pavilion Building.)

Chair: R. Denning, RP 491, Phone (407) 384-2161, Fax (407) 384-2157

Assistant Chair: A. Rackooh, BLLC 277, Phone (407) 631-5366 (Brevard Campus)

Assistant Chair: R. Coowar, RP 478, Phone (407) 384-2151

Faculty: Coowar, Misconi, Morse, Motlagh, Osborne, Rahrooh, Rogers, Walsh

Mission Statement and Objectives

Mission
The mission of the Engineering Technology program is to educate students to become professional technologists who meet the current needs of industry.

Objectives
1. Provide excellent curriculum content (e.g. math, science, and engineering technology principles, discipline-related topics and skills, and competencies in communication, problem solving, teamwork) to prepare students for professional practice in engineering technology.
2. Provide an educational program so graduates are successful in
attaining professional employment.
3. Provide an excellent learning environment so the graduates are competitive with other BS Engineering Technology graduates from other U.S. institutions.
4. Provide educational content so graduates understand and value professional ethics, integrity, and diversity.

The mission statement and objectives for Engineering Technology are electronically posted and continuously updated. More information on the Engineering Technology programs can be found on the ENT Department home page at http://www-ent.engr.ucf.edu.

Bachelor of Science in Electrical Engineering Technology (BSEET)
Coordinator: Alireza Rahrooh
This program in electrical engineering technology, leading to the BSEET degree, provides a structured curriculum with instruction in fundamentals and engineering principles applicable toward working with both present and future technologies in a variety of work environments. Graduates may find employment opportunities in such diverse fields as aerospace, instrumentation, computers, communications, consumer products, banking and education. They may become involved in applied design, product development, manufacturing, quality assurance, production and operations as well as activities such as field engineering, sales, system analysis, technical writing and software design, preparation and programming.

The EET program provides two paths of concentration, thereby providing the student a choice between either a hardware or a software emphasis. The concentration in Electrical systems provides a broad based curriculum in electrical/electronic engineering principles, and their application. Instruction and problem solving experiences are provided in both circuit and system aspects including computers, communications, controls and electrical power.

The concentration in Computer Systems, while providing a firm foundation in electrical/electronics technology, also includes extensive instruction in programming, system design and analysis, and systems programming. Projects in solving real-world problems are required of all students in this concentration.

Bachelor of Science in Information Systems Technology (BS)
Acting Coordinator: Bahman Motlagh
The Engineering Technology Department also offers the Bachelor of Science degree in Information Systems Technology (BS), designed to accept Associate of Science (AS) degree graduates from community college programs in Computer Programming Technology, Digital Communications, and Networking. The IST curriculum provides the AS graduate with additional course work in networking and computer systems. It also provides skills and knowledge related to project management, economic analysis, quality assurance, reliability, and logistics. A characteristic of this curriculum is that it contains less mathematics and natural science than do the BSET and BSEET curricula.

REx3E OFFICER TRAINING CORPS
AIR FORCE ROTC (Aerospace Studies)
Chair: Lt Col Judge, Trailer 501, Room 103, Phone (407) 823-1247, FAX (407) 823-2265
Faculty/Staff: Major Fiedler, Captain Mang, Captain Zeitz, MSgt Hernandez, SSgt Garcia, and Mrs. Fioramanti, Office Manager

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 four-year, three-year, and two-year Air Force ROTC programs. The four/three-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. All programs offer scholarship opportunities to selected students. Students are invited to write or visit the Department of Aerospace Studies to obtain additional information. The Air Force retains sole discretion whether or not any applicant is qualified for precommissioning education through the Air Force ROTC. More information on the Aerospace Studies program can also be found on the AFROTC home page at http://pegasus.cc.ucf.edu/~airfrotc/

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. AFROTC courses are listed under the prefix AFR. The curriculum is divided into two phases:

1. General Military Course (GMC)
The General Military Course is designed to give students their first exposure to the Reserve Officer Training Corps program during their freshman and sophomore years. The courses deal with the mission, organization, and structure of the US 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 is designed to develop and hone managerial and officer skills during a student's junior and senior years. All students who seek a commission through the Air Force ROTC must complete the POC curriculum. 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.

LEADERSHIP LABORATORY
Leadership Laboratory is a required lab that must be taken in conjunction with the academic class. Leadership Laboratory is only open to students who are members of the Reserve Officer
Training Corps or are eligible to pursue a commission as determined by the Professor of Aerospace Studies.
• Be at least 17 years of age at the time of acceptance
• Be able to complete the Professional Officer Course and complete all degree requirements prior to reaching age 26.5 if entering Flight Training, or before age 30 (can be waived to age 35) if entering a non-flying Air Force specialty
• Pass the Air Force Officer Qualifying Test
• Pass an Air Force medical examination
• Pass the Air Force Physical Fitness Test
• Selection by the Professor of Aerospace Studies and acceptance by the University
• Successful completion of a summer Field Training course (either 4 or 6 week)
• 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 $150 per month.

AIR FORCE ROTC SCHOLARSHIP PROGRAM
Scholarships are phased at 4, 3, and 2-year opportunities. This system provides opportunities to those students enrolled in certain academic majors. These scholarships provide for full tuition and fees, and an allowance for textbooks. Scholarship recipients also receive the $150 monthly tax-free monetary allowance. A POC Incentive scholarship is available to eligible cadets enrolled in the last two years of our program regardless of major as long as they graduate prior to becoming 27 years old and maintain a term grade point average of 2.35 or greater.

SUMMER TRAINING
All students must attend a summer Field Training course conducted at several Air Force bases. 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. 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 Corps curriculum. These students need to contact the department early in the Fall prior to the Summer Field Training.

OFFICER COMMISSIONS
Students who complete the Professional Officer Course are appointed Second Lieutenants in the United States Air Force. After completing the training program and entering active duty with a reserve commission, 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 initial period of active service, new officers are given the opportunity to attain career status by obtaining a regular commission in the United States Air Force.

ARMY ROTC (MILITARY SCIENCE)
Chair: LTC John J. Ruzich, Trailer 501, Room 110
Faculty/Staff: CPT Hribar, MSG Davidson, SFC Rivera, SSG Coyle, SGT Villada, Ms. Martin, Office Manager, Phone (407) 823-2430, Fax (407) 823-3524
The University of Central Florida, in cooperation with the US Army, provides an opportunity to earn a commission as a Second 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 $3700.00 in their last two years.

CURRICULUM:
The Military Science on-campus curriculum is divided into two phases: Basic Military Science Course and Advanced Military Science Course.

1. Basic Military Science
A. 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 organizations, equipment, weapons, map reading, land navigation, management skills, grade structure, communications and leadership. There are non contractual obligations or commitments for students in the Basic course phase. The Basic Course phase offers students the opportunity to see what Army ROTC is all about (MIS 1031, 1400, 2120, 2300). Students will also participate in a Field Training Exercise (FTX). These courses fulfill pre-requisite requirements for entering the Advanced Military Science phase.
B. Requisites for admission to the Basic Course:
• Enrollment in a Baccalaureate or Master’s degree program
• Full-time student status

2. Advanced Military Science
A. The Advanced Military Science courses, open to both men and women, are 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 tax-free subsistence of $150.00 per month up to 10 months during the school year. Each student is required to take courses that meet the Army’s Professional Military Education Requirements. These requirements include taking at least one course in each of the following areas: Communication Skills, Military History (AMH 3470), Military Literacy (MIS 3301, 3410, 4421 and 4430). Students must meet pre-requisite requirements prior to participating in the Advanced program. They must also successfully complete a 35-day Advanced Leadership Camp at Ft. Lewis, WA, normally between their junior and senior years.
B. Requisites for Admission to the Advanced Course:
• Successful completion of Basic Course, Basic Camp, JROTC, prior military service or permission of the Department Chair
• Must be 17 years of age at the time of entry, but not more than 30 years of age at the time of commissioning (30-year age regulation waived for veterans up to age 34)
• Successful completion of an Army physical examination
• Agreement to complete the Advanced Course requirements and serve on either Active, Reserve, or National Guard duty as a commissioned officer
• Full-time undergraduate student status (minimum of 12 hours); full-time graduate student status (minimum 6 hours)
• US Citizen
3. **Monetary Allowance**
   All contracted and scholarship students enrolled in the Advanced Military Science Course receive a tax-free monetary allowance of $150.00 per month during the school year.

4. **Scholarships**
   Four, three and two-year scholarships are available for all students who qualify. These scholarships provide full tuition, books and fees for Fall and Spring semesters. In addition, all contracted scholarship students also receive the $150 monetary allowance during the school year. Contact the Enrollment Officer for additional information at (407) 823-5383.

5. **Placement Credit**
   Placement credit is offered to all students with prior service. Prior service experience waives the required Basic Courses. Prior service is extended to include Active duty, Reserve Forces and National Guard. Although prior service does waive the Basic Courses, if a prior service student desires, he/she may elect to enroll in the Basic Courses.

6. **Daytona Beach Campus Students**
   These students should contact the Professor of Military Science at Embry-Riddle Aeronautical University, Daytona Beach, Florida, (904) 239-6469. Students will participate in a Field Training Exercise (FTX) and will commission, if qualified, with Embry-Riddle.

**SUMMER TRAINING COURSES**

1. **Basic Course Summer Training**
   A student can earn placement credit for the Basic Course classes and allowed entry into the Advanced Course 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 receive approximately $700.00 pay. Additionally, all lodging, meals and transportation are furnished. Uniforms will be provided at no expense.

2. **Specialized Summer Training Courses**
   Qualified students can be selected to attend specialized military training occurring the summer months. These areas of training include: a) Airborne Training; b) Air Assault Training; c) Northern Warfare Training; d) Cadet Troop Leadership Training; e) Master Fitness Training; and f) Mountain Training.

**MILITARY SCIENCE ELECTIVE: Orienteering and Survival Course**
   Army ROTC hosts an Orienteering and Survival course open to all students on campus as an elective. This class is offered as a service to the UCF community. For Army ROTC cadets, it does not count towards commissioning credit unless approved by the Professor of Military Science (Chair, Military Science Department). For additional information on any aspect of the above program call (407) 823-2430 or 5383.
The College of Health and Public Affairs is composed of two schools and five departments. The two schools are Nursing and Social Work. The health related disciplines include: Communicative Disorders, Health Professions and Physical Therapy, and Molecular Biology and Microbiology. The Criminal Justice/Legal Studies and Public Administration programs comprise the public affairs unit of the college.

As a college, we are responsible for educating professionals in health, human and public service. As an integral part of the Central Florida community, we have as our mission the advancement of knowledge, education, public policy and professional practice in health and public affairs.

The college offers thirteen baccalaureate, eight graduate programs, seven minors and one certificate program.

**General Requirements for the Bachelors Degree**

Some Schools, 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: Schools of Nursing and Social Work, and the Programs in Cardiopulmonary Sciences, Medical Laboratory Sciences, Health Information Management, Physical Therapy and Radiologic Sciences. Application must be made to the appropriate program in health sciences. For Social Work, contact the School of Social Work. Additional information regarding prerequisites and grade point averages may be obtained from the desired School, Program or Department.

The following Departments and Programs do not have limited access: Departments of Communicative Disorders, Criminal Justice/Legal Studies, Molecular Biology/Microbiology, and Public Administration; and the Program in Health Service Administration.

**ADVICEMENT**

### OFFICE OF STUDENT SUPPORT

**Director of Student Support:** Judy Sindlinger, HPA 110, (407) 823-0010

**Advisement Coordinator:** Debbie Phillips, HPA 110, (407) 823-0010

E-mail: hpainfo@pegasus.cc.ucf.edu

The College of Health and Public Affairs Office of Student Support assists students in understanding matters relating to college and university requirements and procedures as well as coordinating orientation, registration and graduation certification. Students interested in pursuing limited access programs are encouraged to meet with advisors in the college to stay on track by taking the appropriate prerequisite requirements. Advisors are available through our Outreach Program for students on probation or for those who are having academic difficulty. Questions concerning university and college academic policies should be directed through this office. Faculty advisors are assigned to students upon admission to their degree program in their academic department. Pre-health Professions Advisement for students interested in pursuing professional degrees is handled in the Pre-Health Professions Advisement Office located in HPA 124, (407) 823-2670.

### Foreign Language Requirements

<table>
<thead>
<tr>
<th>Program</th>
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<tbody>
<tr>
<td>Cardiopulmonary Sciences</td>
<td>B.S. - high school only</td>
</tr>
<tr>
<td>Communicative Disorders</td>
<td>B.A. - 2 semesters/ proficiency</td>
</tr>
<tr>
<td>Health Information Management</td>
<td>B.S. - high school only</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>B.S. - high school only</td>
</tr>
<tr>
<td>Health Services Administration</td>
<td>B.S. - high school only</td>
</tr>
<tr>
<td>Medical Laboratory Sciences</td>
<td>B.S. - high school only</td>
</tr>
<tr>
<td>Molecular Biology and Microbiology</td>
<td>B.S. - high school only</td>
</tr>
<tr>
<td>Nursing</td>
<td>B.S.N. - high school only</td>
</tr>
<tr>
<td>Physical Therapy</td>
<td>B.A. - 2 semesters/ proficiency</td>
</tr>
<tr>
<td>Public Administration</td>
<td>B.S. - 6 hours approved courses</td>
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<tr>
<td>Radiologic Sciences</td>
<td>B.S. - high school only</td>
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<tr>
<td>Social Work</td>
<td>B.S.W. - 2 semesters/ proficiency or 2 cultural diversity courses</td>
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### PROGRAMS & DEGREES

<table>
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<tr>
<th>Title</th>
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<tbody>
<tr>
<td>Cardiopulmonary Sciences</td>
<td>(BS)</td>
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<tr>
<td>Communicative Disorders</td>
<td>(BA, BS, MA)</td>
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<tr>
<td>Criminal Justice</td>
<td>(BS, MS)</td>
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<tr>
<td>Health Information Management</td>
<td>(BS)</td>
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<tr>
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<td>Social Work</td>
<td>(B.SW, MSW)</td>
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### DEPARTMENTS AND PROGRAMS

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<th>Department</th>
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<tr>
<td><strong>DEPARTMENT OF COMMUNICATIVE DISORDERS</strong></td>
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<tr>
<td>Interim Chair: M. J. Sweeney</td>
</tr>
<tr>
<td>Research Pavilion Suite 200-210, Phone</td>
</tr>
<tr>
<td>(407) 249-4798</td>
</tr>
<tr>
<td><strong>Faculty:</strong> Brice, Bratten, Ingram, Mullin, Nye, Parker, Ratusnik, Rivers, Rosa-Lugo, Ryalls, Ut, Vanryckeghem</td>
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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 the 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 Council on Academic Accreditation of the American Speech-Language Hearing Association.

In addition to coursework for majors, the Department offers a 3-course sequence in Sign Language: SPA 4380, SPA 4381, SPA 4382.

Degrees: Communicative Disorders (BA, BS, MA)
Tracks: None
Minors: Communicative Disorders

DEPARTMENT OF CRIMINAL JUSTICE AND LEGAL STUDIES
Chair: B.J. McCarthy, HPA 311, Phone (407) 823-2603
Faculty: Applegate, Bast, Becker, Bishop, Bohm, Cherry, Cook, Eastepe, Fabianic, Flagg, Griset, Hall, Holmes, Lanier, Lucken, Lynch, Mahan, B.J. McCarthy, B.R. McCarthy, Pyle, Remis, Reynolds, Sanborn, Slaughter, Surette

The Department of Criminal Justice and Legal Studies includes two undergraduate degree programs: Legal Studies and Criminal Justice.

Criminal Justice Program
Criminal Justice is a problem based field of study which focuses on the nature of crime and crime control agencies in a democratic society. The curriculum reflects the dynamic nature of the field and prepares students for challenging careers in public service.

Legal Studies Program
The Legal Studies Program provides students with a broad understanding of basic principles of law and the role and function of the legal system. The legal studies program, in addition to preparing students for law-related careers, provides a foundation for law school or other graduate education. All of the full time Legal Studies faculty are attorneys and are available for law school advising. Satisfactory completion of program requirements leads to the degree of Bachelor of Arts or Bachelor of Science with a minor in Legal Studies.

Degrees: Criminal Justice (BS, MS), Legal Studies (BA, BS)
Tracks: None
Minors: Criminal Justice, Legal Studies

DEPARTMENT OF HEALTH PROFESSIONS AND PHYSICAL THERAPY
Interim Chair: M. J. Sweeney, TR 534, Phone (407) 823-2359
Faculty: Aciero, Barr, Bertetta, Chase-Beasley, Diesen, Douglass, Edwards, Enchelmaier, Falen, Frazer, Hamby, Hudson, Liberman, Larry, Little, Mendenhall, Morrison, Rotarius, Walker, Worrell

The Department of Health Professions and Physical Therapy offers a diversity of baccalaureate programs which prepare students for professions in the fields of Cardiopulmonary Sciences (Respiratory Therapy), Health Information Management, Health Sciences (Athletic Training), Health Services Administration, Physical Therapy and Radiologic 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 programs in Cardiopulmonary Sciences, Health Information Management and Radiologic Sciences require a minimum overall GPA of 2.5 for admission and the Physical Therapy program requires a minimum overall and prerequisite GPA of 3.0. In addition, a minimum grade of "C" is required for prerequisite courses and required courses within the major. No CLEP, TSD, or AP credit may be used for prerequisite courses.

The primary goal of the program in Health Services Administration is to prepare managers to direct a variety of health care organizations such as hospitals, HMO's, clinics and any other organization involved in the delivery or management of health care services. The undergraduate curriculum is consistent with the curricular requirements of the Association of University Programs of Health Administration, stressing administration, policy and planning skills. A diverse health care community offers students a variety of internship experiences as well as providing placement opportunities upon graduation. Faculty are actively engaged in research relating to management, conflict resolution, occupational stress, outcome assessment and integrated delivery mechanisms.

PROGRAM IN CARDIOPULMONARY SCIENCES

Director: L.T. Worrell, TR 534, Phone (407) 823-2214

The major in Cardiopulmonary Sciences (which includes the Respiratory Care Program) leads to the Bachelor of Science Degree. In the professional curriculum, students study advanced courses in respiratory therapy, pharmacology, life support systems, disease assessment, clinical practice, diagnostics, and patient management. Upon completion of the undergraduate program, the baccalaureate individual will possess basic and advanced level skills and should be prepared to assume future leadership roles within the profession. Graduates will be prepared to become Registered Respiratory Therapists through licensure by the State of Florida.

The Cardiopulmonary Sciences program is accredited by the Committee on Accreditation for Respiratory Care in conjunction with CAAHEP of the American Medical Association.

This is a limited access program and requires a separate application to the program by February 1 of the year in which admission is sought.

Degrees: Cardiopulmonary Sciences (BS)
Tracks: None
Minors: None

PROGRAM IN HEALTH INFORMATION MANAGEMENT

Director: C. Barr, TR 534, Phone (407) 823-2353

Health Information Managers 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 Health Information Management program is approved by the Commission on Accreditation of Allied Health Education Programs (CAAAHEP) in collaboration with the Council on Accreditation of the American Health Information Management Association.

This is a limited access program and requires a separate application to the program by February 1 of the year in which admission is sought.

Degrees: Health Information Management (BS)
Tracks: None
Minors: None
PROGRAM IN HEALTH SCIENCES
Director: V. Hudson, HPA 256, Phone (407) 823-3470

The Program in athletic training at the University of Central Florida is a track in the Department of Health Professions and Physical Therapy in the College of Health and Public Affairs. The athletic training program is a five semester program where students complete 12-15 credits per semester while engaged in clinical affiliations. The core of athletic training coursework will emphasize skills and competencies necessary for successful clinical practice in a variety of settings in which athletic trainers are presently employed. A significant and important aspect of the educational process will be clinical experiences that will occur in a variety of settings under the direction of a certified athletic trainer. These local affiliation sites include high schools, colleges, universities, sports medicine clinics, and professional athletic organizations. The unique aspect of the athletic training curriculum is that upon successful completion of the course of study, it will provide the graduate with a bachelor of science degree in Health Sciences and the eligibility to take the National Athletic Trainer's Association (NATA) Certification Exam. By successfully passing the exam, the student will be recognized as a certified athletic trainer (A.T.C.).

Degrees: Health Sciences (BS)
Tracks: Athletic Training
Minors: None

PROGRAM IN HEALTH SERVICES ADMINISTRATION
Director: TR 534, Phone (407) 823-2359

The Program offers a baccalaureate degree in Health Services Administration. The baccalaureate degree is designed for students who desire to study the business side of health care. People within the health care industry who associate with science degrees in areas such as nursing, respiratory therapy, radiologic technologies, medical laboratory technology, dental hygiene, and others may find this program providing a migration path from the clinical side of the health care industry to the leadership side. Students without a background in the health care industry can build a solid understanding of the complexity of managing health services organizations.

Degrees: Health Services Administration (BS, MS)
Tracks: Athletic Training
Minors: Health Services Administration, Health Sciences

PROGRAM IN PHYSICAL THERAPY
Director: E. Hamby, HPA 256, Phone (407) 823-3470

The physical therapy program at the University of Central Florida is an accredited entry-level, three year curriculum leading to a bachelor of science in health sciences, then to a bachelor of science in physical therapy degree. (The program is currently under review to convert to a post-baccalaureate master's program for implementation in the year 2000.) After completion of the three year professional program, graduates will be eligible to take the state licensure examination in any state in the United States, or comparable examination in foreign countries with practice acts regulating the practice of health professionals. Graduates of entry-level programs are prepared to practice in an ethical, legal, safe, caring and effective manner in a variety of acute, community, rehabilitative or private health care settings, providing both physical and psychosocial intervention. Graduates are able to screen individuals to determine the need for physical therapy treatment or for referral to other health professionals. They can design and manage a comprehensive physical therapy plan of care that includes a comprehensive treatment plan, appropriate delegation to and supervision of other support personnel, accurate and thorough documentation of the delivery, and quantified results of, the plan of care, and participation in discharge planning and follow-up care.

Graduates are also prepared to pursue graduate studies, and/or specialty training and certification in all recognized physical therapy specialties.

This is a limited access program and requires a separate application to the program by February 1 of the year in which admission is sought.

Degrees: Health Sciences (BS), Physical Therapy (MS)
Tracks: None
Minors: None

PROGRAM IN RADIOLOGIC SCIENCES
Director: T. J. Edwards III, HPB 104, Phone (407) 823-2747

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. Radiographers and Radiation Therapists 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 Therapists and, with experience, advance to leadership positions in their profession.

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 administration, education, quality management, and public health physics.

Radiation Therapists work closely with physicians to deliver high energy radiation for the treatment of cancer. The Radiation Therapist 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 radiation administration, education, quality assurance, and dosimetry.

The program works in conjunction with Central Florida regional hospitals, Sanford; Health Central, Ocoee; Jewett Orthopedic Clinic, Winter Park; Halifax Medical Center, Daytona Beach; South Seminole Community Hospital, Longwood; Winter Park Memorial Hospital, Winter Park; and Orlando Regional Medical Center, Orlando.

This is a limited access program and requires a separate application to the program by February 1 of the year in which admission is sought.

Degrees: Radiologic Sciences (BS)
Tracks: Radiography, Radiation Therapy
Minors: None

DEPARTMENT OF MOLECULAR BIOLOGY AND MICROBIOLOGY
Chair: R.N. Gennaro, BL 306, Phone (407) 823-5932
Faculty: Berringer, Bertetta, Blaney, Chai, D. Chakrabarti, R. Chakrabarti, Charba, Daniell, Fernandez-Valle, Gennaro, Hitchcock, Jacobs, Logiudice, Naser, Sweeney, Washington, White

The Department of Molecular Biology and Microbiology offers curricular programs leading to a minor, a Bachelor of Science degree, and a Master of Science degree, each in Molecular Biology and Microbiology. The department also offers a Bachelor of Science degree in Medical Laboratory Sciences. The Molecular Biology and Microbiology program offers courses which fulfill admission requirements for all the four-year health professions and graduate programs in molecular biology and microbiology.
PROGRAM IN MOLECULAR BIOLOGY AND MICROBIOLOGY

The Core Curriculum in the baccalaureate program, with its broad and thorough grounding in the physical, computational, and life sciences, provides a solid foundation in concepts and applications of modern biology to contemporary and future problems. The Restricted Electives component of the baccalaureate program allows each student to enhance his/her academic preparation in areas of morphological, clinical, analytical or investigative applications. Students are also encouraged to gain research experience and exposure to specialized topics not taught in formal courses through the mechanism of directed research and independent study contracts with selected faculty. This thorough, but flexible, program, provides an excellent preparation for industry, graduate education, and for the four-year health professions (chiropractic, medical, dental, optometric, podiatry, pharmacy, and veterinary medicine).

Degrees: Molecular Biology and Microbiology (BS, MS)
Tracks: None
Minors: None

PROGRAM IN MEDICAL LABORATORY SCIENCES

Director: D. Hitchcock, BL 306, Phone (407) 823-2968

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 ability 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.

The last two years of sequential courses constitute the upper division portion of the Program. The size of the class to be selected in the Medical Laboratory Science Program is determined by the availability of space and equipment, requirements concerning class size set for by the Program Accrediting Agency, and available spaces in the clinical facilities.

This is a limited access program that requires a separate application to the program by March 1 of the year in which admission is sought.

Degrees: Medical Laboratory Sciences (BS)
Tracks: None
Minors: None

SCHOOL OF NURSING

Director: E. Stullenbarger-Galford, HPA 220, Phone (407) 823-2744

Faculty: Bear, Browne-Krimsley, Bushy, Byers, Covelli, Crigger, Dorrer, Dow, Gichia, Giavincio, Gropper, Hennig, Holcomb, Kiehl, Kijek, Leli, Pelliccio, Peterson, Ramey, Smith, Sole, Stullenbarger, Wink

The nursing curriculum 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.

Nurses licensed in Florida are eligible for admission into the RN to BSN Program at UCF. Applicants have to hold current RN license in Florida. Each applicant is reviewed individually and guided to prevent repetition of previous coursework. RNs may submit applications during any semester. Contact the School of Nursing for specifics on the RN-BSN program. This program is offered in Orlando, Leesburg, and on the Brevard and Daytona campuses.

The goal of the MSN program is to prepare advanced registered nurse practitioners and administrators to assume leadership positions in a variety of healthcare settings. Three majors are offered at this time: Family Nurse Practitioner, Adult Nurse Practitioner, and Nursing Leadership and Management. Minimum hours for the degree are 41-46 hours of graduate work depending on the major. Either a thesis or research utilization project is required. Student must be a licensed Registered Nurse in Florida.

All programs are limited access and require a separate application to the School of Nursing.

Degrees: Nursing (BSN) (MSN)
Tracks: RN to BSN, Generic BSN, RN to MSN, MSN
Minors: None

DEPARTMENT OF PUBLIC ADMINISTRATION

Chair: T. Liou, HPA 343, Phone (407) 823-2604

Faculty: Berman, Colby, Feldheim, Gianakis, Jurie, Lawther, Liou, Rios, Rogers, Shapek, Wang

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 or Bachelor of Science with a major in Public Administration. The baccalaureate program in Public Administration is offered on the Orlando and Brevard campuses.

Degrees: Public Administration (BA, BS, MPA)
Tracks: None
Minors: Public Administration

SCHOOL OF SOCIAL WORK

Director: Mary Van Hook, HPA 204, Phone (407) 823-2114

Faculty: Abel, Brett, Colby, Davis, Dzegielweski, Green, Jacinto, Kazmerski, Leon, Poole, Sauer, Suh

The School 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. The Social Work program is a limited access program which requires separate application to the School of Social Work.

The School of Social Work also offers the Certificate of Gerontology. The gerontology certificate is an interdisciplinary program which helps prepare the students to meet the needs of the elderly citizens of Central Florida. The program may be of particular interest to students who are majoring in health sciences, psychology, social work, nursing or sociology. Other students, such as those majoring in music, music education, physical education, or art education may also find the program valuable.

If currently majoring in an area of certificate coursework, the student should work with their department to coordinate fieldwork. For social work majors, the School of Social Work will plan fieldwork to complete this program.

Degrees: Social Work (BSW, MSW)
Tracks: None
Minors: None
## UCF MAJORS AND PROGRAMS

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ACCOUNTING: BACHELOR OF
SCIENCE IN BUSINESS
ADMINISTRATION

Admission Requirements
- Completion of the University General Education program or an
AA degree from a Florida Public Community College.
- See Common Program Prerequisites

Degree Requirements
1. UCF General Education Program (page 76) (min 36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural and Historical Foundations 9 hrs
   C. Mathematical Foundations
      Select MAC 1105 College Algebra 3 hrs
      Select CGS 2100C Computer Fund. for Bus 3 hrs
   D. Social Foundations
      Select ECO 2013 Principles of Economics I 3 hrs
      or ECO 2023 Principles of Economics II 3 hrs
      Select one: PSY 2013, SYG 2000, ANT 2000 3 hrs
   E. Science Foundation 6 hrs

2. Common Program Prerequisites (9-12 hrs)
   ACG 2021 Principles of Financial Accounting
   ACG 2071 Principles of Managerial Accounting
   ECO 2013 Principles of Macroeconomics
   ECO 2023 Principles of Microeconomics
   *MAC2233 Concepts of Calculus
   *STA2023 (or QMB2100) Statistics
   CGS 2100C Computer Fundamentals for Business
   * At UCF, students who have completed MAC2233 and STA2023
     will be waived from ECO3401. Students who have not completed
     both classes with a "C" or better must take ECO3401.

3. Common Body of Knowledge (33 hrs)
   First Semester in the College of Business Administration:
   Students must demonstrate competency in micro-computer
   applications during their first semester in College of Business
   Administration courses. Students who fail to demonstrate
   competency will not be permitted to continue enrollment in the
   business program. Computer competency can be met by taking the
   computer competency exam or by earning a "C" or better in CGS
   2100C or its equivalency.
   GEB 3031 Cornerstone 6 hrs
   ECO 3401 Quantitative Business Tools I 3 hrs
   First or subsequent semesters depending on major:
   ECO 3411 Quantitative Business Tools II 3 hrs
   FIN 3403 Business Finance 3 hrs
   MAN 3025 Management of Organizations 3 hrs
   MAN 3504 Quality and Productivity Management 3 hrs
   MAR 3023 Marketing 3 hrs
   BUL 3320 Business Law I** 3 hrs
   Last Semester:
   GEB 4361 Business in the Internatl Environment 3 hrs
   MAN 4720 Strategic Management 3 hrs

4. Special College and/or Departmental Requirements
   - Grades of "D" do not transfer into the program and students must
     have a "C" or better in each common program prerequisites class.
   - A minimum grade of "C" must be earned in each accounting,
     business law, and tax course completed. Principles of Financial
     Accounting and Principles of Managerial Accounting are
     included under this rule.
   - Students are allowed a maximum of three course repetitions
     during their program of study leading to the bachelors degree,
     including repetitions of courses from which they have withdrawn.
     This requirement applies to upper division accounting, tax, and
     business law courses only.
   - A transfer student to this program must take a minimum of twelve
     (12) semester hours in accounting at UCF as approved by the
     Director of the School of Accounting
   - All students must have credit for a course in each of the following
     areas:
     - English communication arts including written composition
     - Oral expression
     - Behavioral science such as psychology, anthropology, and
     sociology
     - Humanities
     - Political environment of business and society such as political
     science, public administration, and ethics
   - Students must demonstrate computer proficiency. All College of
     Business Administration students must demonstrate computer
     proficiency by completion of the CBA Computer Proficiency
     Examination. Accounting majors must also complete CGS 2100.
   - Students not in attendance at the first meeting of any College of
     Business course may be dropped from the course. It is the
     responsibility of the student to take whatever steps are necessary
     to determine if they have been officially dropped from a course.
     This does not remove the student's responsibility for dropping
     courses they do not intend to complete.

5. Core Requirements (27 hrs)
   ACG 3101 Intermediate Financial Accounting I 3 hrs
   ACG 3111 Intermediate Financial Accounting II 3 hrs
   ACG 3361 Cost Accounting I 3 hrs
   ACG 3501 Fin Acct for Gov't and Nonprofit Org 3 hrs
   ACG 4401 Accounting Systems I* 3 hrs
   TAX 4001 Federal Income Tax I 3 hrs
   ACG 4203 Advanced Accounting 3 hrs
   ACG 4651 Auditing 3 hrs
   BUL 3321 Business Law II** 3 hrs
   * CGS 2100C is a prerequisite for Accounting Systems.
   ** Transferable only from senior academic institutions.

6. Foreign Language Requirements (0-8 hrs)
   Admission: Two (2) years of one foreign language in high school,
   or one (1) year of one foreign language in college (or equivalent
   proficiency exam) prior to graduation.
   Graduation: None

7. University Minimum Exit Requirements
   - A 2.00 GPA in all work attempted (Overall, UCF, COB, Major)
   - 60 semester hours earned after any CLEP award
   - 48 semester hours of upper division credit completed
   - 30 semester hours of course work completed in residency (last 30
     hours) at UCF
   - A maximum of 45 semester hours of extension, correspondence,
     CLEP, Credit by Exam, and Military credit permitted
   - Completion of the General Education Program, the Gordon Rule,
     the CLAST, and 9 semester hours of Summer credit (if applicable)

8. Electives As needed to result in 120 total credit hours.

***Total Semester Hours Required 120 hours

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 minimum 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 coverage of financial accounting, auditing, cost and managerial accounting, and taxation.

39 hours in general business, including at least 6 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. For additional information about the department, curriculum, faculty, events, and careers in accounting, students are invited to visit our department home page at: http://www.bus.ucf.edu/acc/.

Community/Junior College Transfer Notes

- Common Program Prerequisites for the State University System for College of Business Administration programs include Financial Accounting, Managerial Accounting, Macroeconomics, Micro-economics, Calculus, Statistics, and a relevant computer class. At UCF Business, students who have completed the calculus and statistics class will be waived from Business Quantitative Tools I. Students who have completed either the calculus or the statistics, but not both, must take Quantitative Tools I.
- Subject to the general grade and residence requirements, credit will be granted for transferred course work equivalent to that required in the UCF Business program. Grades of "D" do not transfer into the program and students must have a "C" or better in each common program prerequisites class.
- ACG X001 and X011 will substitute for ACG 2021 at UCF.
- Florida Public Community College students are advised to complete the Associate of Arts degree, to include the general education requirements, the common program prerequisites for the SUS system, and college algebra.
- 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 (junior, senior) course areas and cannot be satisfied with freshman, sophomore level courses.
- A minimum of 12 semester hours must be completed at UCF within each individual major.
- Orientation and advising are two of the most valuable tools that a student can make use of when transferring to UCF. Be sure that you take advantage of both.

FOUR YEAR PLAN OF STUDY - ACCOUNTING

Freshman

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Must complete 9 hours in a summer semester.

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* "C" or better grade required in each class

Must complete CLAST requirement

**Accounting majors must have a "C" or better in each class in the major to include law and tax and a 2.0 GPA in major

Transfer students must complete a minimum of twelve (12) hours in Accounting at UCF

Junior

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-Pass Computer Competency Exam in same term Cornerstone completed

Senior

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***General electives as required to reach 120 semester hours to include at least 60 semester hours outside the College of Business Administration. Economics courses in the Common Program Prerequisites and the Common Body of Knowledge count toward the 60 hours outside Business Administration.
ADVERTISING/PUBLIC RELATIONS: BACHELOR OF ARTS

College of Arts and Sciences
Nicholson School of Communication, COM 250, (407) 823-2829,
E-mail: ad-pr@ucf.edu
Dr. Bob Davis
Limited Access program.

Admission Requirements
- Students should apply to become Advertising/Public Relations majors only after completing all requirements for admission. Deadlines are:
  - October 8, 1999 for Spring 2000
  - March 3, 2000 for Summer 2000
  - July 7, 2000 for Fall 2000
- Attain an overall minimum 2.25/4.00 GPA based on a minimum of 30 credit hours of college work. Note: meeting the minimum GPA does not guarantee admission since students are admitted on a space available basis. THE GPA CUT OFF FOR THE 1998-1999 YEAR WAS 2.8.
- Pass a computer keyboard proficiency test (20 wpm). The test may be taken ONLY three times. Completion of a basic college keyboard or typing course with a grade of "C" will satisfy the requirement.

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students should consult with a departmental advisor
- School Residency Requirement consists of at least 24 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF School of Communication
- Students electing both a major and minor in the School must take the minor courses in excess of the 120 hours required for graduation
- 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
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations
      - Select ENC 1101 & 1102 Composition 6 hrs
      - Select SPC 1600C Fund Oral Communication 3 hrs
   B. Cultural and Historical Foundations
      - 9 hrs
   C. Mathematical Foundations
      - Select MGF 1203 Finite Mathematics 3 hrs
      - (may substitute a higher level math)
      - Select CGS 1060C Intro to Computer Sci or STA 2014 Principles of Statistics 3 hrs
   D. Social Foundations
      - 6 hrs
   E. Science Foundations
      - 6 hrs

2. Common Program Prerequisites
   SPC 1600C Fund Oral Communication GEP

3. Core requirements (33 hrs)
   - ADV 3000 Principles of Advertising 3 hrs
   - ADV 4003 Advertising Layout and Prep 3 hrs
   - ADV 4101* Advertising Copywriting 3 hrs
   - ADV 4103 Radio-TV Advertising 3 hrs
   - COM 3110 Business and Prof Communication 3 hrs

MM 3311 Mass Media Research Methods 3 hrs
MM 4200 Mass Communication Law 3 hrs
VIC 3001 Visual Communication 3 hrs
PUR 3100* Writing for Public Relations 3 hrs
PUR 4000† Public Relations 3 hrs
Select one course 3 hrs
PUR 4801 Public Relations Case Studies
PUR 4941 Internship
ADV 4941 Internship
†Students who complete a 3-hour internship may take either PUR 4801 or ADV 4103.
*Keyboard Proficiency Test required.

4. School Exit Requirements
- To avoid delaying graduation, you must request a review of requirements before registering for your last term.
- Achieve an overall "C" GPA (2.0) in required UCF Ad/PR courses. This GPA does not include Restricted Electives in the major or other electives.
- Computer Competency met by program admission test

5. Foreign Language Requirements (0-8 hrs)
   Admission: Met by graduation requirement
   Graduation: One year or equivalent proficiency exam.

6. Electives (variable)
   Select primarily from upper level courses, with School advisor's approval. Should be taken outside of the School of Communication.

7. University Minimum Exit Requirements
- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Marketing

Related Minors: Business, Psychology

Transfer notes:
- "D" grades from other institutions do not meet school requirements
- Courses taken at community colleges do not substitute for Upper Division courses
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information
AEROSPACE ENGINEERING:
BACHELOR OF SCIENCE

College of Engineering
Mechanical, Materials & Aerospace Engineering Department,
ENGR 381, (407) 823-2416 FAX: (407) 823-0208, Home Page
http://www.mmae.engr.ucf.edu
Dr. J. D. McBreyer, E-Mail: mcbrayer@mail.ucf.edu

Admission Requirements:
All entering students are required by UCF to attend Orientation before registering for their first semester at UCF. Orientation includes engineering academic advisement and registration for first-semester UCF classes; see also the section, Orientation, found elsewhere in this catalog.

Degree Requirements
- Each engineering student is assigned a qualified engineering academic advisor in the department of his/her major. Each student must seek academic advisement before registering for classes each semester to minimize excess hours and to ensure that satisfactory academic progress is being maintained.

1. UCF General Education Program for Engineering Students (38 hrs)
The UCF General Education Program (GEP) is described in the section, General Education Program, found elsewhere in this catalog. Engineering students should closely study the requirements of the UCF GEP and the allowable substitutions detailed in paragraphs A. through E. below to minimize excess hours. Students transferring to UCF from the Florida State University/Community College Systems should complete the GEP and the Common Program Prerequisites before transferring.

A. Communication Foundations
1. Take ENC 1101
2. Take ENC 1102
3. SPC 1016 is the preferred substitute for SPC 1600C for engineering students.

See the descriptions of these courses in the section, Alphabetical Listing of Courses, later in this catalog.

B. Cultural and Historical Foundations
9 hrs
1. Take MAC 2281, Calculus for Scientists and Engineers I, (4 hrs). NOTE: College algebra and trigonometry are prerequisites for Calculus I. See the course descriptions.
2. Take STA 3032 (3 hrs). NOTE: Calculus II is the prerequisite for this course.

D. Social Foundations
6 hrs
1. Take ECO 2048/48L
2. Take PHY 2048/48L
2. Take either GEO 1200 or GEO 2370.

2. Common Program Prerequisites (CPR’s) (19 hrs)
These courses are specifically required for all engineering students of the Florida State University System. CPR courses are also available at other Florida post-secondary schools and may be transferred directly to UCF programs. All engineering students must remain in the Calculus sequence which they begin. Students who begin with MAC 2281, Calculus for Scientists and Engineers I, must continue with MAC 2282 and MAC 2283. Students who begin with MAC 2311, Calculus with Analytic Geometry I, must continue with MAC 2312 and MAC 2313. MAC 2281-MAC 2282-MAC 2283 is the preferred sequence for engineering students. The courses in these two Calculus sequences are not individually interchangeable.

NOTE: MAC 2281 and PHY 2048/48L also satisfy UCF GEP sub requirements do ENC 1101, ENC 1102, the Humanities courses, and the Social Science courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHS 1440</td>
<td>Fundamentals of Chemistry for Eng</td>
<td>4</td>
</tr>
<tr>
<td>MAC 2281</td>
<td>Calculus for Scientists &amp; Engineers I</td>
<td>GEP</td>
</tr>
<tr>
<td>MAC 2282</td>
<td>Calculus for Scientists &amp; Engineers II</td>
<td>4</td>
</tr>
<tr>
<td>MAC 2283</td>
<td>Calculus for Scientists &amp; Engineers III</td>
<td>4</td>
</tr>
<tr>
<td>MAP 2302</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHY 2048/48L</td>
<td>Physics for Engineers &amp; Scientists I</td>
<td>GEP</td>
</tr>
<tr>
<td>PHY 2049/49L</td>
<td>Physics for Engineers &amp; Scientists II</td>
<td>4</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>Composition I</td>
<td>GEP</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>Composition II</td>
<td>GEP</td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td>GEP</td>
</tr>
<tr>
<td>Social Science Courses</td>
<td></td>
<td>GEP</td>
</tr>
<tr>
<td>Humanities or Social Sciences</td>
<td></td>
<td>GEP</td>
</tr>
</tbody>
</table>

3. Courses Required for the Major (61 hrs)
The College of Engineering requires all engineering students to achieve a minimum 2.250 GPA in completing these courses, together with the technical elective courses listed in 4. below and with the senior design courses listed in 5. below. Independent study courses generally do not satisfy major requirements and normally are awarded grades of I, S, or U.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGN 1006</td>
<td>Intro to the Engineering Profession</td>
<td>1</td>
</tr>
<tr>
<td>EGN 1111C</td>
<td>Engineering Computer Graphics</td>
<td>2</td>
</tr>
<tr>
<td>EGN 1930</td>
<td>ST: Engineering Concepts &amp; Methods</td>
<td>1</td>
</tr>
<tr>
<td>EGN 3310</td>
<td>Engineering Analysis - Statics</td>
<td>3</td>
</tr>
<tr>
<td>EGN 3321</td>
<td>Engineering Analysis - Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>EGN 3343</td>
<td>Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>EGN 3365</td>
<td>Structure &amp; Properties of Materials</td>
<td>3</td>
</tr>
<tr>
<td>EGN 3930</td>
<td>ST: Principles of Electrical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>STA 3032</td>
<td>Probability &amp; Statistics for Engineers</td>
<td>GEP</td>
</tr>
<tr>
<td>EAS 3010</td>
<td>Fundamentals of Flight</td>
<td>1</td>
</tr>
<tr>
<td>EAS 3101</td>
<td>Aerodynamics I</td>
<td>3</td>
</tr>
<tr>
<td>EAS 3800C</td>
<td>Aerospace Engineering Measurements</td>
<td>3</td>
</tr>
<tr>
<td>EAS 3810C</td>
<td>Design of Aerospace Experiments</td>
<td>2</td>
</tr>
<tr>
<td>EAS 4105</td>
<td>Flight Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>EAS 4134</td>
<td>High-Speed Aerodynamics</td>
<td>3</td>
</tr>
<tr>
<td>EAS 4200</td>
<td>Flight Structures</td>
<td>3</td>
</tr>
<tr>
<td>EAS 4210</td>
<td>Space Structural Dynamics or</td>
<td></td>
</tr>
<tr>
<td>EAS 4400</td>
<td>Aerospace Attitude Dynamics or</td>
<td></td>
</tr>
<tr>
<td>EAS 4505</td>
<td>Orbital Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>EAS 4300</td>
<td>Aerothermodynamics-Pulsion Sys</td>
<td>3</td>
</tr>
<tr>
<td>EML 3034</td>
<td>Modeling Methods in MMAE</td>
<td>3</td>
</tr>
<tr>
<td>EML 3312C</td>
<td>Feedback Control</td>
<td>3</td>
</tr>
<tr>
<td>EML 3601</td>
<td>Solid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>EML 3701</td>
<td>Fluid Mechanics I</td>
<td>3</td>
</tr>
<tr>
<td>EAS 3404C</td>
<td>Discrete Control Aerospace Vehicles</td>
<td>3</td>
</tr>
<tr>
<td>EML 4535C</td>
<td>Introduction to CAD/CAM</td>
<td>3</td>
</tr>
</tbody>
</table>

4. Approved Technical Electives (4 hrs)
Technical electives are available in the BSAE program to address specific student interests in a variety of technical areas. Students must consult with their assigned academic advisor for a list of the approved technical electives and the terms when specific courses of this type are to be offered.

5. Departmental Graduation Requirements (6 hrs)
- EAS 4700C Aerospace Design I 3 hrs
- EAS 4710C Aerospace Design II 3 hrs
- COE encourages all engineering students to take the Engineering
Intern Exam during their Senior year.

6. Foreign Language Requirements
   (0-8 hrs)
   Admission: 2 years of one foreign language in high school, or 1 year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
   Graduation: None.

7. University Minimum Graduation Requirements
   - A 2.00 GPA in all work attempted (both UCF and overall).
   - 60 semester hours earned after any CLEP award.
   - 48 semester hours of upper division credit completed.
   - 32 semester hours of regular courses completed at UCF.
   - A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits are permitted.
   - Complete the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit (if applicable).

Total Semester Hours Required: 128 hrs

Related Programs: Mechanical Engineering.

Related Minors: Space Studies.

Transfer Notes:
- Courses taken from Community Colleges do not substitute for Upper Division Courses
- Courses transferred must be formally evaluated for equivalency credit. The student must provide all supporting information with his/her petition for this evaluation.
- EGN 1006 and EGN 1930 are required courses for incoming freshman students only. The two credit hours for these courses may be substituted by an approved Aerospace Engineering technical elective for transfer students.

Tentative Course Schedule for Entering Freshmen
The tentative course schedule listed below is a guide for those students who plan on completing their degree in four years. All engineering students should meet with their faculty advisor to develop and maintain an appropriate plan of study.

Aerospace Engineering - 128 semester hours

FIRST YEAR
Fall (14 cred hrs, 18 cont hrs)
* ENC 1101 English Comp I 3
* CHS 1440 Chem for Eng cr 4
CHM 2045 w/lab 3
* MAC 2281 Calc Sci & Eng I cr 4
MAC 2311 Calculus I 3
EGN 1006 Intro to Eng Prof 1
EGN 1111C Eng Comp Graphics 2

Summer (10 credit hrs, 10 contact hrs)
* MAC 2283 Calc Sci & Eng III cr 4
MAC 2313 Calculus III 3
EGN 3365 Struct & Prop of Mat'l 3
(PR: CHS 1440 & MAC 2282)
* Social Foundations 3

Spring (15 cred hrs, 19 cont hrs)
* ENC 1930 ST: Eng Conc/Meth 1
* ENC 1102 English Comp II 3
* MAC 2282 Calc Sci & Eng II cr 4
MAC 2312 Calculus II 3
* PHY 2048 Phys Eng/Sci I w/lab 4
* SPC 1016 Tech Presentations 3

SECOND YEAR
Fall (14 cred hrs, 18 cont hrs)
* Humanities/History 4
* MAP 2302 Diff Equations 3
* PHY 2049 Phys Eng II w/lab 4
EGN 3310 Engr Anal - Statics 3
(PR: PHY 2048, CR: MAC 2282)
EAS 3010 Fund Aero Flight 1

Spring (12 cred hrs, 12 cont hrs)
EGN 3930 ST: Prin Elec Eng 3
(PR: PHY 2049, CR: MAP 2302)
EGN 3321 Engr Anal-Dynamics 3
(PR: EGN 3310, CR: MAC 2283)
EGN 3343 Thermodynamics 3
(PR: MAP 2302, CR: EGN 3321)
EML 3601 Solid Mechanics 3
(PR: EGN 3310, CR: MAP 2302)

Summer (9 credit hrs, 9 contact hrs)
* ECO 2010 or 2023 Econ I or II 3
* Humanities/History 4
STA 3032 Prob & Stats/Engrs 3

THIRD YEAR
Fall (15 cred hrs, 19 cont hrs)
EML 3034 Model Meth's MMAE 3
(PR: EGN 1111C, MAP 2302, High Lev Prog; CR: EGN 3321)
EML 3701 Fluid Mechanics I 3
(PR: MAP 2302, EGN 3343)
EAS 3800C Aerosp Eng Mgr 3
(PR: EML 3601, CR: EGN 3343)
EML 3312C Feedback Control 3
(PR: EGN 3321, 3373 or 3930
MAP 2302)
EAS 4200 Flight Structures 3
(PR: EML 3601, EML 3034)

Spring (14 cred hrs, 18 cont hrs)
EAS 3101 Fund of Aerodyn 3
(PR: EML 3701)
EAS 3810C Dsgn Aerosp Exp 2 3
(PR: EAS 3800C, EML 3701)
EAS 3404C Dis Con Aero Veh 3
(PR: EML 3312C)
EAS 4505 Orbital Mechanics or 3
(PR: EML 3312C, MAP 2302)
EAS 4400 Sppcraft Att Dyn or 3
(PR: EML 3312C(Fall only)
EAS 4210 Space Struct Dyn 3
(PR: EML 3312C, EAS 4200)
* Earth Science 3

FOURTH YEAR
Fall (12 cred hrs, 18 cont hrs)
EML 4525C CAD/CAM 3
(PR: EGN 3343, EML 3034, EML 3601; CR: EAS 4200 or EML 3500)
EAS 4105 Flight Mechanics 3
(PR: EAS 3101, EML 3312C)
EAS 4134 High-Spd Aerodyn 3
(PR: EAS 3101)
EAS 4700C Aerosp Design I 3
(PR: EAS 3810C)

Spring (13 cred hrs, 17 cont hrs)
EML 4525C CAD/CAM 3
(PR: EGN 3343, EML 3034, EML 3601; CR: EAS 4200 or EML 3500)
EAS 4134 High-Speed Aerodynamics 3
(PR: EAS 3101)
EAS 4710C Aerosp Design II 3
(PR: EAS 4700C)

Footnotes:
1. Courses marked with an asterisk (*) are also available from most Community Colleges and are often part of their Pre-Engineering AA programs. Most of these courses are part of the UCF General Education Program; see the section on the GEP elsewhere in this catalog for further information.
2. All students must remain in the Calculus sequence with which they begin. Students who begin with MAC 2281 Calculus for Scientists and Engineers I, must continue with MAC 2282 and MAC 2283. Students who begin with MAC 2311 Calculus with Analytical Geometry I, must continue with MAC 2312 and MAC 2313. The individual courses in these two Calculus sequences are not interchangeable.
3. Students must consult with the MMSE Department in ENGR 381 for a list of approved technical electives and for the terms when specific courses of this type are to be offered. Students should check with their faculty advisor frequently to ensure they are making satisfactory progress toward their degree.
4. The State University System requires most students to complete a minimum of nine semester hours during summer terms prior to graduation. See the section on Summer Attendance Requirement elsewhere in this catalog.
5. Aerospace engineering students must earn at least 32 hours in residence at UCF.
IMPORTANT NOTICE

• **Bolded** course should be taken in the term noted or in a previous term if your schedule permits and as long as all prerequisites for that course have been met.

• A number of the **bolded** courses are given only during the term noted in this program of study, therefore it is imperative that you take them in the suggested sequence. Failure to do so may result in a considerable delay in the date of your graduation.

• **Non-bolded** course may be taken at any time as long as all prerequisites for that course have been met. Caution must be taken to ensure that you take courses in a proper sequence regarding prerequisites.

• Please meet with your advisor if you have any questions regarding your schedule. Do not drop any course before discussing this action with your advisor - there may be alternative actions which will benefit you.

• If you do not have a higher level programming language background you must take a course in this area prior to taking EML 3034 ("C" or FORTRAN recommended).

• If you are not ready to begin the calculus sequence upon entry to the Aerospace Engineering curriculum it is imperative that you meet with your advisor to plan a personalized program of study. Mathematics and physics are cornerstones of a quality engineering program and it is important for your academic career that you proceed accordingly.
ANIMATION: BACHELOR OF ARTS

College of Arts and Sciences
Animation, VAB 210, (407) 823-3110,
E-mail: animation@ucf.edu
Mr. D. Haxton
Restricted Access program.

Admission Requirements
- Students should complete ART 2201 & 2203 (Design Fundamentals), ART 2300 & 2301 (Drawing Fundamentals), ART 2600C (Computer Graphics), and FIL 3282 (Introduction to Cel Animation) before applying
- Students must submit a satisfactory drawing portfolio to be admitted to FIL 3283C (Intermediate Cel Animation) or FIL 3286C (Introduction to Computer Animation)
- Students must maintain an overall minimum 3.0 GPA in the above courses
- Applications must include a portfolio of work done in courses, including drawings, design projects, computer graphics, animation work, and storyboards
- Deadlines for applications for admission into Animation are September 15 for Spring term and February 1 for the Fall term
- Students are admitted on a space available basis

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students should consult with a departmental advisor
- Departmental Residency Requirement consists of at least 24 semester hours of regularly scheduled 3000-4000 level courses taken within the UCF Art and Film programs
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations
      9 hrs
   B. Cultural and Historical Foundations
      Take one two-semester sequence
      Select ARH 2050 The History of Art I
      6 hrs
      Select ARH 2051 The History of Art II
      3 hrs
   C. Mathematical Foundations
      Select MGF 1203 Finite Mathematics
      (may substitute a higher level math)
      3 hrs
      Select CGS 1060C Intro to Computer Science
      3 hrs
   D. Social Foundations
      6 hrs
   E. Science Foundations
      6 hrs

2. Common Program Prerequisites (21 hrs)
   ART 2201C Design Fundamentals I
   ART 2203C Design Fundamentals II
   ART 2300C Drawing Fundamentals I
   ART 2301C Drawing Fundamentals II
   ARH 2050 History of Art I
   ARH 2051 History of Art II
   ART 2600C Intro to Computer Graphics
   ART 2XXX-4XXX any ART prefix, studio, or media course
   3 hrs

3. Core requirements (6 hrs)
   FIL 3282 Introduction to Cel Animation
   FIL 3410 History of Animated Films

4. Restricted Upper Division Elective (12 hrs)
   Complete one of the 2 tracks. Workshops may be repeated.

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Computer Animation
- FIL 3286C Intro to Computer Animation
  3 hrs
- FIL 3287C Intermediate Computer Animation
  3 hrs
- FIL 4288C Advanced Computer Animation
  3 hrs
- FIL 4289C Computer Animation Workshop
  3 hrs

Cel Animation
- FIL 4282C Intermediate Cel Animation
  3 hrs
- FIL 4293C Advanced Cel Animation
  3 hrs
- FIL 4234C Cel Animation Workshop
  6 hrs

5. Elective in Art
   Select four courses; two may be lower division
   Select from at least three of the following areas:
   Ceramics, Drawing, Fibers and Fabrics, Graphic Design, Illustration, Painting, Photography, Printmaking, Sculpture, and Special Topics Studio Courses.

6. Departmental Exit Requirements
   - ART 4971 Thesis
     3 hrs
   - Achieve at least a "C" GPA (2.0) in courses within the major
   - Computer Competency met by CGS 1060C or ART 2600C

7. Foreign Language Requirements (0-8 hrs)
   Admission: Met by graduation requirement
   Graduation: One year college level or equivalent proficiency exam.

8. Electives (variable)
   Select primarily from upper level courses, with departmental advisor’s approval. May be outside of the department.

9. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Art, Art Education, Art History, Film Production/Screen writing, Radio/TV

Related Minors: Art, Film

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements
- Courses taken at community colleges do not substitute for Upper Division courses
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
- ART 2600C: may substitute 3 hours of any computer course
ANThROPOLOGY: BACHELOR OF ARTS

College of Arts and Sciences
Department of Sociology and Anthropology, FA 405, (407) 823-2227, E-mail: anthropology@ucf.edu
Dr. J. Corzine, (407) 823-2227

Students study all subfields of Anthropology: Cultural Anthropology, Archaeology, Physical Anthropology, and Linguistics.

Students with sufficient course background may participate in ongoing archaeological excavations associated with the Maya culture in the Central American country of Belize.

Admission Requirements: None

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Departmental Residency Requirement: at least 30 semester hours of regularly scheduled 3000-4000 level courses must be taken from the UCF Sociology and Anthropology Department
- Students must maintain an overall GPA of at least 2.0 in all courses used for the major
- Students should consult with a departmental advisor
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations
   B. Cultural and Historical Foundations
   C. Mathematical Foundations
   - Select MAC 1105 College Algebra (or higher)
   - Select STA 2023 Statistical Methods I
   D. Social Foundations
   - Select one: ECO 2013, ECO 2023, POS 2041
   - Select ANT 2000 General Anthropology
   E. Science Foundations
   - Select one: PSC 1121, PHY 2053C, CHM 1020
   - Select ANT 2511 The Human Species

2. Common Program Prerequisites (3 hrs)
   - ANT 2000* General Anthropology
   - ANT 2511* The Human Species
   *See Transfer Notes for possible substitutes

3. Core requirements (27 hrs)
   - ANT 2100 Arch & the Rise of Human Cult
   - ANT 2410 Cultural Anthropology
   - ANT 3145 Arch of Complex Societies
   - ANT 3212 Peoples of the World
   - ANT 3640 Language and Culture
   - ANT 4034 Hist of Anthropological Thought
   - Select 3 courses from the following
     - ANT 3163 Mesoamerican Archaeology
     - ANT 3311 Indians of the SE US
     - ANT 3312 Ethnology of North Amer Indians
     - ANT 3313 Indians of N Amer High Plains
     - ANT 3168 Maya Archaeology
     - ANT 3332 Peoples and Cult of Latin Amer
     - ANT 3363 Anthropology of Japan

4. Restricted Electives (15 hrs)
   - Select 5 courses from the following, with at least one course from each group
     Cultural
     - ANT 3302 Sex, Gender, and Culture
     - ANT 3241 Magic, Ritual, and Belief
     - ANT 3262 Rural Society
     - ANT 3273 Law and Culture
     Archaeology
     - ANT 3115 Arch Method and Theory
     - ANT 3142 Old World Prehistory
     - ANT 3184 Mortuary Archaeology
     - ANT 4824 Adv Archaeological Fieldwork
     - ANT 4180 Seminar in Laboratory Analysis
     Physical
     - ANT 4462 Medical Anthropology
     - ANT 4525 Functional Morphology of the Human Skeleton
     - ANT 4586 Human Origins
     - ANT 3541 Biobehavioral Anthropology

5. Departmental Exit Requirements
- A minimum GPA of 2.0 in all courses used for the major
- Computer Competency met by ANT 2211
- Students will be required to take a standard exit exam.

6. Foreign Language Requirements (0-8 hrs)
- Admission: Met by graduation requirement.
- Graduation: Two semesters or equivalent proficiency exam.

7. Electives (variable)
   Select primarily from upper level courses, with departmental advisor's approval. These courses may be outside of the department.

8. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Sociology

Related Minors: African-American Studies, American Studies, Anthropology, Anthropology in Multicultural Studies, Asian Studies, Canadian Studies, Judaic Studies, Latin American Studies, Russian Area Studies, Sociology, and Women's Studies

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements
- Courses taken at community colleges do not substitute for Upper Division courses
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
- ANT 2000: any ANT course. However, this course is a prerequisite and must be taken regardless.
- ANT 2511: any ANT course. However, ANT2511 will need to be taken for the major.
ART: BACHELOR OF FINE ARTS (BFA)

College of Arts and Sciences
Art Department VAB 117, (407) 823-2676, E-mail: art@ucf.edu
Advisor J. Chavda, 823-2676

The BFA degree is recommended for studio art majors who plan to attend graduate school.

Admission Requirements
- The student must submit a formal application and a portfolio to the Faculty after completing 90 semester hours
- All applicants will be reviewed by the Art BFA Portfolio Review Committee. Deadlines for formal application are announced every Spring semester.

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- 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.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations
   - 9 hrs
   B. Cultural and Historical Foundations
   - Take one two-semester sequence
   - Select ARH 2050 The History of Art I
   - 3 hrs
   C. Mathematical Foundations
   - Select MGF 1203 Finite Mathematics
   - 3 hrs
   - (may substitute a higher level math)
   - Prefer CGS 1060C Intro to Computer Sci
   - 3 hrs
   D. Social Foundations
   - 6 hrs
   E. Science Foundations
   - 6 hrs

2. Common Program Prerequisites (21 hrs)
   ART 2201C* Design Fundamentals I
   - 3 hrs
   ART 2203C* Design Fundamentals II
   - 3 hrs
   ART 2300C* Drawing Fundamentals I
   - 3 hrs
   ART 2301C* Drawing Fundamentals II
   - 3 hrs
   ARH 2050 History of Art I
   - GEP
   ARH 2051 History of Art II
   - 3 hrs
   ART 2600C* Intro to Computer Graphics
   - 3 hrs
   ART 2XXX-4XXX any ART prefix, studio or media course
   - 3 hrs
   *See Transfer Notes for possible substitutes

3. Restricted Electives (42 hrs)
   ARH 3XXX-4XXX Art History Courses
   - 9 hrs
   Specialization:
   - 18 hrs
   Select six upper division courses from one area:
   - Cel Animation (FIL 3282, 4283, 4283C, 4293C*, 4294C*)
   - Ceramics (ART 3111C, 4114C)
   - Computer Animation (FIL 3286C, 3287C, 4288C*, 4289C*)
   - Drawing (ART 3330C, 4320C*)
   - Fibers and Fabrics (ART 3XXX*, 4138C*)
   - Graphic Design (ART 3239C, 3232C, 3610C, 4235C, 4237C*)
   - Illustration (ART 3253C, ART 4260C*)
   - Painting (ART 3520C, 4530C*)
   - Photography (PGY 2401C, 4420C*, 4440C*)
   - Printmaking (ART 3400C, 4402C*)
   - Sculpture (ART 3701C, ART 4703*).
   *may be repeated for credit

Elective in Art: 15 hrs
Select five Art courses; two of which may be lower division
Select from at least three of the following areas, excluding the area of specialization.
- Cel Animation, Ceramics, Computer Animation, Drawing, Fibers and Fabrics, Graphic Design, Illustration, Painting, Photography, Printmaking, Sculpture and Special Topics Studio Courses.

4. Departmental Exit Requirements (3 hrs)
   ART 4935C BFA Exhibit/Seminar
   - 3 hrs
   (BFA Exhibit Seminar is only offered during Spring Semester)
   - Achieve at least a "B" GPA (3.0) in courses within the major
   - Each senior is required to submit a portfolio of representative work in the student's area of concentration, for review and approval by faculty, during their last semester of matriculation toward the degree
   - Computer Competency met by CGS 1060C or ART 2600C

5. Foreign Language Requirements (0-8 hrs)
   Admission: met by graduation requirement
   Graduation: One year or equivalent proficiency exam

6. Electives (variable)
   Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

7. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Art History, Studio Art (BA), Art Education

Related Minors: Partners in Visual Art Education

Transfer notes:
- “D” grades from other institutions do not meet departmental requirements
- Courses taken at community colleges do not substitute for Upper Division courses
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
- ART 2201C and 2203C*: A student may substitute a four credit ART 2201; however, both ART 2201 and 2203 are prerequisites for subsequent art course and will need to be taken for the major.
- ART 2300C and 2301C*: A student may substitute a four credit ART 2300; however, both ART 2300 and 2301 are prerequisites for subsequent art courses and will need to be taken for the major.
- ART 2600C*: A student may substitute any three hour media course; however, ART 2600C is a prerequisite for subsequent art courses and will need to be taken for the major.

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ART EDUCATION: BACHELOR OF SCIENCE

College of Education Instructional Programs, ED346, (407) 823-2939 Coordinator: Dr. Thomas Brewer, ED158, (407) 823-3714, e-mail: tbrewer@pegasus.cc.ucf.edu Web Address: http://pegasus.cc.ucf.edu/~ucfed/

Admission Requirements
• have on file in the University Admissions Office passing scores on all parts of the College Level Academic Skills Test (CLAST) (No alternatives)
• have on file in the University Admissions Office a score at or above the 40th percentile on the SAT (950) or ACT (20 enhanced)
• present an overall GPA of 2.5
• achieve a “C” or better grade in EDG 4323, Professional Teaching Practices, including successful completion of the tutorial component or equivalent
• complete a formal application for admission to a particular teacher education program
• meet any special departmental requirements

Degree Requirements
• Students should see an advisor
• The courses designated in 1 (General Education) and 2 (Common Program Prerequisites) should usually be completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural-Historical Foundations
      Select One 2 semester sequence: 6 hrs
         Select ARH 2050 3 hrs
   C. Mathematical Foundations 6 hrs
   D. Social Foundations 6 hrs
      Select PSY 2013 Ge. Psychology 6 hrs
   E. Science Foundations plus 1 lab

At least one course taken to meet the natural science requirements in General Education and/or Prerequisites must include a laboratory component.

2. Common Program Prerequisites** (30 hrs)
   EDF 2005 Intro to Education 3 hrs
   *EDG 2701 Teaching Diverse Populations 3 hrs
   EME 1040 Intro to Technology 3 hrs
   ART 2201C Designs Fundamentals I 3 hrs
   ART 2203C Designs Fundamentals II 3 hrs
   ART 2300C Drawing Fundamentals I 3 hrs
   ART 2301C Drawing Fundamentals II 3 hrs
   ARH 2050 History of Art I GEP
   ARH 2051 History of Art II 3 hrs
   ART 2110C Ceramics 3 hrs
   ART 2510C Painting I 3 hrs

*In addition to EDG 2701, students must take 6 additional hours with an international or diversity focus. The eligible courses will be determined by the institution in which the student is enrolled for their lower division course work. (These courses must be identified in the college/university catalog.)

3. Education Core Requirements (9 hrs)
   EDG 4323 Professional Teaching Practices 3 hrs

EDF 4603 Analysis Critical Issues in Education 3 hrs
EDF 4214 Classroom Learning Principles 3 hrs

4. Internship I (ESE 3940) (6 hrs)
   • A student must have completed the portfolio process for Internship I satisfactorily before student teaching
   • At least 50% of all required art courses must be completed before registering for Internship I

5. Core Requirements (18 hrs)
   All these courses must be taken prior to enrollment in any 3,000 or 4,000 level specialization coursework.
   ART 2600 Intro to Computer Graphics 3 hrs
   ART 2400C Printmaking 3 hrs
   ARE 4356 Teaching Art Appr 3 hrs
   PGY 2401 Photography 3 hrs
   ARE 4351 Meth/Tch Art Ed I 3 hrs
   ARE 4352 Meth/Tch Art Ed II 3 hrs

6. Restricted Electives - Select Five (15 hrs)
   Any 3,000 or 4,000 level ART, ARE, ARH, PGY (With advisor’s approval)

7. Internship II (ESE 4943) (12 hrs)
   • A student must have completed the portfolio process for Internship II Satisfactorily before student teaching
   • All art courses and all methods courses must be completed before registering for Internship II

8. Foreign Language Requirements (0-6 hrs)
   State University System foreign language admission requirement: 2 years in high school or 1 year of college instruction in a single foreign language. (This requirement applies to those students admitted to the University without the required 2 units of foreign language in high school)

9. Departmental Exit Requirements
   Achieve a 2.5 GPA in all courses within the major

10. University Minimum Exit Requirements
    • A 2.0 GPA in all work attempted (both UCF and overall)
    • 60 semester hours earned after CLEP awarded
    • 48 semester hours of upper division credit completed
    • 30 semester hours in regular courses completed at UCF
    • Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 126 hours

Transfer notes:
Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

*Acceptable Substitutes:
While another course (3 hours) may be acceptable, for certification purposes students should take the listed courses. The courses are prerequisites for upper division coursework.
ART 2205 and ART 2206 are acceptable substitutes for ART 2201 and ART 2203.
ART - HISTORY TRACK:
BACHELOR OF ARTS

College of Arts and Sciences
Art Department, VAB 117, (407) 823-2676
E-mail: art@ucf.edu
Advisor, K. Congdon, 823-2195

Admission Requirements None

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- 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 ARH specialization.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural and Historical Foundations
      Take one two-semester sequence 6 hrs
      Select ARH 2050 The History of Art I 3 hrs
   C. Mathematical Foundations
      Select MGF 1203 Finite Mathematics 3 hrs
      (may substitute a higher level math)
      Prefer CGS 1060C Intro to Computer Sci 3 hrs
   D. Social Foundations 6 hrs
   E. Science Foundations 6 hrs

2. Common Program Prerequisites (9 hrs)
   ART 2201C Design Fundamentals I 3 hrs
   ART 2300C Drawing Fundamentals I 3 hrs
   ARH 2050 History of Art I GEP
   ARH 2051 History of Art II 3 hrs

3. Core Requirements (15 hrs)
   ARH 4310 Italian Renaissance Art 3 hrs
   ARH 4430 Nineteenth Century Art 3 hrs
   ARH 4450 Twentieth Century Art 3 hrs
   ARH 4800 Theory and Criticism 3 hrs
   ENC 3311 Expository Writing 3 hrs

4. Restricted Electives (18 hrs)
   One Non-Western Art History Course: 3 hrs
   ARH 3520 African Art
   ARH 4545 Art of India
   ARH 4655 MesoAmerican Art
   One of the following courses: 3 hrs
   ARH 4350 Baroque Art
   ARH 4458 Women & Art in 20th Cent America
   ARH 4892 Women in Art
   Select 12 additional hours from following 12 hrs
   ARH 3520 African Art
   ARH 3728 American Art
   ARH 3456 Art after 1945
   ARH 5451 Artistic World Views
   ARH 4458 Women and Art in 20th Century America
   ARH 4892 Women in Art
   ARH 4350 Baroque Art
   ARH 5478 Contemporary Women Artists
   ARH 4170 Greek and Roman Art

ARH 3710 History of Photography I
ARH 3711 History of Photography II
ARH 3720 History of Prints
ARH 4655 MesoAmerican Art
ARH 3683 Southern Folk Arts
ARH 3820 Visual Arts Administration
ARH 5933 Sem. in African & African-American Arts

5. Departmental Exit Requirements (4 hrs)
   ARH 4912 Senior Thesis 3 hrs
   ARH 4906 Comprehensive Exam 1 hr
   Achieve at least a "C" GPA (2.0) in courses within the major
   Computer Competency met by CGS 1060C, ART 2600C, or ARH 3820

6. Foreign Language Requirements (0-14 hrs)
   Admission: met by graduation requirement.
   Graduation: Two years or equivalent proficiency exam.

7. Electives (variable)
   Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

8. University Minimum Exit Requirements
   A "C" GPA (2.0) in all work attempted (both UCF and overall)
   60 semester hours earned after CLEP awarded
   48 semester hours of upper division credit completed
   30 semester hours in regular courses completed at UCF
   A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
   Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Studio Art (BA, BFA), Art Education, Film & Animation.
Related Minors: Studio Art, Partners in Visual Art Education

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements
- Courses taken at community colleges do not substitute for Upper Division courses
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information
ART - STUDIO TRACK: BACHELOR OF ARTS

College of Arts and Sciences
Art Department VAB 117, (407) 823-2676
E-mail: art@ucf.edu
Advisor S. Chavda, 823-2676

Admission Requirements
- A portfolio is required for the Graphics Design Specialization. Deadline for application is April 1st prior to beginning the Fall of the Junior year.
- A portfolio is required for the Animation Specialization. Deadlines for application are September 15 for Spring term and February 1 for the Fall term

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- 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.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural and Historical Foundations
      Take one two-semester sequence 6 hrs
      Select ARH 2050 The History of Art 3 hrs
   C. Mathematical Foundations
      Select MGF 1203 Finite Mathematics 3 hrs
      (may substitute a higher level math)
      Prefer CGS 1060C Intro to Computer Sci 3 hrs
   D. Social Foundations 6 hrs
   E. Science Foundations 6 hrs

2. Common Program Prerequisites (21 hrs)
   ART 2201C Design Fundamentals I 3 hrs
   ART 2202C Design Fundamentals II 3 hrs
   ART 2300C Drawing Fundamentals I 3 hrs
   ART 2301C Drawing Fundamentals II 3 hrs
   ARH 2050 History of Art I GEP
   ARH 2051 History of Art II 3 hrs
   ART 2600C* Intro to Computer Graphics 3 hrs
   ART 2XXX-4XXX any ART prefix, studio or media course 3 hrs
   *See Transfer Notes for possible substitutes

3. Restricted Electives (33 hrs)
   ARH 3XXX-4XXX Art History Courses 6 hrs
   Specialization: 15 hrs
   Select five upper division courses from one area:
   Cel Animation (FIL 3282, 4283C, 4284*, 4293C*)
   Ceramics (ART 3111C, 4114C)
   Computer Animation (FIL 3286, 3287C, 4288C*, 4289*)
   Drawing (ART 3330C, 4320C*)
   Fibers and Fabrics (ART 3XXX, 4138C*)
   Graphic Design (ART 3290C, 3292C, 3610C, 4235C, 4237C*)
   Illustration (ART 3253C, 4260C*)
   Painting (ART 3520C, 4530C*)
   Photography (PGY 3401C, 4420C*, 4440C*)
   Printmaking (ART 3400C, 4402C*)
   Sculpture (ART 2401C, 4703C*)
   *may be repeated for credit

Elective in Art: 12 hrs
Select four Art courses, two of which may be lower division
Select from at least three of the following areas, excluding the area of specialization.
Cel Animation, Ceramics, Computer Animation, Drawing, Fibers and Fabrics, Graphic Design, Illustration, Painting, Photography, Printmaking, Sculpture and Special Topics Studio Courses.

4. Departmental Exit Requirement
   - Each senior is required to submit a portfolio of representative work in the student's area of specialization, for review and approval by faculty, during their last semester of matriculation toward the degree.
   - Achieve at least a "C" GPA (2.0) in courses within the major.
   - Computer Competency met by CGS 1060C or ART 2600C

5. Foreign Language Requirements (0-8 hrs)
   Admission: met by graduation requirement
   Graduation: One year or equivalent proficiency examination.

6. Electives (variable)
   Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

7. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Art History, Studio Art (BFA), Art Education
Related Minors: Partners in Visual Art Education

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
- ART 2600C: may substitute 3 hours of any media course
BIOLOGY: BACHELOR OF SCIENCE
College of Arts and Sciences
Biology Department, BL 210, (407) 823-2141
http://pegasus.cc.ucf.edu/~biology/
E-mail: biology@ucf.edu
Dr. W. Taylor, (407) 823-2141

Admission Requirements None

Degree Requirements
• UCF students who change degree programs and select this major must adopt the most current catalog.
• No credit by exam (CLEP, TSD, Military credit), "D" or "S" grades from other institutions may be used for the major.
• No more than 4 hours of BSC 4401L, Independent Study, Directed Research, or similar types of credit may be applied toward major requirements.
• Departmental Residency Requirement consists of at least 23 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF Biology Department.
• Students seeking a double major must satisfy the requirements for both majors and must take no fewer than 40 semester hours of upper division restricted elective course work appropriate to the combined areas of specialization of the two majors.
• Courses designated in 2 (Common Program Prerequisites) and 3 (Core Requirements) are usually completed in the first 60 hours.
• A minor in Biology will not be awarded to students who expect to complete a degree or who have previously obtained a degree in any Life Science program.

1. UCF General Education Program (39 hrs)
A. Communication Foundations
B. Cultural and Historical Foundations
C. Mathematical Foundations
   Select MAC 2311 Calculus or
   MAC 2241 Calculus for Life Sciences 4 hrs
   Select STA 2023 Statistical Methods I 3 hrs
D. Social Foundations
E. Science Foundations
   Select PHY 2053C College Physics
   (PR: MAC 1105 and MAC 1114) 4 hrs
   Select BSC 2010C General Biology 4 hrs
2. Common Program Prerequisites (16 hrs)
BSC 2010C* General Biology 4 hrs
BSC 2011C* Biological Diversity 4 hrs
MAC 2311* Calculus w/ Analytic Geometry I GEP 4 hrs
STA 2023* Statistical Methods I GEP 4 hrs
CHM 2045C Chem Fund I 4 hrs
CHM 2046 & L Chem Fund II & lab 4 hrs
Select one Physics sequence with labs
   PHY 2053C College Physics I 4 hrs + GEP
   PHY 2054C College Physics II 4 hrs + GEP
or
   PHY 2048 & L* Physics Engr. & Sci. I & Lab 4 hrs
   PHY 2049 & L* Physics Engr. & Sci. II & Lab 4 hrs
*See Transfer Notes for possible substitutes

3. Core requirements (22-24 hrs)
CHM 2210 Organic Chem. I 3 hrs
CHM 2211L & L Organic Chem. II & lab 5 hrs
or
CHM 3120C Analytical Chemistry 5 hrs

and

CHM 2205 Intro Organic & Biochemistry 5 hrs
PCB 3043 Ecology 3 hrs
PCB 3063 Genetics 3 hrs
PCB 3023 Molecular Cell Biology 3 hrs
PCB 4683C Population Biol & Evolution 5 hrs

Students planning on entering professional or graduate school should take Biochemistry (BCH 4053, 4054) as well as additional Calculus courses. Students are urged to consult their departmental advisor.

4. Upper Division Restricted Electives (23 hrs)
• Courses must be selected from the groupings listed below.
• Student must complete at least one course dealing exclusively with animals (marked a) and one course dealing exclusively with plants (marked b).
• At least three credit hours from each group must be completed.
• No more than 12 hours of the upper division restricted electives may be taken outside the Biology Department.
• Transferred courses must be at a 3000 level or higher, and be evaluated by a departmental advisor, in order to count as an Upper Division Restricted Elective.
• Courses at the 5000 level are only open to seniors and beginning graduate students.

Form/Function (minimum of one lecture course)

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<th>Code</th>
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<td>BCH 4053</td>
<td>Biochemistry I</td>
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<td>BCH 4054</td>
<td>Biochemistry II</td>
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<td>b BOT 4303C</td>
<td>Plant Kingdom</td>
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<td>b BOT 4503C</td>
<td>Plant Physiology</td>
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<td>b BCH 4103</td>
<td>History of Biology</td>
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<td>PCB 3063L</td>
<td>Genetics Laboratory</td>
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<td>PCB 4524</td>
<td>Molecular Biology II</td>
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<td>PCB 3233</td>
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<td>a PCB 4723</td>
<td>Animal Physiology</td>
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<td>PCB 5665C</td>
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<td>Embryology/Development</td>
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Environmental (minimum of one lecture course)

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<td>b BOT 3154C</td>
<td>Local Flora</td>
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<td>b BOT 4680C</td>
<td>Florida Wildflowers</td>
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<tr>
<td>b BOT 3800C</td>
<td>Ethnobotany</td>
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<tr>
<td>b BOT 4686C</td>
<td>Conservation of Native Plants</td>
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<td>b BOT 5623C</td>
<td>Plant Geography &amp; Ecology</td>
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<td>PCB 4312C</td>
<td>Marine Biology</td>
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<td>IDS 3XXX</td>
<td>Interdisciplinary Environmental Studies</td>
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<tr>
<td>PCB 3943L</td>
<td>Ecology Laboratory</td>
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<td>PCB 3442</td>
<td>Florida Aquatic Ecology</td>
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<td>PCB 5485</td>
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Systematic (minimum of one lecture course)

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<td>Terrestrial Cryptogams</td>
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<td>b BOT 5705C</td>
<td>Plant Biosystematics</td>
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<td>a ENV 4004C</td>
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<td>MCB 3020C</td>
<td>General Microbiology</td>
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<td>PCB 3301C</td>
<td>Aquatic Biology</td>
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<td>a ZOO 4205C</td>
<td>Bio &amp; Ecol of Metazoan Inverts</td>
<td>4 hrs</td>
</tr>
<tr>
<td>a ZOO 4310C</td>
<td>Vertebrate Evolution &amp; Ecol</td>
<td>4 hrs</td>
</tr>
</tbody>
</table>
5. Departmental Exit Requirements

- A GPA of 2.0 in all UCF courses taken in the Common Program Prerequisites, the Biology Core and the Upper Division Restricted Electives.
- To demonstrate Computer Competency students are expected to 1) check and maintain their campus electronic mail account and 2) be capable of locating, viewing, and retrieving documents on the World Wide Web.
- Students will be required to take a comprehensive exam in biology during their last semester. The exam will be given in the Fall and Spring semesters. Students who plan to graduate in the Summer must take the exam in the Spring.
- UCF Biology majors may not take any courses required in the major as a transient student at a community college.

6. Foreign Language Requirements (0-8 hrs)

Admission: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.

Graduation: None

7. Electives (variable)

Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

8. University Minimum Exit Requirements

- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Molecular and Microbiology, Science Education, Environmental Engineering

Related Minors: Biology, Molecular and Microbiology

Transfer notes:

- "D" grades from other institutions do not meet departmental requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:

- BSC 2010C & Lab: may use PCB 2010, PCB 2011, PCB 2021, PCB 2131, BSC 1040, or BSC 2012
- BSC 2011C & Lab: may use ZOO 2010, BOT 2010, BSC 2041, or BOT 1013. However, subsequent Biology courses require either BSC 2011 or both ZOO 2010 and BOT 2010.
- STA 2023: may use STA 2122, STA 2014, STA 2023, STA 2024, STA 2321, MAC 2234, MAC 2254, or MAC 3282
- MAC 2311: may use MAC 2333, MAC 2253 or MAC 2281
- Physics*: Although Common Program Prerequisites permit substitutions, Organic chemistry for Physics, both Physics and Organic Chemistry must be taken as part of the Biology degree requirements.
BIOLOGY - PREPROFESSIONAL TRACK: BACHELOR OF SCIENCE

College of Arts and Sciences
Biology Department, BL 210, (407) 823-2141
http://pegasus.cc.ucf.edu/~biology/
E-mail: biology@ucf.edu
Dr. D. Vickers

Students who hope to gain admission to a professional school (medical, dental, optometry, etc.) can meet the admission requirements while pursuing a Biology degree. The following track lists courses which will meet both sets of requirements.

Admission Requirements None

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- No credit by exam (CLEP, TSD, Military credit), "D" or "S" grades from other institutions may be used for the major.
- No more than 4 hours of BSC 4401L, Independent Study, Directed Research, or similar types of credit may be applied toward major requirements.
- Departmental Residency Requirement consists of at least 23 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF Biology Department.
- Students seeking a double major must satisfy the requirements for both majors and must take no fewer than 40 semester hours of upper division restricted elective course work appropriate to the combined areas of specialization of the two majors.
- Courses designated in 2 (Common Program Prerequisites) and 3 (Core Requirements) are usually completed in the first 60 hours.
- A minor in Biology will not be awarded to students who expect to complete a degree or who have previously obtained a degree in any Life Science program.

1. UCF General Education Program (39 hrs)

A. Communication Foundations
   - 9 hrs

B. Cultural and Historical Foundations
   - 9 hrs

C. Mathematical Foundations
   Select MAC 2311 Calculus or
   MAC 2241 Calculus for Life Sciences
   - 4 hrs

   Select STA 2023 Statistical Methods I
   - 3 hrs

D. Social Foundations
   - 3 hrs

E. Science Foundations
   Prefer PHY 2048 & L College Physics & lab (PR:MAC 2311)
   Select BSC 2010C General Biology
   - 4 hrs

   Select BSC 2010C General Biology
   - 4 hrs

2. Common Program Prerequisites (16 hrs)

BSC 2010C* General Biology
   - 4 hrs

BSC 2011C* Biological Diversity
   - 4 hrs

MAC 2311* Calculus with Analytic Geometry
   - 4 hrs

STA 2023* Statistical Methods I
   - 4 hrs

CHM 2045* Chem Fund I
   - 4 hrs

CHM 2046 & L Chem. Fund II & Lab
   - 4 hrs

PHY 2048* & L Physics for Engr. & Sci. I & Lab
   - 4 hrs

PHY 2049* & L Physics for Engr. & Sci. II & Lab
   - 4 hrs

*See Transfer Notes for possible substitutes

3. Additional Core requirements (22 hrs)

PCB 3043 Ecology
   - 3 hrs

PCB 3063 Genetics
   - 3 hrs

CHM 2210 Organic Chem. I
   - 3 hrs

CHM 2211 & L Organic Chem. II & lab
   - 5 hrs

PCB 3023 Molecular Cell Biology
   - 3 hrs

PCB 4683 Population Biology & Evolution
   - 5 hrs

4. Restricted Electives (Suggested) (23 hrs)

The following suggestions are appropriate for many professional schools. Consult a departmental advisor and be cognizant of the professional school's requirements.

Form/Function

BCH 4053 Biochemistry I
   - 3 hrs

BCH 4054 Biochemistry II
   - 3 hrs

PCB 3063L Genetics Lab
   - 1 hr

PCB 4524 Molecular Biology II
   - 3 hrs

PCB 3233 Immunology
   - 3 hrs

PCB 5665C Human Genetics
   - 4 hrs

a PCB 4723 Animal Physiology
   - 4 hrs

a ZOO 3713C Comparative Vert Anatomy
   - 5 hrs

a ZOO 4603C Embryology/Development
   - 5 hrs

a ZOO 4753C Vertebrate Histology
   - 4 hrs

Environmental

b BOT 3800 Ethnobotany
   - 3 hrs

Systematic

MCB 3020C General Microbiology
   - 5 hrs

a ZOO 4205C Bio & Ecol of Metazoan Inverts
   - 4 hrs

a ZOO 4310C Vertebrate Evolution & Ecol
   - 4 hrs

5. Departmental Exit Requirements

- A GPA of 2.0 in all UCF courses taken in the Common Program Prerequisites, the Biology Core and the Upper Division Restricted Electives.
- To demonstrate Computer Competency students are expected to (1) check and maintain their campus electronic mail account and (2) be capable of locating, viewing, and retrieving documents on the World Wide Web.
- Students will be required to take a comprehensive exam in biology during their last semester.
- UCF Biology majors may not take any courses required in the major as a transient student at a community college.

6. Foreign Language Requirement (0-8 hrs)

Admission: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation. The exam will be given in the Fall and Spring semesters. Students who plan to graduate in the Spring must take the exam in the Spring.

Graduation: none (Spanish highly recommended).

7. Electives (variable)

Select primarily from upper level courses, with departmental advisor’s approval. May be outside of the department.

8. University Minimum Exit Requirements

- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Biology, Chemistry, Molecular/Microbiology
Related Minors: None

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
- BSC 2010C & Lab: may use PCB 2010, PCB 2011, PCB 2021, PCB 2131, BSC 1040, or BSC 2012
- BSC 2011C & Lab: may use ZOO 2010, BOT 2010, BSC 2041, or BOT 1013. However, subsequent Biology courses require either BSC 2011 or both ZOO 2010 and BOT 2010.
- STA 2023: may use STA 2122, STA 2014, STA 2023, STA 2024, STA 2321, MAC 2234, MAC 2254, or MAC 3282
- MAC 2311: may use MAC 2333, MAC 2253 or MAC 2281
- PHY 2048 & 2049: Although Common Program Prerequisites permit substitutions, Organic chemistry for Physics, both Physics and Organic Chemistry must be taken as part of the Biology degree requirements.
CARDIOPULMONARY SCIENCES:
BACHELOR OF SCIENCE

College of Health and Public Affairs
Trailer 534 (407) 823-2214
Undergraduate Program Director: L. Timothy Worrell
E-mail: worrell@pegasus.cc.ucf.edu
Web Address: http://www.cohpa.ucf.edu/health.pro/

Admission Requirements - LIMITED ACCESS
Acceptance to the university does not necessarily constitute admission to the upper division cardiopulmonary sciences program.

- SEPARATE APPLICATION to the limited access program must be made directly to the program prior to February 1 of the year admission is sought
- UCF application must also be submitted by the program deadline of February 1st
- A personal interview is also required
- Student must complete all general education, foreign language admissions, and program prerequisites prior to the start of the program
- All applicants must have a minimum overall GPA of 2.5, and complete all program prerequisite courses with at least a grade of "C". (No CLEP, TSD, or AP credit may be used for prerequisite courses.)
- A one page statement of intent for entry into the profession must be included with the program application
- Applicants are required to have completed a basic life support (CPR) program prior to admission to the program

This department will continue to accept Associate in Arts (AA) and Associate in Science (AS) transfers, but those students admitted with the AS degree will need to complete the UCF’s General Education requirements. Students should seek advisement from the program as soon as they declare Cardiopulmonary Sciences as their major so that they are kept abreast of the articulation activity.

NOTE: 16 community college AA degree transfers and/or UCF undergraduates are admitted each FALL semester for the regular Cardiopulmonary Science program. Registered Respiratory Therapists (RRT’s) are admitted EACH SEMESTER on a space available basis and have a separate application process.

Degree Requirements
- Students should complete the General Education Program, Foreign Language Admissions, and the Common Program Prerequisites Requirements before transferring within the Florida Public University/Community College System
- Student should consult with a departmental advisor
- The courses designated in sections 1 and 2 below may be taken at a Florida Community College, and should usually be completed in the first 60 hours
- A minimum overall GPA of 2.5 and a minimum grade of "C" in prerequisite and major courses is required for admission to, continuation in, and graduation from the Cardiopulmonary Sciences Program
- UCF Residency Requirement: 32 hours
- The courses designated in sections 1 (General Education) and 2 (Common Program Prerequisites) should usually be completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs

   B. Cultural Historical Foundations 9 hrs
   C. Mathematical Foundations 9 hrs
   Select MAC 1105
   Select STA 2023
   D. Social Foundations 6 hrs
   E. Science Foundations 6 hrs
   Select BSC 2010C
   Select CHM 1032 and lab

2. Common Program Prerequisites (16 hrs)
   MAC 1105 College Algebra GEP
   STA 2023 Statistics GEP
   BSC 2010C General Biology GEP
   MCB 2005C Microbiology 4 hrs
   ZOO 3733C Human Anatomy* 4 hrs
   PCB 3703C Human Physiology* 4 hrs
   CHM 1032&L Chemistry for Health Sciences or higher level (with lab) GEP
   PHY 2053C College Physics or higher lab 4 hrs
   (with lab) *

   * see transfer notes

3. Core Requirements (75 hrs)
   RET 3026C Intro. to Respiratory Care 4 hrs
   RET 3484C Cardiopulmonary Physiology 4 hrs
   HSC 4550 Pathophysiology Mechanisms 3 hrs
   APB 4651 Medical Pharmacology I 2 hrs
   HSC 3593C HIV Disease: A Human Concern 3 hrs
   RET 4503 Chest Medicine 3 hrs
   RET 4244 Life Support Systems 3 hrs
   RET 3264C Mechanical Ventilation 3 hrs
   APB 4652 Medical Pharmacology II 2 hrs
   HSA 4700 Intro to Research in Health Prof. 3 hrs
   RET 4414C Pulmonary Function Studies 4 hrs
   RET 3714 Pediatric Respiratory Care 3 hrs
   RET 3874 Clinical Practice I 5 hrs
   RET 4284 Cardiopulmonary Diagnostics I 3 hrs
   RET 4715 Neonatal Medicine 3 hrs
   RET 4034 Problems in Patient Management. 3 hrs
   RET 3875 Clinical Practice II 8 hrs
   RET 4285 Cardiopulmonary Diagnostics II 3 hrs
   RET 4934 Selected Topics in Respiratory Care 2 hrs
   HSC 4008 Professional Development 3 hrs
   RET 4876 Clinical Practice III 8 hrs

4. Upper Division Restricted Electives None

5. Departmental Exit Requirements (127 hrs)
Cardiopulmonary Sciences GPA requirement 2.5 overall required for admission and graduation.

6. Electives None

7. Foreign Language Requirements (0-8 hrs)
Admissions: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
Graduation: None

8. University Minimum Exit Requirements
   A "C" GPA (2.0) in all work attempted (both UCF and overall)
   • 60 semester hours earned after CLEP awarded
   • 48 semester hours of upper division credit completed
   • 32 semester hours in regular courses completed at UCF
   • A maximum of 45 hrs of extension, correspondence, CLEP, Credit by Exam and Armed Forces credits permitted
Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

**Total Semester Hours Required** 127 hrs

**Related Programs:** Radiologic Sciences, Nursing, Physical Therapy, Health Services Administration, Gerontology Certificate

**Related Minors:** Health Services Administration, Health Sciences, Molecular Biology & Microbiology, Biology, Chemistry

**Transfer Notes:**
Registered Respiratory Therapist / RRT Transfer-Credit by Examination is available for Registered Respiratory Therapists for 26 credits of course work. Credit will be awarded by the Cardiopulmonary Sciences faculty when students demonstrate advanced knowledge and competencies beyond the level required for entry into the profession. This knowledge may be demonstrated by successful completion of the two part registry examination given by the National Board for Respiratory Care (NBRC). Only graduates of an accredited institution and program are eligible for the NBRC credentials. Students who successfully complete these requirements will have validated the knowledge and clinical competencies and will be awarded credit in their final semester with grades of "S" recorded in their transcripts.

**Community College Equivalents**
- College Algebra (MAC 1105) or (higher level) 3
- Statistics (STA 2023) or (higher level) 3
- College Physics I (PHY 1007/L) or (PHY 3004/L) 4
- or higher level with labs
- General Chemistry with Lab (CHM 1031/L) or (higher level) 4
- General Biology with Lab (BSC 1005/L) or (higher level) 4
- General Microbiology (MCB 2010C) or (MCB 2005) or (MCB 2020/L) or (PHA 2751) 4
- Human Anatomy and Physiology I & II (BSC 2093C and 2094C) or (BSC X085 and X086) replaces Anatomy and Physiology courses (ZOO 3733C and PCB 3703C) 8

**Tentative Course Schedule for Entering Freshmen**

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<tr>
<th>Freshman Year</th>
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<tbody>
<tr>
<td><strong>Fall</strong></td>
</tr>
<tr>
<td>ENC 1101</td>
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<tr>
<td>CHM 1032 and lab</td>
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<tr>
<td>BSC 2010C</td>
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<tr>
<td>PSY 2013 or</td>
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<tr>
<td>ANT 2000 or</td>
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<td>HSC 2000</td>
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<td><strong>Summer</strong></td>
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<th>Sophomore Year</th>
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<tr>
<td>PHY 2053C</td>
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<tr>
<td>ZOO 3733C</td>
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<tr>
<td>EUH 2001 or HUM</td>
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<tr>
<td>2230 or AMH 2020</td>
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<tr>
<td>STA 2023</td>
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<table>
<thead>
<tr>
<th>Summer</th>
<th>8 hrs</th>
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<td>(Foreign Lang I)</td>
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<tr>
<td>(Foreign Lang II)</td>
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If not satisfied in high school

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<th>Junior Year</th>
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<tr>
<td><strong>Fall</strong></td>
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<tr>
<td>RET 3026C</td>
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<tr>
<td>RET 3484C</td>
</tr>
<tr>
<td>HSC 4550</td>
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<tr>
<td>APB 4651</td>
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<tr>
<td>HSC 3593C</td>
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<table>
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<tr>
<th>Summer</th>
<th>12 hrs</th>
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<td>RET 4414C</td>
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<tr>
<td>RET 3714</td>
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<td>RET 3874</td>
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<table>
<thead>
<tr>
<th>Senior Year</th>
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</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
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<tr>
<td>RET 4284</td>
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<tr>
<td>RET 3875</td>
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<tr>
<td>RET 4715</td>
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<tr>
<td>RET 4034</td>
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</tbody>
</table>

**Minor** None

**Accreditation**
Upon completion of the undergraduate program, the baccalaureate individual will possess basic and advanced level skills and should be prepared to assume future leadership roles within the profession. Graduates will be prepared to become Registered Respiratory Therapists through licensure by the State of Florida.

The Cardiopulmonary Sciences program is accredited by the Committee on Accreditation for Respiratory Care in conjunction with CAAHEP of the American Medical Association.
CHEMISTRY: BACHELOR OF SCIENCE

College of Arts and Sciences
Chemistry Department, CH 117, (407) 823-2246
E-mail: chemistry@ucf.edu
Dr. B. Madsen, (407) 823-2230

Admission Requirements None

Degree Requirements
• UCF students who change degree programs and select this major must adopt the most current catalog.
• Departmental Residency Requirement consists of at least 15 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF Department of Chemistry
• Courses designated in 1 (General Education) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

1. UCF General Education Program (39 hrs)
A. Communication Foundations 9 hrs
B. Cultural and Historical Foundations 9 hrs
C. Mathematical Foundations
   Select MAC 2311 Calculus 4 hrs
   Select STA 2023 Statistical Methods I, or CGS 1060C Intro to Computer Sci 3 hrs
D. Social Foundations 6 hrs
E. Science Foundations
   Select PHY 2048 & L Physics for Sci & Engr (PR:MAC 2311) 4 hrs
   Select BSC 2010C General Biology 4 hrs

2. Common Program Prerequisites (16 hrs)
CHM 2045C* Chem Fund I 4 hrs
CHM 2046 & L Chem Fund II with lab 4 hrs
MAC 2311 Calculus w/ Anal Geometry I GEP
MAC 2312 Calculus w/ Anal Geometry II 4 hrs
PHY 2048 & L* Physics Engr. & Sci. I & Lab GEP
PHY 2049 & L* Physics Engr. & Sci. II & Lab 4 hrs
*See Transfer Notes for possible substitutes

3. Core requirements (45 hrs)
MAC 2313 Calculus w/ Anal Geometry III 4 hrs
CHM 2210 Organic Chem. I 3 hrs
CHM 2211 Organic Chem. II 3 hrs
CHM 2211L Organic Lab Techniques I 2 hrs
CHM 3212L Organic Lab Techniques II 2 hrs
CHM 3120C Analytical Chemistry 5 hrs
CHM 3410 Physical Chemistry I 4 hrs
CHM 3411 Physical Chemistry II 3 hrs
CHM 3411L Physical Chemistry Lab 2 hrs
CHM 4610 Inorganic Chemistry 3 hrs
CHM 4610L Inorganic Chemistry Lab 2 hrs
CHM 4130C Adv Analytical Lab Technique 4 hrs
CHM 4912 Undergraduate Research 4 hrs
CHM 4930 Chemistry Seminar 1 hr
BCH 4053 Biochemistry I 3 hrs
BSC 2010C General Biology GEP
Select one of the following GEP
   STA 2023 Statistical Methods I
   CGS 1060 Intro to Computer Science

4. Upper Division Restricted Electives (5 hrs)
BCH 4054 Biochemistry II 3 hrs
CHM 5225 Advanced Organic Chem I 3 hrs
CHM 4220 Organic Chem III 3 hrs

CHM 5235 Applied Molec Spectroscopy 3 hrs
CHM 5580 Advanced Physical Chem 3 hrs
CHM 5450 Polymer Chemistry 3 hrs
CHM 5451L Polymer Chemistry Laboratory 2 hrs
CHS 4200 Concepts in Industrial Chem 3 hrs

5. Directed Elective (3 hrs)
Course will be selected with the aid of a departmental advisor and approved in advance by the department chair. Course will be selected from the physical, biological, mathematical sciences and/or related disciplines and normally will be at the 3000/4000 level.

6. Departmental Exit Requirements
• Achieve at least a "C" GPA (2.0) in all UCF Chemistry courses and an overall 2.0 GPA in all Chemistry courses used to satisfy this requirement
• Grades earned in CHM 4930 and CHM 4912 will not be applied in the determination of the Chemistry GPA
• Students will be required to take a nationally normed test in chemistry during their last semester
• Computer Competency met by a Computer Science course or by departmental assessment

7. Foreign Language Requirements (0-8 hrs)
Admission: 2 years high school, or 1 year college language (or equivalent proficiency exam) prior to graduation.
Graduation: None

8. Electives (variable)
Select primarily from upper level courses, with departmental advisor’s approval. May be outside of the department.

9. University Minimum Exit Requirements
• A "C" GPA (2.0) in all work attempted (both UCF and overall)
• 60 semester hours earned after CLEP awarded
• 48 semester hours of upper division credit completed
• 30 semester hours in regular courses completed at UCF
• A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
• Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Forensic Science, Molecular and Microbiology, Science Education

Related Minors: Chemistry, Molecular and Microbiology

Transfer notes:
• “D” grades from other institutions do not meet departmental requirements
• Courses taken at community colleges do not substitute for Upper Division courses
• Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
• CHM 2045: may use CHM 1040 plus CHM 1041
• PHYS 2048 & Lab: may use CHY 2053C
• PHYS 2049 & Lab: may use CHY 2054C
• Physics: Program admission requirements may permit substitution by Organic Chemistry (CHM 2210 & 2211)
• PHY 2048 & Lab and PHY 2049 & Lab are prerequisite courses for subsequent chemistry courses and will still have to be taken.
CINEMA STUDIES TRACK - MOTION PICTURE TECHNOLOGY: BACHELOR OF ARTS

College of Arts and Sciences
Film Program, Communication Building, (407) 823-3456
E-mail: film@ucf.edu
Mr. A. Major

Admission Requirements
- Applications to major in the Cinema Studies track are required by January 15th for admission to the subsequent Fall term.
- Attain an overall minimum 2.5 GPA based on a minimum of 36 semester hours of college work before applying.
- Submission of a written essay.

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students are required to earn a grade of "B" in all courses used in the major.
- Students should consult with a departmental advisor.
- Departmental Residency Requirement consists of at least 24 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF Department Film program.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural and Historical Foundations 9 hrs
   C. Mathematical Foundations
      Select MGF 1203 Finite Mathematics 3 hrs
      (may substitute a higher level math)
      Prefer CGS 1006C Intro to Computer Sci 3 hrs
   D. Social Foundations 6 hrs
   E. Science Foundations 6 hrs

2. Common Program Prerequisites (6 hrs)
   FIL 2400* History of the Motion Pictures 3 hrs
   FIL 3106C* Introduction to Scriptwriting 3 hrs
   *see Transfer Notes for possible substitutes

3. Core Requirements (33 hrs)
   FIL 3006 Art of the Cinema 3 hrs
   FIL 3XXX Visual Expression 3 hrs
   FIL 3300 Film Documentary 3 hrs
   FIL 3410 History of Animated Films 3 hrs
   FIL 3503 Film Theory and Criticism I 3 hrs
   FIL 3XXX Film Theory and Criticism II 3 hrs
   FIL 3401 Film History to 1945 3 hrs
   FIL 3402 Film History from 1945 to Present 3 hrs
   FIL 3XXX American Cinema 3 hrs
   FIL 4504 Motion Picture Genre/Aesthetics 3 hrs
   FIL 4604 The Film Producer 3 hrs

4. Restricted Upper Division Electives (12 hrs)
   Select from the following upper level FIL courses:
   FIL 3520 Italian Film
   FIL 3521 French Film
   FIL 3522 German Film
   FIL 3XXX Black Cinema
   FIL 3309 Women in Film

5. Departmental Exit Requirements
   - A student must earn a grade of "B" in all Film courses used in the Film major.
   - Computer Competency met by FIL 3106C.

6. Foreign Language Requirements (0-8 hrs)
   Admission: met by graduation requirement.
   Graduation: One year college level or equivalent proficiency exam.

7. Electives (variable)
   Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

8. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Animation, Art, Creative Writing, Film, Music, Theatre, Radio/TV

Related Minors: Art, Cinema Studies, Creative Writing, Music, Theatre

Transfer notes:
- "C" grades from other institutions do not meet departmental requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites:
- FIL 2400*: may substitute FIL 3401 Film History to 1945, and FIL 3402 Film History 1945 to Present.
- FIL 3106C*: may substitute CRW 3410 Writing Scripts or equivalent lower level script writing course.
CIVIL ENGINEERING: BACHELOR OF SCIENCE

College of Engineering
Civil & Environmental Engineering Department (CEE), ENGR 207B, (407) 823 2841, FAX: (407) 823-3315, Home Page http://www.cee.engr.ucf.edu

Dr. Manoj Chopra, E-Mail: chopra@mail.ucf.edu

Admission Requirements:
All entering students are required by UCF to attend Orientation before registering for their first semester at UCF. Orientation includes engineering academic advisement and registration for first-semester UCF classes; see also the section, Orientation, found elsewhere in this catalog.

Degree Requirements
- Each engineering student is assigned a qualified engineering academic advisor in the department of his/her major. Each student should seek academic advisement before registering for classes each semester to minimize excess hours and to ensure that satisfactory academic progress is being maintained.

1. UCF General Education Program for Engineering Students (38 hrs)
The UCF General Education Program (GEP) is described in the section, General Education Program, found elsewhere in this catalog. Engineering students should closely study the requirements of the UCF GEP and the allowable substitutions detailed in paragraphs A. through E. below to minimize excess hours. Students transferring to UCF from within the Florida State University/Community College Systems should complete the GEP and the Common Program Prerequisites before transferring.
A. Communication Foundations 9 hrs
   1. Take ENC 1101
   2. Take ENC 1102
   3. SPC 1016 is the preferred substitute for SPC 1600C for engineering students.
See the descriptions of these courses in the section, Alphabetical Listing of Courses, later in this catalog.
B. Cultural and Historical Foundations 9 hrs
C. Mathematical Foundations 7 hrs
   1. Take MAC 2281, Calculus for Scientists and Engineers I, (4 hrs). NOTE: College algebra and trigonometry are prerequisites for Calculus I. See the course descriptions.
   2. Take STA 3032 (3 hrs). NOTE: Calculus II is the prerequisite for this course.
D. Social Foundations 6 hrs
   1. Take ECO 2013 or ECO 2023.
E. Science Foundations 7 hrs
   1. Take PHY 2048/48L.
   2. Take either GEO 1200 or GEO 2370.

2. Common Program Prerequisites (CPP's) (19 hrs)
These courses are specifically required for all engineering students of the Florida State University System. CPP courses are also available at other Florida post-secondary schools and may be transferred directly to UCF programs. All engineering students must remain in the Calculus sequence with which they begin. Students who begin with MAC 2281 Calculus for Scientists and Engineers I, must continue with MAC 2282 and MAC 2283. Students who begin with MAC 2311 Calculus with Analytical Geometry I, must continue with MAC 2312 and MAC 2313. The individual courses in these two Calculus sequences are not interchangeable. NOTE: MAC 2281 and PHY 2048/48L also satisfy UCF GEP sub-requirements, as do ENC 1101, ENC 1102, the Humanities courses, and the Social Science courses.

CHM 2045/45L Chemistry Fundamentals I with Lab 4 hrs
MAC 2281 Calculus for Scientists & Engineers I GEP (MAC 2311 will substitute)
MAC 2282 Calculus for Scientists & Engineers II 4 hrs (MAC 2312 will substitute)
MAC 2283 Calculus for Scientists & Engineers III 4 hrs (MAC 2313 will substitute)
MAP 2302 Differential Equations 3 hrs
PHY 2048/48L Physics for Engineers & Scientists I GEP
PHY 2049/49L Physics for Engineers & Scientists II 4 hrs
ENC 1101 Composition I GEP
ENC 1102 Composition II GEP

3. Courses Required for the Major (62 hrs)
The College of Engineering requires all engineering students to achieve a minimum 2.250 GPA in completing these courses, together with the technical elective courses listed in 4. below and with the senior design courses listed in 5. below. Independent study courses generally do not satisfy major requirements and normally are awarded grades of I, S, or U.

EGN 1006 Intro to the Engineering Profession 1 hr
EGN 1930 ST: Engineering Concepts & Methods 1 hr
CHM 2046 Chemistry Fundamentals II 3 hrs
EGN 3310 Engineering Analysis - Statics 3 hrs
EGN 3321 Engineering Analysis - Dynamics 3 hrs
EGN 3331 Mechanics of Materials 3 hrs
EGN 3343 Thermodynamics 3 hrs
EGN 3365 Structure & Properties of Materials 3 hrs
EGN 3930 ST: Principles of Electrical Engineering 3 hrs
EGN 3613 Engineering Economic Analysis 2 hrs
ENV 4624 Introduction to Environmental Engineering 3 hrs
STA 3032 Probability & Statistics for Engineers GEP
CWR 4000 Intro to Environmental Engineering 3 hrs
STJ 2302 Probability & Statistics for Engineers GEP
CWR 4101C Geotechnical Engineering I 4 hrs
CWR 4102C Geotechnical Engineering II 4 hrs
CWR 4200 Structural Analysis I 3 hrs
CWR 4201C Structural Analysis II 3 hrs
CWR 4300 Introduction to Environmental Engineering 3 hrs
CWS 2101C Surveying 3 hrs
TTE 4004 Transportation Engineering 4 hrs

4. Approved Technical Electives (3 hrs)
Technical electives are available in the BSCE program to address specific student interests in a variety of technical areas. Students should consult with their assigned academic advisor for a list of the approved technical electives and the terms when specific courses of this type are to be offered.

5. Departmental Graduation Requirements (6 hrs)
- Approved CE Project Design Course I 3 hrs
- Approved CE Project Design Course II 3 hrs
- Civil engineering students must take the Engineering Intern Exam during their Senior year.
- Earn a graduating GPA of 2.25 in each of the following areas: the Engineering Core and in the Civil Engineering Option, which includes the major courses from 3. above and the approved CE
6. Foreign Language Requirements (0-8 hrs)

Admission: 2 years of one foreign language in high school, or 1 year of one foreign language in college (or equivalent proficiency exam) prior to graduation.

Graduation: None.

7. University Minimum Graduation Requirements

- A 2.000 GPA in all work attempted (both UCF and overall).
- 60 semester hours earned after any CLEP award.
- 48 semester hours of upper division credit completed.
- 32 semester hours of regular courses completed at UCF.
- A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits are permitted.
- Complete the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit (if applicable).

Total Semester Hours Required: 128 hrs

Related Programs: Environmental Engineering, Mathematics.

Related Minors: Mathematics.

Transfer Notes:
- Courses taken from Community Colleges do not substitute for Upper Division Courses.
- Courses transferred must be formally evaluated for equivalency credit. The student must provide all supporting information with his/her petition for this evaluation.

Tentative Course Schedule for Entering Freshmen

The tentative course schedule listed below is a guide for those students who plan on completing their degree in four years. All engineering students should meet with their faculty advisor to develop and maintain an appropriate plan of study.

Civil Engineering - 128 semester hours required

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
<th>14 hrs</th>
<th>16 hrs</th>
<th>15 hrs</th>
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<tr>
<td>Fall</td>
<td>ENC 1101 English Comp I</td>
<td>ENC 1102 English Comp II</td>
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<tr>
<td></td>
<td>MAC 2281 Calc Sci &amp; Eng I</td>
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<td>SPC 1016 Tech Presentations</td>
<td>PHY 2048/L Phys Engr I w/lab</td>
<td>3/1</td>
</tr>
<tr>
<td></td>
<td>ECO 2013 or</td>
<td>ANT/PSY/SYG or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECO 2023 Economics I, II</td>
<td>GEO GLY/BSC</td>
<td>1</td>
</tr>
<tr>
<td>Spring</td>
<td>EGN 1006 Intro To Eng Prof</td>
<td>EGN 1930 ST Eng Con &amp; Meth</td>
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<td>MAC 2283 Calc Sci &amp; Eng III</td>
<td>MAP 2302 Diff Equations</td>
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<tr>
<td></td>
<td>CHM 2045/L Chem Funds I</td>
<td>CHM 2046 Chemistry Funds II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>HUM/AMH/EUH I</td>
<td>PHY 2049/L Phys Eng II w/lab</td>
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<td>EGN 3310 Engr Anal - Statics</td>
<td>HUM/AMH/EUH II</td>
<td>3</td>
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<tr>
<td></td>
<td>EGN 3613 Eng Econ Anal</td>
<td>EGN 3321 Engr Anal-Dynamic</td>
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<td>Summer</td>
<td>SUR 2101C Surveying</td>
<td>EN 3331 Mechanics of Materials</td>
<td>3</td>
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<td></td>
<td>ENV 3001 Intro to Environ Eng</td>
<td>EN 3001 Intro to Geology</td>
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<table>
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<tr>
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<th>15 hrs</th>
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<tbody>
<tr>
<td>Fall</td>
<td>CWR 3201 Eng Fluid Mechanics</td>
<td>CWR 4101C Hydrology</td>
</tr>
<tr>
<td></td>
<td>EGN 3365 Strctr &amp; Prop Matls</td>
<td>CWR 4203C Hydraulics</td>
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<tr>
<td></td>
<td>EGN 3343 Thermodynamics</td>
<td>EGN 3900 ST: Prin Elec Eng</td>
</tr>
<tr>
<td></td>
<td>CES 4100 Structural Analysis I</td>
<td>ANT/PSY/SYG or</td>
</tr>
<tr>
<td></td>
<td>STA 3032 Prob/Stats for Engrs</td>
<td>GEO/GLY/BSC</td>
</tr>
</tbody>
</table>

Footnotes:
1. Courses marked with an asterisk (*) are also available from most Community Colleges and are often part of their Pre-Engineering AA programs. Most of these courses are part of the UCF General Education Program; see the section on the GEP elsewhere in this catalog for further information.
2. EGN 1006 and EGN 1930 are required courses for incoming freshmen only. The credits for these two courses (one hour each) may, with prior approval of the department academic advisor, be moved to the area 4. Approved Technical Electives.
CIVIL ENGINEERING - CONSTRUCTION ENGINEERING OPTION: BACHELOR OF SCIENCE

College of Engineering
Civil & Environmental Engineering Department (CEE), ENGR 207B, (407) 823 2841, FAX: (407) 823-3315, Home Page http://www.cee.engr.ucf.edu
Dr. Manoj Chopra, E-Mail: chopra@mail.ucf.edu
Coordinator: Dr. Amr A. Oloufa, E-mail: aoloufa@mail.ucf.edu

Admission Requirements:
All entering students are required by UCF to attend Orientation before registering for their first semester at UCF. Orientation includes engineering academic advisement and registration for first-semester UCF classes; see also the section, Orientation, found elsewhere in this catalog.

Degree Requirements
- Each engineering student is assigned a qualified engineering academic advisor in the department of his/her major. Each student should seek academic advisement before registering for classes each semester to minimize excess hours and to ensure that satisfactory academic progress is being maintained.

1. UCF General Education Program for Engineering Students (38 hrs)
The UCF General Education Program (GEP) is described in the section, General Education Program, found elsewhere in this catalog. Engineering students should closely study the requirements of the UCF GEP and the allowable substitutions detailed in paragraphs A. through E. below to minimize excess hours. Students transferring to UCF from within the Florida State University/Community College Systems should complete the GEP and the Common Program Prerequisites before transferring.

A. Communication Foundations 9 hrs
   1. Take ENC 1101
   2. Take ENC 1102
   3. SPC 1016 is the preferred substitute for SPC 1600C for engineering students.

See the descriptions of these courses in the section, Alphabetical Listing of Courses, later in this catalog.

B. Cultural and Historical Foundations 9 hrs
   1. Take MAC 2281, Calculus for Scientists and Engineers I, (4 hrs). NOTE: College algebra and trigonometry are prerequisites for Calculus I. See the course descriptions.
   2. Take STA 3032 (3 hrs). NOTE: Calculus II is the prerequisite for this course.

D. Social Foundations 6 hrs
   1. Take ECO 2048 or ECO 2023.

E. Science Foundations 7 hrs
   1. Take PHY 2048/48L.
   2. Take either GEO 1200 or GEO 2370.

2. Common Program Prerequisites (CPP's) (19 hrs)
These courses are specifically required for all engineering students of the Florida State University System. CPP courses are also available at other Florida post-secondary schools and may be transferred directly to UCF programs. All engineering students must remain in the Calculus sequence with which they begin. Students who begin with MAC 2281 Calculus for Scientists and Engineers I, must continue with MAC 2282 and MAC 2283. Students who begin with MAC 2311 Calculus with Analytical Geometry I, must continue with MAC 2312 and MAC 2313. The individual courses in these two Calculus sequences are not interchangeable. NOTE: MAC 2281 and PHY 2048/48L also satisfy UCF GEP sub-requirements, as do ENC 1101, ENC 1102, the Humanities courses, and the Social Science courses.

CHM 2045/45L Chemistry Fundamentals I with Lab 4 hrs
MAC 2281 Calculus for Scientists & Engineers I 4 hrs
MAC 2282 Calculus for Scientists & Engineers II 4 hrs
MAC 2283 Calculus for Scientists & Engineers III 4 hrs
MAP 2302 Differential Equations 3 hrs
PHY 2048/48L Physics for Engineers & Scientists I 3 hrs
PHY 2049/49L Physics for Engineers & Scientists II 4 hrs
ENC 1101 Composition I 3 hrs
ENC 1102 Composition II 3 hrs
Humanities Courses 6 hrs
Social Science Courses 6 hrs
Humanities or Social Sciences 6 hrs

3. Courses Required for the Major (64 hrs)
The College of Engineering requires all engineering students to achieve a minimum 2.250 GPA in completing these courses, together with the technical elective courses listed in 4. below and with the senior design courses listed in 5. below. Independent study courses generally do not satisfy major requirements and normally are awarded grades of F, S, or U.

EGN 1006 Intro to the Engineering Profession 1 hr
EGN 1930 ST: Engineering Concepts & Methods 1 hr
CHM 2646 Chemistry Fundamentals II 3 hrs
EGN 3310 Engineering Analysis - Statics 3 hrs
EGN 3321 Engineering Analysis - Dynamics 3 hrs
EGN 3331 Mechanics of Materials 3 hrs
EGN 3613 Engineering Economic Analysis 2 hrs
ENV 3002 Intro to Environmental Engineering 3 hrs
STA 3032 Probability & Statistics for Engineers 3 hrs
CCE 4XXX Mech & Elec Systems for Buildings 4 hrs
CCE 4XXX Construction Equip & Productivity 3 hrs
CCE 4XXX Constr Materials or 3 hrs
EGN 3365 Struc & Prop of Materials 3 hrs
CCE 4004 Construction Methods 3 hrs
CCE 4034 Construction Estimating & Scheduling 3 hrs
CCE 4932 Intro to the Construction Industry 3 hrs
CEG 4101C Geotechnical Engineering I 4 hrs
CES 4100 Structural Analysis I 3 hrs
CES 4702 Reinforced Concrete Structures 3 hrs
CWR 3201 Engineering Fluid Mechanics 3 hrs
MAN 3301 Human Resource Management or 3 hrs
MAN 4240 Organizational Theory & Behavior 3 hrs
ACG 2071 Managerial Accounting 3 hrs
SUR 2101C Surveying 3 hrs
TTE 4004 Transportation Engineering 4 hrs

4. Approved Technical Electives (3 hrs)
Technical electives are available in the BSCE program to address specific student interests in a variety of technical areas. Students should consult with their assigned academic advisor for a list of the approved technical electives and the terms when specific courses of this type are to be offered.

5. Departmental Graduation Requirements (4 hrs)
- CEE 4XXX Construction Engr. Design Project 4 hrs
Civil engineering students must take the Engineering Intern Exam during their Senior year.

Earn a graduating GPA of 2.25 in each of the following areas: the Engineering Core and in the Civil Engineering Option, which includes the major courses from 3. above and the approved CE project design courses.

6. Foreign Language Requirements (0-8 hrs)
Admission: 2 years of one foreign language in high school, or 1 year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
Graduation: None.

7. University Minimum Graduation Requirements
- A 2.000 GPA in all work attempted (both UCF and overall).
- 60 semester hours earned after any CLEP award.
- 48 semester hours of upper division credit completed.
- 32 semester hours of regular courses completed at UCF.
- A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits are permitted.
- Complete the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit (if applicable).

Total Semester Hours Required: 128 hrs

Related Programs: Environmental Engineering, Mathematics.

Related Minors: Mathematics.

Transfer Notes:
- Courses taken from Community Colleges do not substitute for Upper Division Courses
- Courses transferred must be formally evaluated for equivalency credit. The student must provide all supporting information with his/her petition for this evaluation.

Tentative Course Schedule for Entering Freshmen
The tentative course schedule listed below is a guide for those students who plan on completing their degree in four years. All engineering students should meet with their faculty advisor to develop and maintain an appropriate plan of study.

Civil Engineering - Construction Engineering Option 128 semester hours required

### FIRST YEAR

**Fall**
- ENC 1101 English Comp I 3
- MAC 2281 Calc Sci & Eng I 4
- SPC 1016 Tech Presentations 3
- ECO 2013 Macro-Economics 3
- EGN 1006 Intro To Eng Prof 1

**Spring**
- *Enc 1102 English Comp II 3
- *MAC 2282 Calc Sci & Eng II 4
- *PHY 2048/L Phys Engr I w/lab 3/1
- *ANT/PSY/SYG or or ECO 3023 Prin of Econ I or II 3
- EGN 1930 ST Eng Con & Meth 1

### SECOND YEAR

**Fall**
- MAC 2283 Calc Sci & Eng III 4
- *CHM 2045/L Chem Funds I 4
- *HUM/AMH/EUH - I 3
- EGN 3310 Engr Anal - Statics 3
- EGN 3613 Eng Econ Anal 2

**Spring**
- *MAP 2302 Diff Equations 3
- *CHM 2046 Chemistry Funds II 3
- *PHY 2049/L Phys Eng II w/lab 4
- *HUM/AMH/EUH - II 3
- EGN 3331 Mech of Materials 3

**Summer**
- SUR 3101C Surveying 3
- STA 3032 Prob/Stats for Engineers 3
- ENV 3001 Intro to Environ Eng 3

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### THIRD YEAR

**Fall**
- EGN 3321 Engr Anal-Dynamics 3
- CCE 4932 Intro Constr. Industry 3
- CES 4100 Structural Analysis I 3
- *ANT/PSY/SYG or or GEO/GLY/BSC 3
- *HUM/AMH/EUH 3
- MAN 3301 Human Res Mgmt or 3
- MAN 4240 Organ Theory & Beh 3

**Spring**
- *ACG 2071 Accounting 3
- CES 4702 Concrete Structures 3
- CCE 4004 Construct Methods 3
- CWR 3201 Eng Fluid Mechanics 3

### FOURTH YEAR

**Fall**
- TTE 4004 Transportation Eng 4
- CCE 4034 Construc Est & Sched 3
- CCE 4101C Geotechnical Engr 4
- CCE 4XXX Mech & Elec Bldgs 4
- EGN 3365 Struc & Prop of Mat 3
- Technical Elective 3

**Spring**
- CCE 4000 Construc Proj 4
- CCE 4XXX Constr Equip & Prod 3
- CCE 4XXX Constr Materials or 3
- EGN 4XXX Mech & Elec Bldgs 4

**Footnotes:**
1. Courses marked with an asterisk (*) are also available from most Community Colleges and are often part of their Pre-Engineering AA programs. Most of these courses are part of the UCF General Education Program; see the section on the GEP elsewhere in this catalog for further information.
2. EGN 1006 and EGN 1930 are required courses for incoming freshmen only. The credits for these two courses (one hour each) may, with prior approval of the department academic advisor, be moved to the area 4. Approved Technical Electives.
COMMUNICATIVE DISORDERS: BACHELOR OF ARTS OR BACHELOR OF SCIENCE

College of Health and Public Affairs
12424 Research Parkway, Suite 200-210
Interim Chair: Michael J. Sweeney, Phone: (407) 249-4798
Web Address: http://www.cohpa.ucf.edu/comdis/

Admission Requirements  None

Degree Requirements
- Students should complete the General Education Program before transferring within the Florida Public University/Community College System
- Students should consult with a departmental advisor
- The courses designated in section 1 below may be taken at a Florida Community College, and should usually be completed in the first 60 hours
- Students must earn at least a “C” in each required course
- The courses designated in section 1 (General Education) should usually be completed in the first 60 hours

1. UCF General Education Program (36 hrs)
A. Communication Foundations 9 hrs
B. Cultural Historical Foundations 9 hrs
C. Mathematical Foundation 6 hrs
   Select STA 2023
D. Social Foundations 6 hrs
E. Science Foundations 6 hrs

2. Common Program Prerequisites
None

3. Core Requirements (55 hrs)
SPA 3002  Introduction to Communicative Disorders 3 hrs
LIN 4710C  Foundations of Language 4 hrs
SPA 4212C  Communicative Disorders-Language 4 hrs
SPA 3101  Physiological Bases of Speech and Hearing 3 hrs
SPA 4032  Audiology I 3 hrs
SPA 4201C  Communicative Disorders-Articulation 4 hrs
SPA 3050  Clinical Observation (Taken Fall & Spring of Senior year) 3/3 hrs
SPA 4011  Speech and Hearing Science 3 hrs
SPA 4402C  Communicative Disorders-Language 4 hrs
SPA 4556  Therapeutic Communications 3 hrs
SPA 4251C  Organic Speech Disorders 4 hrs
SPA 4321  Aural Habilitation-Rehabilitation 4 hrs
SPA 4130  Augmentative Communication Sys 3 hrs
SPA 4310  Audiology II 3 hrs

4. Statistics Requirement (6 hrs)
STA 2023  Statistical Methods I 3 hrs
STA 4163  Statistical Methods II 3 hrs
or
HSA 4701  Introduction to Research in the Health Professions 6 hrs

5. Upper Division Restricted Electives (3 hrs)
A course at the 3000 or 4000 level related to the Major (e.g., education, psychology, sociology, computer, etc.) selected in consultation with the academic advisor.

6. Departmental Exit Requirements
Students must achieve a grade of “C” in required courses in the Department.

7. Electives (6 hrs min)
B.A./B.S. Option.
- Students pursuing the B.A. degree must demonstrate proficiency in a foreign language equivalent to one year in college
- Students pursuing the B.S. degree must complete two courses (6 credit hours) of health science courses approved by the Department. Suggested Courses: HSC 3593, AIDS; HUN 2002, Nutrition, HSC 3531, Medical Terminology; HSC 3110C, Medical Self Assessment; HSA 3122, U.S. Health Care Systems; SPA 3000, Detection of Speech and Hearing Problems.
- ASL (American Sign Language) can only be used for restricted elective or foreign language admission requirement. It does not satisfy B.A. language requirement.
- SPA 3000 can be used for either the restricted elective or the B.S. option.
- Students who wish to obtain a Teacher's Certificate for the State of Florida may include the necessary course work as electives. See your academic advisor.

8. Foreign Language Requirements
Admissions: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
Graduation: Students pursuing the B.A. degree must demonstrate proficiency in a foreign language equivalent to one year.

9. University Minimum Exit Requirements (120 hrs)
- A “C” GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hrs of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Health Services Administration, Physical Therapy

Related Minors: Health Services Administration, Psychology

Transfer Notes:
- “D” grades from other institutions do not meet departmental requirements
- Courses taken at community colleges do not substitute for Upper Division courses
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.
- Students may take STA 2023 to fulfill the first part of the statistics requirement (STA 2014 will not satisfy this requirement)

Honors
Honors Option Requires:
- Completion of a 3 credit directed readings course
- Completion of a 3 credit thesis course
Open to students with a 3.5 GPA in Communicative Disorders
Cumulative UCF 3.2 GPA
Completion of 60 semester hours of college credit, including 12 graded upper division hours at UCF

Tentative Course Schedule for Entering Freshmen

<table>
<thead>
<tr>
<th>Freshman Year*</th>
<th>Fall 12 hrs</th>
<th>Spring 15 hrs</th>
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<tr>
<td>ENC 1101</td>
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<td>ENC 1102</td>
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<td>POS 2041 or ECO 2013</td>
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<td>PSY 2013 or SYG 2000</td>
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<td>PSC 1121 or CHM 1020</td>
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<td>or ANT 2000</td>
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<td>One Course: ARH 2050,</td>
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<td>EHU 2000 or HUM 2211</td>
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<td>ARH 2051, MUL 2010,</td>
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<td>THE 1020, REL 2300,</td>
<td>MGF 1203 or MAC 1105</td>
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<tr>
<td>PHI 2010, LIT 2110, LIT 2120</td>
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*Plan your required 9 summer hours into your course of study

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<tr>
<th>Sophomore Year</th>
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<tr>
<td>SPC 1600C</td>
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<td>EUH 2001 or HUM 2230</td>
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<td>or AMH 2020</td>
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<td>BSC 1020C or BSC 1030</td>
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<td>or GLY 1030 or GEO 1200</td>
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<td>Foreign Lang II (B.A.)</td>
</tr>
<tr>
<td>or BOT 1000C or ANT 2511</td>
<td></td>
<td>or Health Sciences (B.S.)</td>
</tr>
<tr>
<td>Foreign Lang. I (B.A.)</td>
<td>3/4</td>
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<tr>
<td>or Health Sciences (B.S.)</td>
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<tr>
<td>Summer</td>
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<td>HSA 4701**</td>
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<td>**If Gen. Ed. has not been met, take:</td>
<td></td>
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<tr>
<td>STA 2023</td>
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<td>STA 4163</td>
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<td>SPA 3050</td>
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<td>SPA 4130</td>
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<td>SPA 4556</td>
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<tr>
<td>Elective (if needed)</td>
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Minor:
The Department of Communicative Disorders offers a minor consisting of a minimum of 25 semester hours. Required courses: LIN 4710C, SPA 3002, 3101, 3112C, 4032, 4251, 4251L, and 4402.

Licensed Speech Language and Audiology Assistant:
This state license may be obtained by completing the minor plus one additional course as recommended by the academic advisor.

NOTE:
Students who are enrolled as undergraduates are advised that this is a major which realistically requires a Master's Degree. Minimum requirements for entry into the graduate program typically requires a 3.0 GPA in the last 60 hours of undergraduate work in the major.
The Department of Mathematics offers special courses for students in the Honors Program. These courses are designated with an H such as MAC 2311H, MAC 2312H, MAC 2313H, MAC 3930H, and MAP 2302H.

**Admission Requirements**  None

**Degree Requirements**

- UCF students who change degree programs and select this major must adopt the most current catalog.
- All mathematics courses except MAC 2311, 2312, 2313 (or MAC 2281, 2282, 2283), and MAP 2302 must either be taken from, or approved by, the Department of Mathematics at UCF.
- Students must complete one full sequence of calculus; either Calculus with Analytic Geometry (MAC 2311, 2312, 2313) or Calculus for Engineers and Scientists (MAC 2281, 2282, 2283). Only complete calculus sequences will be accepted.
- Departmental Residency Requirement: at least 21 semester hours of regularly scheduled 3000-4000 level courses must be taken from the UCF Math Department.
- Students must earn at least a "C" in each required course.
- Students should consult with a departmental advisor.
- Courses designated in sections 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

### 1. UCF General Education Program (39 hrs)

<table>
<thead>
<tr>
<th>Category</th>
<th>Course Code</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Communication Foundations</td>
<td></td>
<td>9 hrs</td>
</tr>
<tr>
<td>B. Cultural and Historical Foundations</td>
<td></td>
<td>9 hrs</td>
</tr>
<tr>
<td>C. Mathematical Foundations</td>
<td></td>
<td>4 hrs</td>
</tr>
<tr>
<td>Select MAC 2311 Calculus I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select COP 3502C Computer Science I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Social Foundations</td>
<td></td>
<td>6 hrs</td>
</tr>
<tr>
<td>E. Science Foundations</td>
<td></td>
<td>4 hrs</td>
</tr>
<tr>
<td>Select BSC 2010C General Biology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select PHY 2048 &amp; L Physics for Sci &amp; Engr I</td>
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<td>4 hrs</td>
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### 2. Common Program Prerequisites (8 hrs)

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>COP 3502C*</td>
<td>Computer Science I GEP</td>
</tr>
<tr>
<td>MAC 2311**</td>
<td>Calculus I GEP</td>
</tr>
<tr>
<td>MAC 2312**</td>
<td>Calculus II 4 hrs</td>
</tr>
<tr>
<td>MAC 2313**</td>
<td>Calculus III 4 hrs</td>
</tr>
<tr>
<td>BSC 2010C*</td>
<td>General Biology GEP</td>
</tr>
<tr>
<td>PHY 2048*&amp;L</td>
<td>Physics for Sci &amp; Eng I w/lab GEP</td>
</tr>
</tbody>
</table>

*See Transfer Notes for possible substitutes

**At UCF the calculus sequence MAC 2281, 2282, 2283 is preferred as a substitute for the sequence MAC 2311, 2312, 2313. However, students who plan to transfer to another institution within the SUS may want to take the sequence MAC 2311, 2312, 2313 to ensure transferability.

### 3. Basic Core Requirements (10 hrs)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 2049&amp;L</td>
<td>Physics for Sci &amp; Eng II w/lab 4 hrs</td>
</tr>
<tr>
<td>STA 2023</td>
<td>Statistical Methods I 3 hrs</td>
</tr>
</tbody>
</table>

### 4. Advanced Core Requirements (45 hrs)

Select one course

- MHF 2300 Logic and Proof 3 hrs
- COT 3100 Intro to Discrete Structures 3 hrs
- ENC 3241 Technical Report Writing 3 hrs
- MAS 3106 Linear Algebra 4 hrs
- MAD 4203 Combinatorics & Graph Theory 4 hrs
- MAP 4307 Appl of Complex Variables 3 hrs
- MAP 4363 Appl Boundary Value Prob I 3 hrs
- STA 4321 Statistical Theory I 3 hrs
- MAP 4364 Appl Boundary Value Prob II 3 hrs
- COP 3503 Computer Science IV 3 hrs
- STA 4322 Statistical Theory II 3 hrs
- MAA 4226 Advanced Calculus I 4 hrs
- COT 4500 Numerical Calculus 3 hrs

Select one course

- MAP 4103 Mathematical Modeling 3 hrs
- MAP 4153 Vector and Tensor Analysis 3 hrs

### 5. Restricted Electives (18 hrs)

Select six courses

- COP 3402C Systems Software 3 hrs
- COP 3530C Computer Science III 3 hrs
- CDA 4150 Computer Architecture 3 hrs
- COP 4020 Programming Languages I 3 hrs
- COP 4600 Operating Systems 3 hrs
- COP 4210 Discrete Computational Struct. 3 hrs

### 6. Departmental Exit Requirements

- Earn a grade of "C" or better in each course required in the degree program (sections 2-4 above).
- Computer Competency met by COP 3503C.

### 7. Foreign Language Requirements

**Admission:** 2 years high school, or 1 year college language (or equivalent proficiency exam) prior to graduation.

**Graduation:** None

### 8. Electives

Variable

Students wishing to complete a double major in both Computer Science and Applied Mathematics must also complete all the requirements of the School of Computer Science. To minimize the total hours taken for both majors, students should select an advanced computer science course for the unrestricted elective.

### 9. University Minimum Exit Requirements

- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST, and 9 hrs of Summer credit (if applicable)

**Total Semester Hours Required** 120 hours

**Related Programs:** Applied Mathematics, Computer Science, Engineering, Math Education, Statistics
Related Minors: Applied Computer Science, Computer Science, Engineering, Math, Physics, Statistics

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
- COP 3502*: may use any programming language course with a COP prefix.
- BSC 2010C*: may use any laboratory BSC or CHM course which is designed for majors.
- PHY 2048*: may use any PHY course with a lab; however, PHY 2048 is a prerequisite for PHY 2049 which must be taken.

Computational Track in Applied Mathematics

Tentative Course Schedule

First Year Sequence - 28 hours

Fall
- MAC 2281* Calculus for Sci & Eng I (14 hrs)
- BSC 2010C General Biology 4 hrs
- ENC 1101 English Composition I 3 hrs
- ECO 2013 Principles of Economics I 3 hrs

Spring
- MAC 2282* Calculus for Sci & Eng II 4 hrs
- ENC 1102 English Composition II 3 hrs
- PHY 2048 Physics for Eng & Sci I 3 hrs
- PHY 2048L Physics Lab I 1 hr
- Programming Language 3 hrs

Select from
- COP 2213 Pascal
- COP 2223 C Language

Second Year Sequence - 30 hours

Fall
- MAC 2283* Calculus for Sci & Eng III 4 hrs
- PHY 2049 Physics for Eng & Sci II 3 hrs
- PHY 2049L Physics Lab II 1 hr
- COP 3502C Computer Science I 3 hrs
- MHF 2300 Logic and Proof 3 hrs

Spring
- MAP 2302 Differential Equations 3 hrs
- COP 3503C Computer Science II 4 hrs
- CDA 3103 Computer Organization 3 hrs
- STA 2023 Statistical Methods I 3 hrs

Third Year Sequence - 31 hours

Fall
- MAS 3106 Linear Algebra 4 hrs
- MAD 4203 Comb. and Graph Theory 4 hrs

COP 3402C Systems Software 3 hrs
COP 3530 Computer Science III 3 hrs
CDA 4150 Computer Architecture 3 hrs
Spring
- MAP 4103 Math Modeling 3 hrs
- or MAP 4153 will substitute
- COT 4210 Discrete Computational Structures 3 hrs
- Cultural and Historical Foundations 2 3 hrs
- Social Foundations 2 3 hrs
- Unrestricted Elective 2 hrs

Fourth Year Sequence - 31 hours

Fall
- MAP 4363 Applied boundary Value Prob. I 3 hrs
- Cultural and Historical Foundations 1a 3 hrs
- COT 4500 Numerical Calculus 3 hrs
- MAA 4226 Advanced Calculus 4 hrs
- COP 4600 Operating Systems 3 hrs

Spring
- MAP 4364 Applied Boundary Value Prob. II 3 hrs
- MAA 4307 Applications of Complex Analysis 3 hrs
- or MAA 5404 will substitute
- COP 4020 Programming Languages I 3 hrs
- ENC 3241 Technical Report Writing 3 hrs
- Cultural and Historical Foundations 1b 3 hrs

Students wishing to complete a double major in both Computer Science and Applied Mathematics will also need to meet all the requirements in the School of Computer Science. To minimize the total hours taken for both majors, students should select an advanced computer science course for the unrestricted elective.
COMPUTER ENGINEERING: BACHELOR OF SCIENCE

College of Engineering
Electrical & Computer Engineering Department,
ENGR 407C, (407) 823-2786, FAX: (407) 823-5835,
Home Page http://www.ece.engr.ucf.edu
Dr. C. S. Bauer, Jr., E-Mail: bauer@mail.ucf.edu

Admission Requirements:
All entering students are required by UCF to attend Orientation before registering for their first semester at UCF. Orientation includes engineering academic advisement and registration for first-semester UCF classes; see also the section, Orientation, found elsewhere in this catalog.

Degree Requirements
- Each engineering student is assigned a qualified engineering advisor in the department of his/her major. Each student should seek academic advisement before registering for classes each semester to minimize excess hours and to ensure that satisfactory academic progress is being maintained.

1. UCF General Education Program for Engineering Students (38 hrs)
The UCF General Education Program (GEP) is described in the section, General Education Program, found elsewhere in this catalog. Engineering students should closely study the requirements of the UCF GEP and the allowable substitutions detailed in paragraphs A. through E. below to minimize excess hours. Students transferring to UCF from within the Florida State University/Community College Systems should complete the GEP and the Common Program Prerequisites before transferring.

A. Communication Foundations 9 hrs
   1. Take ENC 1101
   2. Take ENC 1102
   3. SPC 1016 is the preferred substitute for SPC 1600C for engineering students.

See the descriptions of these courses in the section, Alphabetical Listing of Courses, later in this catalog.

B. Cultural and Historical Foundations 9 hrs

C. Mathematical Foundations 7 hrs
   1. Take MAC 2281, Calculus for Scientists and Engineers I, (4 hrs). NOTE: College algebra and trigonometry are prerequisites for Calculus I. See the course descriptions.
   2. Take STA 3032 (3 hrs). NOTE: Calculus II is the prerequisite for this course.

D. Social Foundations 6 hrs
   1. Take ECO 2013 or ECO 2023.

E. Science Foundations 7 hrs
   1. Take PHY 2048/48L.
   2. Take either GEO 1200 or GEO 2370.

2. Common Program Prerequisites (CPP's) (19 hrs)
   These courses are specifically required for all engineering students of the Florida State University System. CPP courses are also available at other Florida post-secondary schools and may be transferred directly to UCF programs. All engineering students must remain in the Calculus sequence with which they begin. Students who begin with MAC 2281 Calculus for Scientists and Engineers I, must continue with MAC 2282 and MAC 2283. Students who begin with MAC 2311 Calculus with Analytical Geometry I, must continue with MAC 2312 and MAC 2313. The individual courses in these two Calculus sequences are not interchangeable. NOTE: MAC 2281 and PHY 2048/48L also satisfy UCF GEP sub-requirements, as do ENC 1101, ENC 1102, the Humanities courses, and the Social Science courses.

   MAC 2281 Calculus for Scientists & Engineers I GEP
   (MAC 2311 will substitute)
   MAC 2282 Calculus for Scientists & Engineers II 4 hrs
   (MAC 2312 will substitute)
   MAC 2283 Calculus for Scientists & Engineers III 4 hrs
   (MAC 2313 will substitute)

   MAP 2302 Differential Equations 3 hrs
   PHY 2048/48L Physics for Engineers & Scientists I GEP
   PHY 2049/49L Physics for Engineers & Scientists II 4 hrs
   ENC 1101 Composition I GEP
   ENC 1102 Composition II GEP
   Humanities Courses GEP
   Social Science Courses GEP
   Humanities or Social Sciences GEP

3. Courses Required for the Major (60 hrs)
The College of Engineering requires all engineering students to achieve a minimum 2.250 GPA in completing these courses, together with the technical elective courses listed in 4. below and with the senior design courses listed in 5. below. Independent study courses generally do not satisfy major requirements and normally are awarded grades of I, S, or U.

   UCF GEP
   EGN 1006 Intro to the Engineering Profession 1 hr
   EGN 1930 ST: Engineering Concepts & Methods 1 hr
   EGN 3310 Engineering Analysis - Statics 3 hrs
   EGN 3321 Engineering Analysis - Dynamics 3 hrs
   EGN 3358 Thermo-Fluids-Hot Transfer 3 hrs
   EGN 3373 Principles of Electrical Engineering 4 hrs
   EGN 3420 Engineering Analysis 3 hrs
   STA 3032 Probability & Statistics for Engineers 3 hrs
   PHY 3101 Physics for Engineers & Scientists I 3 hrs
   EEL 3122C Electrical Networks 4 hrs
   EEL 3306 Semiconductor Devices I 3 hrs
   EEL 3307C Electronics I 4 hrs
   EEL 3342C Intro to Digital Circuits & Systems 3 hrs
   EEL 3657 Linear Control Systems 3 hrs
   EEL 3801C Intro to Computer Engineering 3 hrs
   EEL 4767C Computer System Design I 4 hrs
   EEL 4768C Computer System Design II 4 hrs
   EEL 4832 Engineering Application of Comp Methods 3 hrs
   EEL 4851C Engineering Data Structures 4 hrs
   EEL 4882 Engineering System Software 3 hrs
   EEL 4884C Engineering Software Design 4 hrs

4. Approved Technical Electives (5 hrs)
Technical electives are available in the BScpE program to address specific student interests in a variety of technical areas. Students should consult with their assigned academic advisor for a list of the approved technical electives and the terms when specific courses of this type are to be offered.

5. Departmental Graduation Requirements (6 hrs)
   - EEL 4914 Senior Design I 3 hrs
   - EEL 4915L Senior Design II 3 hrs
   - COE encourages all engineering students to take the Engineering Intern Exam during their Senior year.

6. Foreign Language Requirements (0-8 hrs)
Admission: 2 years of one foreign language in high school, or 1 year of one foreign language in college (or equivalent proficiency
7. University Minimum Graduation Requirements
- A 2.000 GPA in all work attempted (both UCF and overall).
- 60 semester hours earned after any CLEP award.
- 48 semester hours of upper division credit completed.
- 32 semester hours of regular courses completed at UCF.
- A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits are permitted.
- Complete the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit (if applicable).

Total Semester Hours Required: 128 hrs


Transfer Notes:
- Courses taken from Community Colleges do not substitute for Upper Division Courses.
- Courses transferred must be formally evaluated for equivalency credit. The student must provide all supporting information with his/her petition for this evaluation.

Tentative Course Schedule for Entering Freshmen
The tentative course schedule listed below is a guide for those students who plan on completing their degree in four years. All engineering students should meet with their faculty advisor to develop and maintain an appropriate plan of study.

**Computer Engineering - 128 semester hours required**

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<th>SECOND YEAR</th>
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<td>Spring</td>
<td>12 hrs</td>
</tr>
<tr>
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<td>3</td>
<td>*ENC 1102 English Comp II</td>
<td>3</td>
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<tr>
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<td>ENG 1930 Eng Conc &amp; Meth</td>
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<td>*MAC 2282 Cal Sci &amp; Eng II</td>
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<td>EGN 1006 Intro to Engr</td>
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<td>*PHY 2048/L Phys for Eng/Sci I</td>
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<td>*MAC 2281 Cal Sci &amp; Eng I</td>
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<tr>
<td>Summer</td>
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<td></td>
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</tr>
<tr>
<td>*Social Foundations I</td>
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<td>*Science Foundations 2</td>
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<tr>
<td>*MAC 2283 Cal Sci &amp; Eng III</td>
<td>4</td>
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|                          |            |          |            |            |

**THIRD YEAR**

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<tr>
<td>EEL 3306 Semicon'd Dev I</td>
<td>3</td>
<td>EEL 3307C Electronics I</td>
<td>4</td>
</tr>
<tr>
<td>EEL 3122C Electrical Nets</td>
<td>4</td>
<td>EEL 3657 Linear Cont Sys</td>
<td>3</td>
</tr>
<tr>
<td>EEL 4851C Eng Data Struc</td>
<td>4</td>
<td>EEL 4767C Cmp Sys Des'n I</td>
<td>4</td>
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<tr>
<td>STA 3032 Prob/Stats for Engr</td>
<td>3</td>
<td>EEL 4882 Engrng Sys S/W</td>
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**FOURTH YEAR**

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<tr>
<td>EEL 4768C Cmp Sys Dsgn II</td>
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<td>*Cult &amp; Hist Foundations 2</td>
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<tr>
<td>EEL 4884C Engr S/W Dsgn</td>
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<td>Approved Technical Elective</td>
<td>3</td>
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<tr>
<td>EEL 4914 Senior Design I</td>
<td>3</td>
<td>EEL 4915C Senior Design II</td>
<td>3</td>
</tr>
<tr>
<td>Approved Technical Elective</td>
<td>2</td>
<td>EEL 4832 Apps Cmplt Mhds</td>
<td>3</td>
</tr>
</tbody>
</table>

Notes:
1. Courses marked with an asterisk (*) are also available from most Community Colleges and are often part of their Pre-Engineering AA programs. Most of these courses are part of the UCF General Education Program; see the section on the GEP elsewhere in this catalog for further information.
2. Assumes a knowledge of a higher level programming language (C preferred).
3. EGN 1006 and EGN 1930 are required courses for incoming freshmen only. The credits for these two courses (one hour each) may, with prior approval of the department academic advisor, be moved to the area 4. Approved Technical Electives.
COMPUTER ENGINEERING - SOFTWARE ENGINEERING CONCENTRATION: BACHELOR OF SCIENCE

College of Engineering
Electrical & Computer Engineering Department,
ENGR 407C, (407) 823-2786, FAX: (407) 823-5835,
Home Page http://www.ece.engr.ucf.edu
Dr. C. S. Bauer, Jr., E-Mail: bauer@mail.ucf.edu

Admission Requirements:
All entering students are required by UCF to attend Orientation before registering for their first semester at UCF. Orientation includes engineering academic advisement and registration for first-semester UCF classes; see also the section, Orientation, found elsewhere in this catalog.

Degree Requirements
- Each engineering student is assigned a qualified engineering academic advisor in the department of his/her major. Each student should seek academic advisement before registering for classes each semester to minimize excess hours and to ensure that satisfactory academic progress is being maintained.

1. UCF General Education Program for Engineering Students (38 hrs)
The UCF General Education Program (GEP) is described in the section, General Education Program, found elsewhere in this catalog. Engineering students should closely study the requirements of the UCF GEP and the allowable substitutions detailed in paragraphs A. through E. below to minimize excess hours. Students transferring to UCF from within the Florida State University/Community College Systems should complete the GEP and the Common Program Prerequisites before transferring.

A. Communication Foundations
   1. Take ENC 1101
   2. Take ENC 1102
   3. SPC 1016 is the preferred substitute for SPC 1600C for engineering students.
   
See the descriptions of these courses in the section, Alphabetical Listing of Courses, later in this catalog.

B. Cultural and Historical Foundations
   9 hrs
   1. Take MAC 2281, Calculus for Scientists and Engineers I, (4 hrs). **NOTE:** College algebra and trigonometry are prerequisites for Calculus I. See the course descriptions.
   2. Take STA 3032 (3 hrs). **NOTE:** Calculus II is the prerequisite for this course.

D. Social Foundations
   1. Take ECO 2013 or ECO 2023.

E. Science Foundations
   7 hrs
   1. Take PHY 2048/48L.
   2. Take either GEO 1200 or GEO 2370.

2. Common Program Prerequisites (CPP's) (19 hrs)
These courses are specifically required for all engineering students of the Florida State University System. CPP courses are also available at other Florida post-secondary schools and may be transferred directly to UCF programs. All engineering students must remain in the Calculus sequence with which they begin. Students who begin with MAC 2281 Calculus for Scientists and Engineers I, must continue with MAC 2282 and MAC 2283. Students who begin with MAC 2311 Calculus with Analytical Geometry I, must continue with MAC 2312 and MAC 2313. The individual courses in these two Calculus sequences are not interchangeable. **NOTE:** MAC 2281 and PHY 2048/48L also satisfy UCF GEP sub-requirements, as do ENC 1101, ENC 1102, the Humanities courses, and the Social Science courses.

CHS 1440 Fundamentals of Chemistry for Eng 4 hrs
   (CHM 2045/45L will substitute)
MAC 2281 Calculus for Scientists & Engineers I GEP
   (MAC 2311 will substitute)
MAC 2282 Calculus for Scientists & Engineers II 4 hrs
   (MAC 2312 will substitute)
MAC 2283 Calculus for Scientists & Engineers III 4 hrs
   (MAC 2313 will substitute)
MAP 2302 Differential Equations 3 hrs
PHY 2048/48L Physics for Engineers & Scientists I GEP
PHY 2049/49L Physics for Engineers & Scientists II 4 hrs
ENC 1101 Composition I GEP
ENC 1102 Composition II GEP
Humanities Courses GEP
Social Science Courses GEP

3. Courses Required for the Major (60 hrs)
The College of Engineering requires all engineering students to achieve a minimum 2.250 GPA in completing these courses, together with the technical elective courses listed in 4. below and with the senior design courses listed in 5. below. Independent study courses generally do not satisfy major requirements and normally are awarded grades of I, S, or U.

EGN 1006 Intro to the Engineering Profession 1 hr
EGN 1930 ST: Engineering Concepts & Methods 1 hr
EGN 3310 Engineering Analysis - Statics 3 hrs
EGN 3321 Engineering Analysis - Dynamics 3 hrs
EGN 3358 Thermo-Fluids-Heat Transfer 3 hrs
EGN 3373 Principles of Electrical Engineering 4 hrs
EGN 3420 Engineering Analysis 3 hrs
STA 3032 Probability & Statistics for Engineers 3 hrs
PHY 3101 Physics for Engineers & Scientists II 3 hrs
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EEL 3801C Intro to Computer Engineering 3 hrs
EEL 4767C Computer System Design I 4 hrs
EEL 4768C Computer System Design II 4 hrs
EEL 4832 Engnr Application of Comp Methods 3 hrs
EEL 4851C Engineering Data Structures 4 hrs
EEL 4882 Engineering System Software 3 hrs
EEL 4884C Engineering Software Design 4 hrs

4. Approved Technical Electives (5 hrs)
Technical electives are available in the BSCpE program to address specific student interests in a variety of technical areas. For those students with a declared interest in Software Engineering, a concentration in this area is available by taking the following technical electives, in addition to the required software engineering courses listed in 3. above.

EEL 5881 Software Engineering I 3 hrs
EEL 4932 Component Design in Software Engr 3 hrs
EEL 5771 Engr App's of Computer Graphics 3 hrs

5. Departmental Graduation Requirements (6 hrs)
- EEL 4914 Senior Design I 3 hrs
- EEL 4915L Senior Design II 3 hrs
COE encourages all engineering students to take the Engineering Intern Exam during their Senior year.

6. Foreign Language Requirements (0-8 hrs)
Admission: 2 years of one foreign language in high school, or 1 year of one foreign language in college (or equivalent proficiency exam) prior to graduation.

Graduation: None.

7. University Minimum Graduation Requirements
- A 2.000 GPA in all work attempted (both UCF and overall).
- 60 semester hours earned after any CLEP award.
- 48 semester hours of upper division credit completed.
- 32 semester hours of regular courses completed at UCF.
- A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits are permitted.
- Complete the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit (if applicable).

Total Semester Hours Required: 128 hrs


Transfer Notes:
- Courses taken from Community Colleges do not substitute for Upper Division Courses
- Courses transferred must be formally evaluated for equivalency credit. The student must provide all supporting information with his/her petition for this evaluation.

Tentative Course Schedule for Entering Freshmen
The tentative course schedule listed below is a guide for those students who plan on completing their degree in four years. All engineering students should meet with their faculty advisor to develop and maintain an appropriate plan of study.

Computer Engineering - Software Engineering Concentration
128 semester hours required

**FIRST YEAR**

<table>
<thead>
<tr>
<th>Fall</th>
<th>14 hrs</th>
<th>Spring</th>
<th>12 hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Cult &amp; Hist Foundations 1a</em></td>
<td>3</td>
<td><em>ENC 1102 English Comp II</em></td>
<td>3</td>
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<tr>
<td><em>ENC 1101 English Comp I</em></td>
<td>3</td>
<td><em>ENG 1930 Eng Cone &amp; Meth</em></td>
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<tr>
<td><em>SFC 1016 Tech Presentations</em></td>
<td>3</td>
<td><em>MAC 2282 Calc Sci &amp; Eng II</em></td>
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</tr>
<tr>
<td>EGN 1006 Intro to Engr</td>
<td>1</td>
<td><em>PHY 2048/L Phys for Eng/Sci I</em></td>
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<tr>
<td><em>MAC 2281 Calc Sci &amp; Eng I</em></td>
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**Summer**

<table>
<thead>
<tr>
<th>10 hrs</th>
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<tbody>
<tr>
<td><em>Social Foundations 1</em></td>
<td>3</td>
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<tr>
<td><em>Science Foundations 2</em></td>
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<tr>
<td><em>MAC 2283 Calc Sci &amp; Eng III</em></td>
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**SECOND YEAR**

<table>
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<tr>
<th>Fall</th>
<th>17 hrs</th>
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<tr>
<td><em>MAP 2302 Diff Equations</em></td>
<td>3</td>
<td>EGN 3321 Engr Anal-Dynamics</td>
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<tr>
<td><em>PHY 2049 Phys Engr/Sci II</em></td>
<td>3</td>
<td>*</td>
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<tr>
<td><em>PHY 2049L Lab En/Sci II</em></td>
<td>1</td>
<td>EGN 3358 Ther-Flds-Ht Tran</td>
<td>3</td>
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<tr>
<td>CHS 1440 Chem for Engr</td>
<td>4</td>
<td>EGN 3373 Prin of Elec Engr</td>
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<tr>
<td>EGN 3310 Engr Anal-Statics</td>
<td>3</td>
<td><em>PHY 3101 Physics for Engr III</em></td>
<td>3</td>
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<tr>
<td>EGN 3420 Eng Analysis*</td>
<td>3</td>
<td>EEL 3342C Intro Dig Cir/Csys</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EEL 3501C Intro Cmptr Engr*</td>
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**Summer**

<table>
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<tr>
<td><em>ECO 2013</em></td>
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<tr>
<td>ECO 2023 Prin of Econ I, II</td>
<td></td>
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<tr>
<td><em>Cult &amp; Hist Foundations</em></td>
<td>1b</td>
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**THIRD YEAR**

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<tr>
<th>Fall</th>
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<tbody>
<tr>
<td>EEL 3306 Semicond't Dev I</td>
<td>3</td>
<td>EEL 3307C Electronics I</td>
<td>4</td>
</tr>
<tr>
<td>EEL 3122C Electrical Nets</td>
<td>4</td>
<td>EEL 3657 Linear Cont Sys</td>
<td>3</td>
</tr>
<tr>
<td>EEL 4851C Eng Data Struct</td>
<td>4</td>
<td>EEL 4767C Cmp Sys Des'n I</td>
<td>4</td>
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<tr>
<td>STA 3032 Prob/Stats for Engr</td>
<td>3</td>
<td>EEL 4882 Engrng Sys S/W</td>
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**FOURTH YEAR**

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<th>12 hrs</th>
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<tr>
<td>EEL 4768C Cmp Sys Dsgn II</td>
<td>4</td>
<td><em>Cult &amp; Hist Foundations</em></td>
<td>2</td>
</tr>
<tr>
<td>EEL 4884C Engr S/W Dsgn</td>
<td>4</td>
<td>EEL 4952 Comp Des S/W Engr</td>
<td>3</td>
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<tr>
<td>EEL 4914 Senior Design I</td>
<td>3</td>
<td>ar</td>
<td>EEL 5771 Eng Apl/Comp Grph</td>
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<tr>
<td>EEL 5881 Software Engr I</td>
<td>3</td>
<td>EEL 4915C Senior Design II</td>
<td>3</td>
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<tr>
<td>EEL 4832 Apps Cmptr Mths</td>
<td>3</td>
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</tr>
</tbody>
</table>

Notes:
1. Courses marked with an asterisk (*) are also available from most Community Colleges and are often part of their Pre-Engineering AA programs. Most of these courses are part of the UCF General Education Program; see the section on the GEP elsewhere in this catalog for further information.
2. Assumes a knowledge of a higher level programming language (C preferred).
3. EGN 1006 and EGN 1930 are required courses for incoming freshmen only. The credits for these two courses (one hour each) may, with prior approval of the department academic advisor, be moved to the area 4. Approved Technical Electives.
## Degree Requirements

- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students must earn at least a "C" in each course in 2-6.
- Students should consult with a departmental advisor.
- Students must request a review of graduation requirements at the time of filing intent-to-graduate.
- School Residency Requirement consists of at least 24 semester hours of regularly scheduled 3000-5000 level courses taken from the UCF School of Computer Science.
- 18 of the 24 Residency hours must be at the 4000-5000 level.
- Courses designated in 1 (General Education Program), 2 (Common Program Prerequisites), and most of 3 (Basic Core Requirement) may be completed in the first 60 hours.

### 1. UCF General Education Program (39 hrs)

- Communication Foundations: 9 hrs
- Cultural and Historical Foundations: 9 hrs
- Mathematical Foundations: 6 hrs
- Science Foundations: 6 hrs

### 2. Common Program Prerequisites (14 hrs)

- COP XXXX*: Computer Language: 3 hrs

* Majors are expected to be proficient in a variety of programming languages, including Pascal. Students who are proficient in a language may substitute any 4000-5000 level Computer Science course with department approval.

### 3. Basic Core requirements (15 hrs)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>COP 3502C</td>
<td>Computer Science I</td>
<td>3 hrs</td>
</tr>
<tr>
<td>COP 3503C</td>
<td>Computer Science II</td>
<td>3 hrs</td>
</tr>
<tr>
<td>STA 2023</td>
<td>Statistical Methods I</td>
<td>GEP</td>
</tr>
<tr>
<td>ENC 3241</td>
<td>Technical Report Writing</td>
<td>3 hrs</td>
</tr>
<tr>
<td>CDA 3103C</td>
<td>Computer Organization</td>
<td>3 hrs</td>
</tr>
<tr>
<td>COT 3100C</td>
<td>Intro to Discrete Structures</td>
<td>3 hrs</td>
</tr>
<tr>
<td>COT 3960</td>
<td>Foundation Exam</td>
<td>0 hrs</td>
</tr>
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</table>

### 4. Intermediate Core (6 hrs)

- COP 3402C: Systems Software: 3 hrs
- COP 3530C: Computer Science III: 3 hrs

### 5. Advanced Core (12 hrs)

- Students must maintain at least a 2.5 GPA in the following courses. Only the highest grade is used in the calculation.
- CDA 4150: Comp Architecture: 3 hrs
- COP 4210: Discrete Comp Structures: 3 hrs
- COP 4020: Programming Languages I: 3 hrs
- COP 4600: Operating Systems: 3 hrs

### 6. Restricted Electives (18 hrs)

- 4000-5000 level Computer Science courses that must include COT 4810 (Topics in Computer Science). Must be offered by the School of Computer Science.
- At most 3 hours of independent study allowed. No internships are allowed.
- 4000-5000 level courses mathematics or statistics: 6 hrs

### 7. School Exit Requirements

- Complete an exit interview with assigned faculty advisor.
- Computer Competency met by completion of major.

### 8. Foreign Language Requirements (0-8 hrs)

- Admission: 2 years high school, or 1 year college language (or equivalent proficiency exam) prior to graduation.
- Graduation: One year or equivalent proficiency exam. With prior School approval, cultural/multicultural courses may be used.

### 9. Electives (variable)

Select primarily from upper level courses, with School advisor’s approval. May be outside of the department.

### 10. University Minimum Exit Requirements

- A "C" GPA (2.0) in all work attempted (both UCF and overall).
- 60 semester hours earned after CLEP awarded.
- 48 semester hours of upper division credit completed.
- 30 semester hours in regular courses completed at UCF.
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted.
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hrs of Summer credit (if applicable).

### Total Semester Hours Required

120 hours

### Related Programs

- Computer Engineering, Management Information Systems
- Applied Computer Science, Computer Information Technology, Computer Science, Network Computing

### Transfer Notes:

- "D" grades do not meet School requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

### Acceptable Substitutes

For common program prerequisites if taken prior to transferring to UCF:

- COP XXXX*: may use any introductory programming in Ada, C, C++, Pascal or equivalent language.
- Science Courses: may use any two science courses designed for majors. Only 6 credits are needed to meet this requirement if taken as part of the AA transfer work.
Criminal Justice: Bachelor of Science

College of Health and Public Affairs
HPA 311 (407) 823-2603
Undergraduate Program Coordinator: Joseph Sanborn
E-mail: sanborn@pegasus.cc.ucf.edu
Web Address: http://www.cohpa.ucf.edu/crim.jus/

Admission Requirements  None

Degree Requirements
- Students should complete the General Education Program before transferring within the Florida Public University/Community College System.
- The courses designated in section 1 below may be taken at a Florida Community College, and should usually be completed in the first 60 hours.
- Students must earn a 2.0 GPA in the core requirements and the restricted electives.
- The courses designated in section 1 (General Education) should usually be completed in the first 60 hours.

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural Historical Foundations 9 hrs
   C. Mathematical Foundations 6 hrs
   Select MGF 1203
   D. Social Foundations 6 hrs
   E. Science Foundations 6 hrs

2. Common Program Prerequisites None

3. Core Requirements (21 hrs)
   CCJ 3024 3 hrs
   CCJ 3014 3 hrs
   CCJ 3290 3 hrs
   CCJ 3306 3 hrs
   CCJ 4105 3 hrs
   CCJ 4701 3 hrs
   ENC 3210 (CCJ Section) 3 hrs

4. Upper Division Restricted Electives (39 hrs)
   a. 27 additional semester hours of upper division CCJ course work. Seniors can satisfy up to 6 hrs of this requirement with internship and up to 6 hrs with directed independent study; however, the combination of these non-class options shall not exceed 9 hrs. Program standards must be met to be eligible for either internships or independent study credit.
   b. 12 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. Upper Division Unrestricted Electives (None)

6. Departmental Exit Requirements (120 hrs)
   Students must take a minimum of 36 hours from the department to obtain the UCF degree in Criminal Justice.

7. Foreign Language Requirements
   Admission: 2 years of one foreign language in high school, or 1 year of one foreign language in college (or equivalent proficiency exam) prior to graduation.

8. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hrs of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Legal Studies

Related Minors: Legal Studies, Public Administration, Psychology.

Transfer Notes: "D" grades from other institutions do not meet departmental requirements.

Honors
Honors Option Requires:
- Completion of a 3 credit directed readings course
- Completion of a 3 credit thesis course
- Open to students with a 3.5 GPA in Criminal Justice
- Cumulative UCF 3.2 GPA
- Completion of 60 semester hours of college credit, including 12 graded upper division hours at UCF

Tentative Course Schedule for Entering Freshmen

<table>
<thead>
<tr>
<th></th>
<th>Freshman Year*</th>
<th>Spring</th>
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<tbody>
<tr>
<td>Fall</td>
<td>14 hrs</td>
<td>15 hrs</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>3</td>
<td>ENC 1102</td>
</tr>
<tr>
<td>CGS 1060C</td>
<td>3</td>
<td>MGF 1203</td>
</tr>
<tr>
<td>PSC 1121 or CHM 1020</td>
<td>3</td>
<td>PSY 2013 or SYG 2000</td>
</tr>
<tr>
<td>One course: ARH 2050</td>
<td>3</td>
<td>or ANT 2000</td>
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<tr>
<td>ARH 2051, MUL 2010</td>
<td>EUH 2000 or HUM 2211</td>
<td>3</td>
</tr>
<tr>
<td>THE 1020, REL 2300</td>
<td>or AMH 2010</td>
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<td>PHI 2010, LIT 2110, LIT 2120</td>
<td>Elective</td>
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<tr>
<td>PAD 2930</td>
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*Plan your required 9 summer hours into your course of study

Summer 3 hrs
POS 2041 or ECO 2013 3

Sophomore Year

<table>
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<tr>
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<th>Summer</th>
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<td>Fall</td>
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<td>SPC 1600C</td>
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<td>EUH 2001 or HUM 2230</td>
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<td>or AMH 2020</td>
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<tr>
<td>BSC 1020 or BSC 1030</td>
<td>ENC 3210 (CCJ Section)</td>
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<tr>
<td>or GLY 1030 or GEO 1200</td>
<td>CCJ Elective</td>
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<tr>
<td>or BOT 1000 or ANT 2511</td>
<td>CCJ Elective</td>
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<td>Elective</td>
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Summer 8 hrs
(Foreign Lang I) 4
(Foreign Lang II) 4
if not satisfied in high school
<p>| | | |</p>
<table>
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<tr>
<td><strong>Junior Year</strong></td>
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<tr>
<td><strong>Fall</strong></td>
<td>15 hrs</td>
<td>Spring</td>
</tr>
<tr>
<td>CCJ 3290</td>
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<td>CCJ 4105</td>
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<tr>
<td>CCJ 3306</td>
<td>3</td>
<td>CCJ 4701</td>
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<td>CCJ Elective</td>
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<td>Supporting Elective</td>
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<td><strong>Senior Year</strong></td>
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<td><strong>Fall</strong></td>
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<td>CCJ Elective</td>
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<td>CCJ Internship or</td>
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<td>Elective (if necessary)</td>
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<td>Elective</td>
<td>3</td>
<td>Elective (if necessary)</td>
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<td></td>
<td></td>
<td>9/15 hrs</td>
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EARLY CHILDHOOD EDUCATION (PRE-KINDERGARTEN THROUGH GRADE 3): BACHELOR OF SCIENCE

College of Education
Instructional Programs, ED346, (407) 823-2939
Coordinator: Dr. Patricia Crawford, ED252, (407) 823-5034, E-mail: pcrawfor@pegasus.cc.ucf.edu
Web Address: http://pegasus.cc.ucf.edu/~ucfed/

Admission Requirements:
- have on file in the University admissions office passing scores on all parts of the College Level Academic Skills Test (CLAST) (No alternatives)
- have on file in the University admissions office a score at or above the 40th percentile on the SAT (950) or ACT (20 enhanced)
- present an overall GPA of 2.5
- complete a formal application for admission. Deadlines: June 30th for the Fall Semester; October 15th for the Spring Semester.
- meet any special departmental requirements

Degree Requirements:
- Students should see an advisor
- The courses designated in 1 (General Education) and 2 (Common Program Prerequisites) should usually be completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural-Historical Foundations 9 hrs
   C. Mathematical Foundations 6 hrs
   Select MGF 1105 College Algebra or MGF 1203 Finite Math
   Select STA 2014 Principles of Statistics
   D. Social Foundations 6 hrs
   Select PSY 2013 Gen Psychology
   E. Science Foundations 6 hrs
   Select one lab

   At least one course taken to meet the natural science requirements in General Education and/or Prerequisites must include a laboratory component.

2. Common Program Prerequisites (24 hrs)
   EDF 2005 Intro to Education 3 hrs
   *EDG 2701 Teaching Diverse Populations 3 hrs
   EME 1040 Intro to Technology 3 hrs
   - A total of 9 hours in communications, including a speech course (may be completed with the General Education)
   - A total of 9 hours in humanities (may be completed within the General Education)
   - A total of 9 hours of Math with MGF, MGT, MAC, and STA prefixes excluding MAT 1033 and computer courses (6 hours in General Education)
   - A total of 9 hours in the social sciences to include Psychology or human growth and development (6 hours in General Education)
   - A total of 9 hours of natural/physical science including one laboratory component (6 hours in General Education)
   - In addition to EDG 2701, students must take 6 additional hours with an international or diversity focus. The eligible courses will be determined by the institution in which the student is enrolled for his/her lower division course work. (These courses must be identified in the college/university catalog.)

   ARE 2011 Art & Creativity in Early Childhood Ed 3 hrs
   MUE 2210 Music & Movement in Early Childhood 3 hrs

3. SEQUENCE OF COURSES
   Block I (16 hrs)
   EDF 3740 Foun of Early Childhood Ed 3 hrs
   EDF 3120 Observing Child Growth & Develop 3 hrs
   EEC 4402 Cultural and Family Systems 3 hrs
   EEC 3268 Play Development 3 hrs
   EEC 4731 Health, Safety, & Nutrition 3 hrs
   EEC 3940 Integration/Internship 1 hr

   Block II (16 hrs)
   EDF 3214 Early Childhd Ed Lrng Environ 3 hrs
   EEC 3610 Social & Emotional Development 3 hrs
   EEX 3450 Young Children w/Special Needs 3 hrs
   EEX 4751 Parent Involvement 3 hrs
   RED 3310 Emergent Literacy 3 hrs
   EEC 3940 Integration/Internship 1 hr

   Block III (16 hrs)
   RED 4311 Development of Literacy 3 hrs
   SCE 4023 Tch Sci & Technology EEC 3 hrs
   MAE 4300 Exploring Math EEC 3 hrs
   EEC 4603 Guidance of Young Children 3 hrs
   EEC 3613 Observ & Asmt of Young People 3 hrs
   EEC 3940 Integration/Internship 1 hr

   Block IV (12 hrs)
   EEC 4943 ECE Student Teaching 12 hrs

   The student must have a grade of "C" or better in each specialization course and must have taken all methods courses prior to enrolling in Student Teaching.

   A student must have completed the portfolio process Satisfactorily before student teaching.

4. Foreign Language Requirements (0-6 hrs)
   State University System foreign language admission requirement: 2 years in high school or 1 year of college instruction in a single foreign language. (This requirement applies to those students admitted to the University without the required 2 units of foreign language in high school)

5. Electives (w/advisor's approval) (variable)

6. Departmental Exit Requirements:
   Achieve a 2.5 GPA in all courses within the major

7. University Minimum Exit Requirements
   - 2.0 GPA in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Transfer notes:
Courses taken at community colleges do not substitute for Upper Division courses. Transfer courses are not accepted for this program.
ECONOMICS: BACHELOR OF ARTS

College of Arts and Sciences
Political Science Department, FA 415, (407) 823-2608
E-mail: politics@ucf.edu
Dr. R. Bledsoe, (407) 823-2608

The Bachelor of Arts in Economics is designed for students with a liberal arts background, and will provide them with a strong foundation for future graduate studies or as training for a career in politics, teaching, research, social services and a variety of other areas. Successful completion of this program leads to the Bachelor of Arts degree with a major in Economics.

Admission Requirements  None

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students should consult with a departmental advisor
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations
      9 hrs
   B. Cultural and Historical Foundations
      9 hrs
   C. Mathematical Foundations
      Select MAC 1105 College Algebra
      3 hrs
      Select STA 2014 Principles of Statistics
      3 hrs
   D. Social Foundations
      Select ECO 2013 Principles of Economics I
      3 hrs
      PSY 2021, SYG 2000 or ANT 2000
      3 hrs
   E. Science Foundations
      6 hrs

2. Common Program Prerequisites (3 hrs)
   ECO 2013* Principles of Economics I
   ECO 2023* Principles of Economics II
   *See Transfer Notes for possible substitutes

3. Core requirements (15 hrs)
   ECO 3101 Intermediate Price Theory
   ECO 3203 Aggrer Econ Conditions Anal
   ECO 4401 Quantitative Business Tools I
   ECO 4411 Quantitative Business Tools II
   ECO 4451 Research Methods in Economics
   3 hrs

4. Upper Division Restricted Electives (18 hrs)

   International option—Select six courses
   ECO 3703 International Economics
   ECO 3723 International Commercial Policy
   ECO 4003 Comparative Economic Syst
   ECO 4013 Eco Development
   ECO 4231* Japanese Prosperity
   ECO 4303 Eco of European Integration
   ECO 4304 Economics of the Pacific Rim
   ECO 4941* Economics Internship
   * Requires departmental approval

   Standard option—Select six courses:
   ECO 3223 Money and Banking
   ECO 3622 American Economic History
   ECO 3703 International Economics
   ECO 3723 International Commercial Policy
   ECO 4303 History of Economic Thought
   ECO 4412 Eco Stat and Econometrics
   ECO 4502 Eco of the Public Sector
   ECP 3004 Seminar in Current Eco Topics
   ECP 3203 Contemp Labor Eco

   ECP 3433 Transportation Econ
   ECP 4403 Business, Govt & Indust Org
   ECP 4603 Urban and Regional Econ Prob
   ECP 4703 Managerial Economics
   ECS 4003 Comparative Economic Syst
   ECS 4013 Eco Development
   ECS 4231* Japanese Prosperity
   ECS 4303 Eco of European Integration
   ECS 4203 Economics of the Pacific Rim
   ECS 4941* Economics Internship
   * Requires departmental approval

5. Required Minor (18 hrs minimum)
   Completion of a minor in one of the following:
   Digital Media, Computer Science, History, Mathematics, Statistics, the Social and Behavioral Sciences, or Technical Writing.

6. Departmental Exit Requirements
   - Maintain a minimum GPA of 2.0 in required courses
   - Computer Competency met by Research Methods course

7. Foreign Language Requirements (0-8 hrs)
   Admission: Met by graduation requirement
   Graduation: One year or equivalent proficiency exam.

8. Electives (variable)
   Select primarily from upper level courses, with departmental advisor’s approval. May be outside of the department.

9. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Economics BS

Related Minors: Computer Science, Economics, Mathematics, Political Science, Psychology, Sociology, Statistics

Transfer Notes:
- "D" grades from other institutions do not meet departmental requirements
- Courses taken at community colleges do not substitute for Upper Division courses
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.
- Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
  - ECO 2013* & 2023*: Any lower level Economics course. However ECO 2013 and 2023 are prerequisites for all subsequent economics courses and will need to be taken.
ECONOMICS: BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

Admission Requirements
- Completion of the UCF General Education program or an AA degree from a Florida Public Community College.
- See Common Program Prerequisites

Degree Requirements

1. UCF General Education Program (36 hrs)
   - Communication Foundations 9 hrs
   - Cultural and Historical Foundations 9 hrs
   - Mathematical Foundations
     - Select MAC 1105 College Algebra 3 hrs
     - Select CGS 2100C Computer Fundamentals for Bus 3 hrs
   - Social Foundations
     - Select ECO 2013 Principles of Economics I 3 hrs
     - or ECO 2023 Principles of Economics II
     - Select one: PSY 2013, SYG 2000, ANT 2000 3 hrs
   - Science Foundation 6 hrs

2. Common Program Prerequisites
   - ACG 2021 Principles of Financial Accounting
   - ACG 2071 Principles of Managerial Accounting
   - ECO 2013 Principles of Macroeconomics
   - ECO 2023 Principles of Microeconomics
   - *MAC2233 Concepts of Calculus
   - *STA2023 (or QMB2100) Statistics
   - CGS 2100C Computer Fundamentals for Business
   - * At UCF, students who have completed MAC2233 and STA2023 will be waived from ECO3401. Students who have not completed both classes with a "C" or better must take ECO3401.

3. Common Body of Knowledge (33 hrs)
   First Semester in the College of Business Administration:
   Students must demonstrate competency in micro-computer applications during their first semester in College of Business Administration courses. Students who fail to demonstrate competency will not be permitted to continue enrollment in the business program. Computer competency can be met by taking the computer competency exam or by earning a "C" or better in CGS 2100C or its equivalency.
   - GEB 3031 Cornerstone 6 hrs
   - ECO 3401 Quantitative Business Tools I 3 hrs
   First or subsequent semesters depending on major:
   - BUL 3130 Legal & Ethical Environments of Business 3 hrs
   - ECO 3411 Quantitative Business Tools II 3 hrs
   - FIN 3403 Business Finance 3 hrs
   - MAN 3025 Management of Organizations 3 hrs
   - MAN 3504 Quality and Productivity Management 3 hrs
   - MAR 3023 Marketing 3 hrs
   Last Semester:
   - GEB 4361 Business in the Internat'l Environment 3 hrs
   - MAN 4720 Strategic Management 3 hrs

4. Special College and/or Departmental Requirements
   - Grades of "D" do not transfer into the program and students must have a "C" or better in each common program prerequisites class.
   - Within the College of Business Administration the first day of class is mandatory. Final exams will be given during Exam Week.
   - A transfer student to this program must take a minimum of twelve (12) semester hours in economics at UCF.
   - Students not in attendance at the first meeting of any College of Business course may be dropped from the course. It is the responsibility of the student to take whatever steps are necessary to determine if they have been officially dropped from a course. This does not remove the student's responsibility for dropping courses they do not intend to complete.

5. Required Major Courses (9 hrs)
   - ECO 3101 Intermediate Price Theory 3 hrs
   - ECO 3203 Aggregate Economic Conditions Analysis 3 hrs
   - ECO 4451 Research Methods in Economics 3 hrs

6. Upper Division Restricted Electives (18 hrs)
   All economics majors will be required to take six (6) electives by choosing one of the following three options:
   A. Standard Option - Select any six (6) 3000-4000 level economics courses other than the three required above.
   B. International Option - Select any six (6) courses from the following list:
     - ECO 3703 International Economics 3 hrs
     - ECO 3723 International Commercial Policy 3 hrs
     - ECS 4003 Comparative Economic Systems 3 hrs
     - ECS 4013 Economic Development 3 hrs
     - ECS 4203 The Economies of the Pacific Rim 3 hrs
     - ECS 4303 Economics of European Integration 3 hrs
     - *ECO 4941 Economics Internship 3 hrs
     - Requires special approval
   C. Multi-Disciplinary Option - Select any four (4) economic courses from the standard option of restricted electives PLUS any two (2) courses from any one emphasis in consultation with faculty advisor.
     Emphasis 1 Political Economy
     Emphasis 2 Area Studies
     Emphasis 3 International Business
     Emphasis 4 Human Resources
     Emphasis 5 Legal Studies
     Emphasis 6 Financial Economics
     Emphasis 7 Quantitative Methods

7. Foreign Language Requirements (0-8 hrs)
   Admission: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
   Graduation: None

8. University Minimum Exit Requirements
   - A 2.000 GPA in all work attempted (Overall, UCF, COB, Major)
   - 60 semester hours earned after any CLEP award
   - 48 semester hours of upper division credit completed
   - 30 semester hours of coursework completed in residency (last 30 hours) at UCF
   - A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Military credit permitted
   - Completion of the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit (if applicable)

9. Electives:
   As needed to result in 120 total credit hours

***Total Semester Hours Required 120 hours
Community/Junior College Transfer Notes

- Common Program Prerequisites for the State University System for College of Business Administration programs include Financial Accounting, Managerial Accounting, Macroeconomics, Microeconomics, Calculus, Statistics, and a relevant computer class. At UCF Business, students who have completed the calculus and statistics class will be waived from Business Quantitative Tools I. Students who have completed either the calculus or the statistics, but not both, must take Quantitative Tools I.
- Subject to the general grade and residence requirements, credit will be granted for transferred course work equivalent to that required in the UCF Business program. Grades of "D" do not transfer into the program and students must have a "C" or better in each common program prerequisites class.
- ACG X001 and X011 will substitute for ACG 2021 at UCF
- Florida Public Community College students are advised to complete the Associate of Arts degree, to include the general education requirements, the common program prerequisites for the SUS system, and college algebra.
- 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 (junior, senior) course areas and cannot be satisfied with freshman, sophomore level courses.
- A minimum of 12 semester hours must be completed at UCF within each individual major.
- Orientation and advising are two of the most valuable tools that a student can make use of when transferring to UCF. Be sure that you take advantage of both.

Four Year Plan of Study - Economics

Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>15 hrs</th>
<th>Spring</th>
<th>15 hrs</th>
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</thead>
<tbody>
<tr>
<td>ENC 1101*</td>
<td>3</td>
<td>ENC 1102*</td>
<td>3</td>
</tr>
<tr>
<td>Cult-Hist I*</td>
<td>3</td>
<td>Cult-Hist II*</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1600C</td>
<td>3</td>
<td>Art/Music/Lit</td>
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<tr>
<td>***Elective</td>
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<td>MAC 1105*</td>
<td>3</td>
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<tr>
<td>***Elective</td>
<td>3</td>
<td>CGS 2100C*</td>
<td>3</td>
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</table>

Must complete 9 hours in a summer semester

Sophomore

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<th>Fall</th>
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<tbody>
<tr>
<td>ECO 2013*</td>
<td>3</td>
<td>ECO 2023*</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2021*</td>
<td>3</td>
<td>ACG 2071*</td>
<td>3</td>
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<tr>
<td>Science</td>
<td>3</td>
<td>Science</td>
<td>3</td>
</tr>
<tr>
<td>Psy/Soc/Ant</td>
<td>3</td>
<td>***Elective</td>
<td>3</td>
</tr>
<tr>
<td>***Elective</td>
<td>3</td>
<td>***Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

* "C" or better grade required in each class

Must complete CLAST requirement

Transfer students must complete a minimum of twelve (12) hours in Economics at UCF

Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>15 hrs</th>
<th>Spring</th>
<th>15 hrs</th>
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</thead>
<tbody>
<tr>
<td>**GEB 3031</td>
<td>6</td>
<td>ECO 3411</td>
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<tr>
<td>ECO 3401</td>
<td>3</td>
<td>MAN 3025</td>
<td>3</td>
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<tr>
<td>MAR 3023</td>
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<td>ECO 3203</td>
<td>3</td>
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<tr>
<td>ECO 3101</td>
<td>3</td>
<td>FIN 3403</td>
<td>3</td>
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<tr>
<td></td>
<td></td>
<td>ECO Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Pass Computer Competency Exam in same term Cornerstone
ELECTRICAL ENGINEERING:
BACHELOR OF SCIENCE

College of Engineering
Electrical & Computer Engineering Department,
ENGR 408, (407) 823-2786, FAX: (407) 823-5835,
Home Page: http://www.eee.engr.ucf.edu
Dr. S. M. Richie, E-mail: richie@mail.ucf.edu

Admission Requirements:
All entering students are required by UCF to attend Orientation before registering for their first semester at UCF. Orientation includes engineering academic advisement and registration for first-semester UCF classes; see also the section, Orientation, found elsewhere in this catalog.

Degree Requirements
> Each engineering student is assigned a qualified engineering academic advisor in the department of his/her major. Each student should seek academic advisement before registering for classes each semester to minimize excess hours and to ensure that satisfactory academic progress is being maintained.

1. UCF General Education Program for Engineering Students (38 hrs)
The UCF General Education Program (GEP) is described in the section, General Education Program, found elsewhere in this catalog. Engineering students should closely study the requirements of the UCF GEP and the allowable substitutions detailed in paragraphs A. through E. below to minimize excess hours. Students transferring to UCF from within the Florida State University/Community College Systems should complete the GEP and the Common Program Prerequisites before transferring.

A. Communication Foundations 9 hrs
1. Take ENC 1101
2. Take ENC 1102
3. SPC 1016 is the preferred substitute for SPC 1600C for engineering students.

See the descriptions of these courses in the section, Alphabetical Listing of Courses, later in this catalog.

B. Cultural and Historical Foundations 9 hrs
C. Mathematical Foundations 7 hrs
1. Take MAC 2281, Calculus for Scientists and Engineers I, (4 hrs). NOTE: College algebra and trigonometry are prerequisites for Calculus I. See the course descriptions.
2. Take STA 3032 (3 hrs). NOTE: Calculus II is the prerequisite for this course.

D. Social Foundations 6 hrs
1. Take ECO 2013 or ECO 2023.

E. Science Foundations 7 hrs
1. Take PHY 2048/48L.
2. take either GEO 1200 or GEO 2370.

2. Common Program Prerequisites (CPP's) (19 hrs)
These courses are specifically required for all engineering students of the Florida State University System. CPP courses are also available at other Florida post-secondary schools and may be transferred directly to UCF programs. All engineering students must remain in the Calculus sequence with which they begin. Students who begin with MAC 2281 Calculus for Scientists and Engineers I, must continue with MAC 2282 and MAC 2283. Students who begin with MAC 2311 Calculus with Analytical Geometry I, must continue with MAC 2312 and MAC 2313. The individual courses in these two Calculus sequences are not interchangeable. NOTE: MAC 2281 and PHY 2048/48L also satisfy UCF GEP sub-requirements, as do ENC 1101, ENC 1102, the Humanities courses, and the Social Science courses.

CHS 1440 Fundamentals of Chemistry for Eng  4 hrs
(MAC 2281 and PHY 2048/48L will substitute)
MAC 2281 Calculus for Scientists & Engineers I  GEP
(MAC 2311 will substitute)
MAC 2282 Calculus for Scientists & Engineers II  4 hrs
(MAC 2312 will substitute)
MAC 2283 Calculus for Scientists & Engineers III  4 hrs
(MAC 2313 will substitute)

MAP 2302 Differential Equations  3 hrs
PHY 2048/48L Physics for Engineers & Scientists I  GEP
PHY 2049/49L Physics for Engineers & Scientists II  4 hrs
ENC 1101 Composition I  GEP
ENC 1102 Composition II  GEP

Humanities Courses  GEP
Social Science Courses  GEP

Humanities or Social Sciences  GEP

3. Courses Required for the Major (56 hrs)
The College of Engineering requires all engineering students to achieve a minimum 2.250 GPA in completing these courses, together with the technical elective courses listed in 4. below and with the senior design courses listed in 5. below. Independent study courses generally do not satisfy major requirements and normally are awarded grades of S, S, or U.

EGN 1006 Intro to the Engineering Profession  1 hr
EGN 1930 ST: Engineering Concepts & Methods  1 hr
EGN 3310 Engineering Analysis - Statics  3 hrs
EGN 3321 Engineering Analysis - Dynamics 3 hrs
EGN 3358 Thermo-Fluids-Heat Transfer  3 hrs
EGN 3373 Principles of Electrical Engineering  4 hrs
EGN 3420 Engineering Analysis  3 hrs
STA 3032 Probability & Statistics for Engineers  GEP
PHY 3101 Physics for Engineers & Scientists III  3 hrs
EEL 3122C Electrical Networks  4 hrs
EEL 3306 Semiconductor Devices I  3 hrs
EEL 3307C Electronics I  4 hrs
EEL 3342C Intro to Digital Circuits & Systems  3 hrs
EEL 3470 Electromagnetic Fields  3 hrs
EEL 3552C Signal Analysis and Communications  4 hrs
EEL 3657 Linear Control Systems  3 hrs
EEL 3801C Intro to Computer Engineering  3 hrs
EEL 4309C Electronics II  4 hrs
EEL 4750 Digital Signal Processing Fund.  3 hrs
EEL 4767C Computer System Design I  4 hrs

4. Approved Technical Electives (9 hrs)
Technical electives are available in the BSEE program to address specific student interests in a variety of technical areas. Students should consult with their assigned academic advisor for a list of the approved technical electives and the terms when specific courses of this type are to be offered.

5. Departmental Graduation Requirements (6 hrs)
> EEL 4914 Senior Design I  3 hrs
> EEL 4915L Senior Design II  3 hrs
> COE encourages all engineering students to take the Engineering Intern Exam during their Senior year.

6. Foreign Language Requirements (0-8 hrs)
Admission: 2 years of one foreign language in high school, or 1 year of one foreign language in college (or equivalent proficiency
exam) prior to graduation.

Graduation: None.

7. University Minimum Graduation Requirements
   - A 2.000 GPA in all work attempted (both UCF and overall).
   - 60 semester hours earned after any CLEP award.
   - 48 semester hours of upper division credit completed.
   - 32 semester hours of regular courses completed at UCF.
   - A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits are permitted.
   - Complete the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit.

Total Semester Hours Required: 128 hrs

Related Programs: Computer Engineering, Computer Science, Electrical Engineering Technology (Electrical Systems Concentration).

Related Minors: None.

Transfer Notes:
   - Courses taken from Community Colleges do not substitute for Upper Division Courses
   - Courses transferred must be formally evaluated for equivalency credit. The student must provide all supporting information with his/her petition for this evaluation.

Tentative Course Schedule for Entering Freshmen
The tentative course schedule listed below is a guide for those students who plan on completing their degree in four years. All engineering students should meet with their faculty advisor to develop and maintain an appropriate plan of study.

### Electrical Engineering - 128 semester hours required

#### FIRST YEAR

<table>
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<tr>
<th>Fall</th>
<th>12 hrs&lt;sup&gt;1,3&lt;/sup&gt;</th>
<th>Spring</th>
<th>15 hrs&lt;sup&gt;1,3&lt;/sup&gt;</th>
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<tbody>
<tr>
<td>EGN 1006 Intro to Engr</td>
<td>1</td>
<td>EGN 1930 Eng Cone &amp; Meth</td>
<td>1</td>
</tr>
<tr>
<td>*ENC 1101 English Comp I</td>
<td>3</td>
<td>*ENC 1102 English Comp II</td>
<td>3</td>
</tr>
<tr>
<td>*CHS 1440 Chem for Engrs</td>
<td>4</td>
<td>*SPC 1016 Tech Presentations</td>
<td>3</td>
</tr>
<tr>
<td>*MAC 2281 Calc Sci &amp; Eng I</td>
<td>4</td>
<td>*MAC 2282 Calc Sci &amp; Eng II</td>
<td>4</td>
</tr>
<tr>
<td>*PHY 2048/L Phys Eng I w/lab</td>
<td>4</td>
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**Summer 11 hrs**

* Cult & Hist Foundations 1a | 3
* MAC 2283 Calc Sci & Eng III | 4
* PHY 2049 Phys for Engr/Sci II | 3
* PHY 2049L Phys Lab En/Sci II | 1

#### SECOND YEAR

<table>
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<tr>
<th>Fall</th>
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<th>Spring</th>
<th>16 hrs&lt;sup&gt;1&lt;/sup&gt;</th>
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<tbody>
<tr>
<td>*MAP 2302 Diff Equations</td>
<td>3</td>
<td>*Cult &amp; Hist Foundations 2</td>
<td>3</td>
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<tr>
<td>*PHY 3101 Phys for Engr/Sci III</td>
<td>3</td>
<td>EGN 3310 Engr Anal-Statics</td>
<td>3</td>
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<tr>
<td>*Science Foundations 2</td>
<td>3</td>
<td>EGN 3373 Prin of Elec Engr</td>
<td>4</td>
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<tr>
<td>*Social Foundations 1</td>
<td>3</td>
<td>EEL 3342C Intro to Dig Circ/Sys</td>
<td>3</td>
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<tr>
<td>EGN 3420 Engineering Anal&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
<td>EEL 3801C Intro to Cmptr Eng&lt;sup&gt;2&lt;/sup&gt;</td>
<td>3</td>
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</table>

**Summer 6 hrs**

* Cult & Hist Foundations 1b | 3
* ECO 2013 ar. | 3
* ECO 2023 Prin of Econ I, II | 3

### THIRD YEAR

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<th>Fall</th>
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<th>Spring</th>
<th>13 hrs</th>
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<tbody>
<tr>
<td>EEL 3306 Semicond Devices I</td>
<td>3</td>
<td>EEL 3307C Electronics I</td>
<td>4</td>
</tr>
<tr>
<td>STA 3032 Prob &amp; Stats for Engrs</td>
<td>3</td>
<td>EEL 3657 Linear Control Sys</td>
<td>3</td>
</tr>
<tr>
<td>EEL 3122C Electrical Networks</td>
<td>4</td>
<td>EEL 4750 Dig Signal Proc Fund</td>
<td>3</td>
</tr>
<tr>
<td>EEL 4767C Cmplt Sys Design I</td>
<td>4</td>
<td>EGN 3321 Engr Anal-Dynamics 3</td>
<td>4</td>
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<tr>
<td>EGN 3358 Ther-Flds-Ht Transfer</td>
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### FOURTH YEAR

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<th>Fall</th>
<th>14 hrs</th>
<th>Spring</th>
<th>12 hrs</th>
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<tr>
<td>EEL 3552C Sig Anal&amp;Comm</td>
<td>4</td>
<td>Approved Technical Elective</td>
<td>3</td>
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<tr>
<td>EEL 3470 Electromagnetic Fields</td>
<td>3</td>
<td>Approved Technical Elective</td>
<td>3</td>
</tr>
<tr>
<td>EEL 4309C Electronics II</td>
<td>4</td>
<td>Approved Technical Elective</td>
<td>3</td>
</tr>
<tr>
<td>EEL 4914 Senior Design I</td>
<td>3</td>
<td>EEL 4915C Senior Design II</td>
<td>3</td>
</tr>
</tbody>
</table>

Notes:
1. Courses marked with an asterisk (*) are also available from most Community Colleges and are often part of their Pre-Engineering AA programs. Most of these courses are part of the UCF General Education Program; see the section on the GEP elsewhere in this catalog for further information.
2. Assumes a knowledge of a higher level programming language (C preferred).
3. EGN 1006 and EGN 1930 are required courses for incoming freshmen only. The credits for these two courses (one hour each) may, with prior approval of the department academic advisor, be moved to the area 4. Approved Technical Electives.
ELECTRICAL ENGINEERING - MICROELECTRONICS
CONCENTRATION: BACHELOR OF SCIENCE

College of Engineering
Electrical & Computer Engineering Department,
ENGR 408, (407) 823-2786, FAX: (407) 823-5835,
Home Page: http://www.ece.engr.ucf.edu
Dr. S. M. Richie, E-mail: richie@mail.ucf.edu

Admission Requirements:
All entering students are required by UCF to attend Orientation before registering for their first semester at UCF. Orientation includes engineering academic advisement and registration for first-semester UCF classes; see also the section, Orientation, found elsewhere in this catalog.

Degree Requirements
- Each engineering student is assigned a qualified engineering academic advisor in the department of his/her major. Each student should seek academic advisement before registering for classes each semester to minimize excess hours and to ensure that satisfactory academic progress is being maintained.

1. UCF General Education Program for Engineering Students (38 hrs)
The UCF General Education Program (GEP) is described in this section, General Education Program, found elsewhere in this catalog. Engineering students should closely study the requirements of the UCF GEP and the allowable substitutions detailed in paragraphs A. through E. below to minimize excess hours. Students transferring to UCF from within the Florida State University/Community College Systems should complete the GEP and the Common Program Prerequisites before transferring.

A. Communication Foundations 9 hrs
1. Take ENC 1101
2. Take ENC 1102
3. SPC 1016 is the preferred substitute for SPC 1600C for engineering students.

B. Cultural and Historical Foundations 9 hrs

C. Mathematical Foundations 7 hrs
1. Take MAC 2281, Calculus for Scientists and Engineers I, (4 hrs). **NOTE:** College algebra and trigonometry are prerequisites for Calculus I. See the course descriptions.
2. Take STA 3032 (3 hrs). **NOTE:** Calculus II is the prerequisite for this course.

D. Social Foundations 6 hrs
1. Take ECO 2013 or ECO 2023.

E. Science Foundations 7 hrs
1. Take PHY 2048/48L.
2. Take either GEO 1200 or GEO 2370.

2. Common Program Prerequisites (CPP's) (19 hrs)
These courses are specifically required for all engineering students of the Florida State University System. CPP courses are also available at other Florida post-secondary schools and may be transferred directly to UCF programs. All engineering students must remain in the Calculus sequence with which they begin. Students who begin with MAC 2281 Calculus for Scientists and Engineers I, must continue with MAC 2282 and MAC 2283. Students who begin with MAC 2311 Calculus with Analytical Geometry I, must continue with MAC 2312 and MAC 2313. The individual courses in these two Calculus sequences are not interchangeable. **NOTE:** MAC 2281 and PHY 2048/48L also satisfy UCF GEP sub-requirements, as do ENC 1101, ENC 1102, the Humanities courses, and the Social Science courses.

CHS 1440 Fundamentals of Chemistry for Eng 4 hrs (CHM 2045/45L will substitute)
MAC 2281 Calculus for Scientists & Engineers I GEP (MAC 2311 will substitute)
MAC 2282 Calculus for Scientists & Engineers II 4 hrs (MAC 2312 will substitute)
MAC 2283 Calculus for Scientists & Engineers III 4 hrs (MAC 2313 will substitute)
MAP 2302 Differential Equations 3 hrs
PHY 2048/48L Physics for Engineers & Scientists I GEP
PHY 2049/49L Physics for Engineers & Scientists II 4 hrs
ENC 1101 Composition I GEP
ENC 1102 Composition II GEP
Humanities Courses GEP
Social Science Courses GEP
Humanities or Social Sciences GEP

3. Courses Required for the Major (56 hrs)
The College of Engineering requires all engineering students to achieve a minimum 2.250 GPA in completing these courses, together with the technical elective courses listed in 4. below and with the senior design courses listed in 5. below. Independent study courses generally do not satisfy major requirements and normally are awarded grades of I, S, or U.

EGN 1006 Intro to the Engineering Profession 1 hr
EGN 1930 ST: Engineering Concepts & Methods 1 hr
EGN 3310 Engineering Analysis – Statics 3 hrs
EGN 3321 Engineering Analysis – Dynamics or
EGN 3358 Thermo-Fluids-Heat Transfer 3 hrs
EGN 3373 Principles of Electrical Engineering 4 hrs
EGN 3420 Engineering Analysis 3 hrs
STA 3032 Probability & Statistics for Engineers GEP
PHY 3101 Physics for Engineers & Scientists III 3 hrs
EEL 3122C Electrical Networks 4 hrs
EEL 3306 Semiconductor Devices I 3 hrs
EEL 3307C Electronics I 4 hrs
EEL 3342C Intro to Digital Circuits & Systems 3 hrs
EEL 3470 Electromagnetic Fields 3 hrs
EEL 3552C Signal Analysis and Communications 4 hrs
EEL 3657 Linear Control Systems 3 hrs
EEL 3801C Intro to Computer Engineering 3 hrs
EEL 4309C Electronics II 4 hrs
EEL 4750 Digital Signal Processing Fund. 3 hrs
EEL 4767C Computer System Design I 4 hrs

4. Approved Technical Electives (9 hrs)
Technical electives are available in the BSEE program to address specific student interests in a variety of technical areas. For those students with a declared interest in microelectronics, a concentration in this area if available by taking the following technical electives in addition to the required microelectronics courses listed in 3. above.

EEL 4314 Device Electronics for Integ Circuits 3 hrs
EEL 5357 CMOS Analog and Digital IC Design 3 hrs
EEL 5353 Semiconductor Dev Modeling & Sim or
EEL 5355C Fabrication of Solid State Devices 3 hrs

5. Departmental Graduation Requirements (6 hrs)
- EEL 4914 Senior Design I 3 hrs
6. Foreign Language Requirements (0-8 hrs)
Admission: 2 years of one foreign language in high school, or 1 year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
Graduation: None.

7. University Minimum Graduation Requirements

Total Semester Hours Required: 128 hrs

Related Programs: Computer Engineering, Computer Science, Electrical Engineering Technology (Electrical Systems Concentration).

Related Minors: None.

Transfer Notes:
1. Courses marked with an asterisk (*) are also available from most Community Colleges and are often part of their Pre-Engineering AA programs. Most of these courses are part of the UCF General Education Program; see the section on the GEP elsewhere in this catalog for further information.
2. Assumes a knowledge of a higher level programming language (C preferred).
3. EGN 1006 and EGN 1930 are required courses for incoming freshmen only. The credits for these two courses (one hour each) may, with prior approval of the department academic advisor, be moved to the area 4. Approved Technical Electives.

Notes:
1. Courses marked with an asterisk (*) are also available from most Community Colleges and are often part of their Pre-Engineering AA programs. Most of these courses are part of the UCF General Education Program; see the section on the GEP elsewhere in this catalog for further information.
2. Assumes a knowledge of a higher level programming language (C preferred).
3. EGN 1006 and EGN 1930 are required courses for incoming freshmen only. The credits for these two courses (one hour each) may, with prior approval of the department academic advisor, be moved to the area 4. Approved Technical Electives.
ELECTRICAL ENGINEERING - WIRELESS COMMUNICATION CONCENTRATION: BACHELOR OF SCIENCE

College of Engineering
Electrical & Computer Engineering Department,
ENGR 408, (407) 823-2766, FAX: (407) 823-5835,
Home Page: http://www.ece.engr.ucf.edu
Dr. S. M. Richie, E-mail: richie@mail.ucf.edu

Admission Requirements:
All entering students are required by UCF to attend Orientation before registering for their first semester at UCF. Orientation includes engineering academic advisement and registration for first-semester UCF classes; see also the section, Orientation, found elsewhere in this catalog.

Degree Requirements
- Each engineering student is assigned a qualified engineering academic advisor in the department of his/her major. Each student should seek academic advisement before registering for classes each semester to minimize excess hours and to ensure that satisfactory academic progress is being maintained.

1. UCF General Education Program for Engineering Students (38 hrs)
The UCF General Education Program (GEP) is described in the section, General Education Program, found elsewhere in this catalog. Engineering students should closely study the requirements of the UCF GEP and the allowable substitutions detailed in paragraphs A. through E. below to minimize excess hours. Students transferring to UCF from within the Florida State University/Community College Systems should complete the GEP and the Common Program Prerequisites before transferring.

A. Communication Foundations
1. Take ENC 1101
2. Take ENC 1102
3. SPC 1016 is the preferred substitute for SPC 1600C for engineering students.

B. Cultural and Historical Foundations
9 hrs

C. Mathematical Foundations
7 hrs
1. Take MAC 2281, Calculus for Scientists and Engineers I, (4 hrs). NOTE: College algebra and trigonometry are prerequisites for Calculus I. See the course descriptions.
2. Take STA 3023 (3 hrs). NOTE: Calculus II is the prerequisite for this course.

D. Social Foundations
6 hrs
1. Take ECO 2013 or ECO 2023
2. Take ANT 2000, PSY 2013, or SYG 2000

E. Science Foundations
7 hrs
1. Take PHY 2048/48L
2. Take either GEO 1200 or GEO 2370

2. Common Program Prerequisites (CPP's) (19 hrs)
These courses are specifically required for all engineering students of the Florida State University System. CPP courses are also available at other Florida post-secondary schools and may be transferred directly to UCF programs. All engineering students must remain in the Calculus sequence with which they begin. Students who begin with MAC 2281 Calculus for Scientists and Engineers I, must continue with MAC 2282 and MAC 2283. Students who begin with MAC 2311 Calculus with Analytical Geometry I, must continue with MAC 2312 and MAC 2313. The individual courses in these two Calculus sequences are not interchangeable. NOTE: MAC 2281 and PHY 2048/48L also satisfy UCF GEP sub-requirements, as do ENC 1101, ENC 1102, the Humanities courses, and the Social Science courses.

CHS 1440 Fundamentals of Chemistry for Eng 4 hrs (CHM 2045/45L will substitute)
MAC 2281 Calculus for Scientists & Engineers I GEP (MAC 2311 will substitute)
MAC 2282 Calculus for Scientists & Engineers II 4 hrs (MAC 2312 will substitute)
MAC 2283 Calculus for Scientists & Engineers III 4 hrs (MAC 2313 will substitute)
MAP 2302 Differential Equations 3 hrs
PHY 2048/48L Physics for Engineers & Scientists I GEP
PHY 2049/49L Physics for Engineers & Scientists II 4 hrs
ENC 1101 Composition I GEP
ENC 1102 Composition II GEP

3. Courses Required for the Major (56 hrs)
The College of Engineering requires all engineering students to achieve a minimum 2.250 GPA in completing these courses, together with the technical elective courses listed in 4. below and with the senior design courses listed in 5. below. Independent study courses generally do not satisfy major requirements and normally are awarded grades of I, S, or U.

EGN 1006 Intro to the Engineering Profession 1 hr
EGN 1930 ST: Engineering Concepts & Methods 1 hr
EGN 3310 Engineering Analysis - Statics 3 hrs
EGN 3321 Engineering Analysis - Dynamics or EGN 3358 Thermo-Fluids-Heat Transfer 3 hrs
EGN 3373 Principles of Electrical Engineering 4 hrs
EGN 3420 Engineering Analysis 3 hrs
STA 3023 Probability & Statistics for Engineers 3 hrs
PHY 3101 Physics for Engineers & Scientists III 3 hrs
EEL 3122C Electrical Networks 4 hrs
EEL 3306 Semiconductor Devices I 3 hrs
EEL 3307C Electronics I 4 hrs
EEL 3342C Intro to Digital Circuits & Systems 3 hrs
EEL 3470 Electromagnetic Fields 3 hrs
EEL 3552C Signal Analysis and Communications 3 hrs
EEL 3657 Linear Control Systems 3 hrs
EEL 3801C Intro to Computer Engineering 3 hrs
EEL 4309C Electronics II 4 hrs
EEL 4750 Digital Signal Processing Fund. 3 hrs
EEL 4767C Computer System Design I 4 hrs

4. Approved Technical Electives (9 hrs)
Technical electives are available in the BSEE program to address specific student interests in a variety of technical areas. For those students with a declared interest in wireless communication, a concentration in this area if available by taking the following technical electives in addition to the required curriculum courses listed in 3. above.

EEL 4512 Communication Systems 4 hrs
EEL 5555C RF and Microwave Communications 3 hrs
EEL 5513 Digital Signal Processing Apps or EEL 5462C Antenna Analysis and Design 3 hrs

5. Departmental Graduation Requirements (6 hrs)
- EEL 4914 Senior Design I 3 hrs
- EEL 4915L Senior Design II 3 hrs
COE encourages all engineering students to take the Engineering Intern Exam during their Senior year.

6. Foreign Language Requirements (0-8 hrs)
- Admission: 2 years of one foreign language in high school, or 1 year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
- Graduation: None.

7. University Minimum Graduation Requirements
- A 2.000 GPA in all work attempted (both UCF and overall).
- 60 semester hours earned after any CLEP award.
- 48 semester hours of upper division credit completed.
- 32 semester hours of regular courses completed at UCF.
- A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits are permitted.
- Complete the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit.

Total Semester Hours Required: 128 hrs

Related Programs: Computer Engineering, Computer Science, Electrical Engineering Technology (Electrical Systems Concentration).

Related Minors: None.

Transfer Notes:
- Courses taken from Community Colleges do not substitute for Upper Division Courses.
- Courses transferred must be formally evaluated for equivalency credit. The student must provide all supporting information with his/her petition for this evaluation.

Tentative Course Schedule for Entering Freshmen
The tentative course schedule listed below is a guide for those students who plan on completing their degree in four years. All engineering students should meet with their faculty advisor to develop and maintain an appropriate plan of study.

Electrical Engineering - Wireless Communication Concentration
128 semester hours required

**FIRST YEAR**

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<thead>
<tr>
<th>Fall</th>
<th>12 hrs</th>
<th>Spring</th>
<th>15 hrs</th>
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<tr>
<td>EGN 1006 Intro to Engr</td>
<td>1</td>
<td>EGN 1930 Eng Conc &amp; Meth</td>
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<tr>
<td>ENC 1101 English Comp I</td>
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<td>ENC 1102 English Comp II</td>
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<td>CHS 1440 Chem for Engrs</td>
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<td>SPC 1016 Tech Presentations</td>
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<tr>
<td>MAC 2281 Calc Sci &amp; Eng I</td>
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<td>MAC 2282 Calc Sci &amp; Eng II</td>
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<tr>
<td>*PHY 2048/L Phys Eng I w/lab</td>
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<tr>
<td>SUMMER</td>
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<td>*Cult &amp; Hist Foundations 1a</td>
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<tr>
<td>*MAC 2283 Calc Sci &amp; Eng III</td>
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**SECOND YEAR**

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<td>PHY 3101 Phys for Engr/Sci III</td>
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<td>EGN 3310 Engr Anal-Statics</td>
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<td>Science Foundations 2</td>
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<td>EGN 3373 Prin of Elec Engr</td>
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<td>Social Foundations I</td>
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<td>EEL 3324C Intro to Dig Circ/Sys</td>
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<td>EGN 3420 Engineering Anal</td>
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<td>EEL 3801C Intro to Comp Engr*</td>
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</table>

| SUMMER            | 6 hrs  |                 |        |

**THIRD YEAR**

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<td>3</td>
<td>EEL 3307C Electronics I</td>
<td>4</td>
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<tr>
<td>STA 3032 Prob &amp; Stats for Engrs</td>
<td>3</td>
<td>EEL 3637 Lin Control Sys</td>
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<td>EEL 3122C Electrical Networks</td>
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<td>EEL 4750 Dig Signal Proc Fund</td>
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<tr>
<td>EEL 4757C Comp Sys Design I</td>
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<td>EGN 3321 Engr Anal-Dynamics</td>
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**FOURTH YEAR**

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<td>EEL 4512C Comm Systems</td>
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<td>EEL 3470 Electromagnetic Fields</td>
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<td>EEL 5555C RF &amp; Microwave</td>
<td>3</td>
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<tr>
<td>EEL 4309C Electronics II</td>
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<td>EEL 4915C Senior Design II</td>
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<td>EEL 4914 Senior Design I</td>
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<td>EEL 5513 Dig Sig Proc Apps</td>
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<tr>
<td>*Cult &amp; Hist Foundations 1b</td>
<td>3</td>
<td>EEL 5462C Ant Anal &amp; Design</td>
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Notes:
1. Courses marked with an asterisk (*) are also available from most Community Colleges and are often part of their Pre-Engineering AA programs. Most of these courses are part of the UCF General Education Program; see the section on the GEP elsewhere in this catalog for further information.
2. Assumes a knowledge of a higher level programming language (C preferred).
3. EGN 1006 and EGN 1930 are required courses for incoming freshmen only. The credits for these two courses (one hour each) may, with prior approval of the department academic advisor, be moved to the area 4. Approved Technical Electives.
ELECTRICAL ENGINEERING TECHNOLOGY - COMPUTER SYSTEMS CONCENTRATION: BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING TECHNOLOGY (BSEET)

College of Engineering
Engineering Technology (ENT) Department
UCF Research Pavilion Building, Suite 493
12424 Research Park Parkway
Orlando, FL 32826
Coordinator: Dr. Alireza Rahrooh
(407) 384-2152 FAX: (407) 384-2157
E-mail: rahrooh@pegasus.cc.ucf.edu
Web Address: http://www-ent.engr.ucf.edu

Admission Requirements None

Degree Requirements
- Students should check with their ENT faculty advisor frequently to ensure that they are making proper progress toward the degree.

1. UCF General Education Program (27 hrs)
   A. Communication Foundations 9 hrs
      If possible, engineering technology students should take SPC 1016 instead of SPC 1600C. See course descriptions.
   B. Cultural and Historical Foundations 9 hrs
   C. Mathematical Foundations 9 hrs
      1. Requirement moved to Engineering Tech Core
      2. CGS 1060C or STA 2014 3 hrs
   D. Social Foundations 6 hrs
   E. Science Foundations 6 hrs
      Requirements moved to Engineering Tech Core

2. Common Program Prerequisites (CPR) (10/12 hrs)
   MAC 2253 or MAC 2311 Calculus I 3/4 hrs
   MAC 2254 or MAC 2312 Calculus II 3/4 hrs
   PHY 2053C or PHY 2048/L Physics I/Lab 4 hrs

3. Engineering Technology Core Requirements (32 hrs)
   BSC 1020/L, BSC 1030/L, BOT 1000/L, GEO 1200/L 4 hrs
   ENC 3241 Writing for the Technical Professional 3 hrs
   MAC 1105 College Algebra 3 hrs
   MAC 1114 College Trigonometry 3 hrs
   MAC 2253 or MAC 2311 Calculus I CPR
   MAC 2254 or MAC 2312 Calculus II CPR
   PHY 2053C College Physics I CPR
   PHY 2054C College Physics II 4 hrs
   ETG 3541 Applied Mechanics 4 hrs
   ETI 3651C Computer Applications 3 hrs
   ETI 3671 Technical Economic Analysis 2 hrs
   ETI 2110 Industrial Quality Control 3 hrs
   ETI 4635 Technology Administration 3 hrs

4. Technical Specialization (56 hrs)
   Lower Level Required and Elective Courses (17 hrs)
   CET 2123C Microprocessor Electronics I 3 hrs
   CET 3323C Digital Technology 3 hrs
   CET 2364 System Applications in C 3 hrs
   EET 3085C Electricity and Electronics 4 hrs

   Approved Lower Level Technical Electives 4 hrs
   Upper Level Required Courses (32 hrs)
   CET 3198C Digital Systems 4 hrs
   CET 3303 Microcomputer Technology I 3 hrs
   CET 3383 Applied Systems Analysis I 3 hrs
   CET 4333 Computer Organization & Design 3 hrs
   CET 4427 Applied Database I 3 hrs
   CET 4505 Applied Operating Systems I 3 hrs
   CET 4523 Applied Systems Analysis II 3 hrs
   CET 4138C Digital Programmable Devices 4 hrs
   CET 4429 Applied Database II 3 hrs
   CET 4527 Applied Operating Systems II 3 hrs

   Upper Level Technical Electives (7 hrs)

5. Departmental Exit Requirements (3 hrs)
   - ETG 4950C Senior Design Project 3 hrs
   - Earn a graduating UCF and overall GPA's ≥ 2.000

6. Foreign Language Requirements (0-8 hrs)
   Admission: 2 years of one foreign language in high school, or 1 year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
   Graduation: None.

7. Approved Technical Electives
   Students should consult with the ENT Department for a list of the approved technical electives and the terms when specific courses of this type are to be offered.

8. University Graduation Requirements
   - 2.000 GPA in all work attempted (both UCF and overall)
   - 60 semester hours earned after any CLEP award
   - 48 semester hours of upper division credit completed
   - 32 semester hours of regular courses completed at UCF
   - A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits are permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit (if applicable)

Total Semester Hours Required: 128 hours

Related Programs: Electrical Engineering Technology (Electrical Systems Concentration)

Related Minors: None

Transfer Notes:
Students transferring from any Florida public institution with an AA degree or with the general education program (GEP) requirements of that institution met have thereby satisfied UCF GEP requirements.
- Students entering a UCF undergraduate program and having a previously-earned baccalaureate degree from an accredited institution have thereby satisfied UCF GEP requirements. (See also the section on the GEP found elsewhere in this catalog.)
- Courses taken from Community Colleges do not substitute for Upper Division Courses
- Courses transferred must be formally evaluated for equivalency credit. The student must provide all supporting information to the ENT Department for this evaluation.
- ENT Departmental Residency Requirements consist of at least 32 semester hours of regularly-scheduled 3000 or 4000 level courses taken from the UCF ENT Department
- PHY 2048/L can substitute for PHY 2053C.
**Tentative Course Schedule for the Computer Systems Concentration**

The tentative course schedule listed below is a guide for those students who plan on completing their upper division engineering technology degree requirements in two years. Many students choose to spread out these requirements over a longer period of time. All engineering students should meet with their faculty advisor to develop and maintain an appropriate plan of study.

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Junior Year</strong></td>
<td><strong>14/15 hrs</strong></td>
<td><strong>13/14 hrs</strong></td>
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<tr>
<td>Fall</td>
<td>MAC 2253/2311 Calculus I 3/4</td>
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<td>PHY 2053/2048 Physics I 4</td>
<td>ETG 3541 Appl Mechanics 4</td>
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<td></td>
<td>ETI 2110 Quality Control 3</td>
<td>CET 3383 Appl Sys Anal I 3</td>
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<tr>
<td></td>
<td>CET 3198C Digital Systems 4</td>
<td>CET 3303 Microcom Tech I 3</td>
</tr>
<tr>
<td>Summer</td>
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<td></td>
<td>CET 4523C Appl Sys Anal II 3</td>
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<td><strong>Senior Year</strong></td>
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<td><strong>15 hrs</strong></td>
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<td>CET 4427 Appl Data Base I 3</td>
<td>CET 4138C Dig Prog Dev 4</td>
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<td>CET 4505 Appl Oper Sys I 3</td>
<td>CET 4429 Appl Database II 3</td>
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<td>ETI 4635 Tech Admin 3</td>
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<tr>
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<td>CET Elective 3</td>
<td>CET 3671 Tech Econ Anal 2</td>
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ELECTRICAL ENGINEERING TECHNOLOGY - ELECTRICAL SYSTEMS CONCENTRATION: BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING TECHNOLOGY (BSEET)

College of Engineering
Engineering Technology (ENT) Department
UCF Research Pavilion Building, Suite 493
12424 Research Park Parkway
Orlando, FL 32826
Coordinator: Dr. Alireza Rahrooh
(407) 384-2152 FAX: (407) 384-2157
E-mail: rahrooh@pegasus.cc.ucf.edu
Web Address: http://www-ent.engr.ucf.edu

Admission Requirements None

Degree Requirements
- Students should check with their ENT faculty advisor frequently to ensure that they are making proper progress toward the degree.

1. UCF General Education Program (27 hrs)
   A. Communication Foundations 9 hrs
      If possible, engineering technology students should take SPC 1016 instead of SPC 1600C. See course descriptions.
   B. Cultural and Historical Foundations 9 hrs
   C. Mathematical Foundations 3 hrs
      1. Requirement moved to Engineering Tech Core
      2. CGS 1060C or STA 2014 3 hrs
   D. Social Foundations 6 hrs
   E. Science Foundations 3 hrs
      Requirement moved to Engineering Tech Core

2. Common Program Prerequisites (CPR) (10/12 hrs)
   MAC 2253 or MAC 2311 Calculus I 3/4 hrs
   MAC 2254 or MAC 2312 Calculus II 3/4 hrs
   PHY 2053C or PHY 2048/L Physics I/Lab 4 hrs

3. Engineering Technology Core Requirements (32 hrs)
   BSC 1020/L, BSC 1030/L, BOT 1000/L, GEO 1200/L 4 hrs
   ENC 3241 Writing for the Technical Professional 3 hrs
   MAC 1105 College Algebra 3 hrs
   MAC 1114 College Trigonometry 3 hrs
   MAC 2253 or MAC 2311 Calculus I CPR
   MAC 2254 or MAC 2312 Calculus II CPR
   PHY 2053C College Physics I CPR
   PHY 2054C College Physics II 4 hrs
   ETG 3541 Applied Mechanics 4 hrs
   ETI 3651C Computer Applications 3 hrs
   ETI 3671 Economic Analysis 2 hrs
   ETI 2110 Industrial Quality Control 3 hrs
   ETI 4635 Technology Administration 3 hrs

4. Technical Specialization (56 hrs)
   CET 2123C Microprocessor Electronics I 3 hrs
   CET 2XXXC Digital Fundamentals 4 hrs
   CET 2364 System Applications in C 3 hrs
   EET 2XXXC Analog Devices CPR 8 hrs
   Lower Level Required and Elective Courses (26 hrs)
   CET 2365C Circuit Analysis 3 hrs
   CET 3058C Electrical Machines 3 hrs
   EET 3171C Communication Systems 3 hrs
   EET 3250C Control Systems 3 hrs
   EET 3271C Circuit Analysis II 3 hrs
   EET 3285C Microprocessor Basics 3 hrs
   EET 3331C Linear Integrated Circuits 3 hrs
   EET 3340C Microprocessor Applications 3 hrs
   EET 3350C Communication Systems 3 hrs
   EET 3355C Microprocessor Systems 3 hrs
   EET 3360C Power Systems 3 hrs
   EET 3380C Feedback Control Systems 3 hrs
   EET 4158C Digital Logic Design 3 hrs
   EET 4204C Digital Systems 3 hrs
   EET 4220C Computer Architecture 3 hrs
   EET 4233C Data Communication Systems 3 hrs
   EET 4333C Advanced Computer Systems 3 hrs
   EET 4339C Microcomputer Technology 3 hrs
   EET 4380C Communication Networks 3 hrs
   EET 4548 Power Systems 3 hrs
   EET 4732C Feedback Control Systems 4 hrs

Upper Level Required Courses (23 hrs)
   CET 3143C Advanced Microprocessor Technology 3 hrs
   CET 3198C Digital Systems 4 hrs
   CET 3303 Microcomputer Technology I 3 hrs
   CET 3716 Network Analysis 3 hrs
   EET 4158C Linear Integrated Circuits 3 hrs
   EET 4548 Power Systems 3 hrs
   EET 4732C Feedback Control Systems 4 hrs

Upper Level Technical Electives (7 hrs)
   Select 7 hours from courses listed below:
   CET 4138C Digital Programmable Devices 4 hrs
   CET 4333 Applied Computer Systems I 4 hrs
   CET 4931 Current Topics in Tech 3 hrs
   EET 4329C Communication Systems 4 hrs
   EET 4339C Antennas and Propagation 3 hrs

5. Departmental Exit Requirements (3 hrs)
   - ETG 4950C Senior Design Project 3 hrs

6. Foreign Language Requirements (0-8 hrs)
   Admission: 2 years of one foreign language in high school, or 1 year of one foreign language in college (equivalent proficiency exam) prior to graduation.
   Graduation: None.

7. Approved Technical Electives (0-4 hrs)
   Students should consult with the ENT Department for a list of approved technical electives and the terms when specific courses of this type are to be offered.

8. University Graduation Requirements
   - 2.000 GPA in all work attempted (both UCF and overall)
   - 60 semester hours earned after any CLEP award
   - 48 semester hours of upper division credit completed
   - 32 semester hours of regular courses completed at UCF
   - A maximum of 24 semester hours of extension correspondence, CLEP, Credit by Exam, and Armed Forces credits are permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit (if applicable)

Total Semester Hours Required: 128 hours

Related Programs:
Electrical Engineering Technology (Computer Systems Concentration).

Related Minors: None.

Transfer Notes:
- Students transferring from any Florida public institution with an AA degree or with the general education program (GEP) requirements of that institution meet have thereby satisfied UCF GEP requirements.
- Students entering a UCF undergraduate program and having a previously earned baccalaureate degree from an accredited institution have thereby satisfied UCF GEP requirements. (See also the section on the GEP found elsewhere in this catalog.)
- Courses taken from Community Colleges do not substitute for Upper Division Courses.
- Courses transferred must be formally evaluated for equivalency
credit. The student must provide all supporting information to the ENT Department for this evaluation.

- ENT Departmental Residency Requirements consist of at least 32 semester hours of regularly-scheduled 3000 or 4000 level courses taken from the UCF ENT Department.
- PHY 2048/L can substitute for PHY 2053C.

### Tentative Course Schedule for the Electrical Systems Concentration

The tentative course schedule listed below is a guide for those students who plan on completing their upper division engineering technology degree requirements in two years. Many students choose to spread out these requirements over a longer period of time. All engineering students should meet with their faculty advisor to develop and maintain an appropriate plan of study.

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<td>CET 3198C Digital Systems 4</td>
<td>CET 3144C Appl MicProc Tech 3</td>
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<td>CET 3303 Microcom Tech I 3</td>
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<td>PHY 2053/2048 Physics I 4</td>
<td>EET 3716C Network Anal 4</td>
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<td><strong>Summer</strong></td>
<td>10 hrs</td>
<td></td>
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<tr>
<td></td>
<td>EET 4158C Linear Int Cir 3</td>
<td></td>
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<td></td>
<td>EET 4732 Feedback Control 4</td>
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<tr>
<td></td>
<td>ETI 3651C Computer Appl 3</td>
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<tr>
<td><strong>Senior Year</strong></td>
<td>15 hrs</td>
<td>13 hrs</td>
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<tr>
<td>Fall</td>
<td>EET 4548 Power Systems 3</td>
<td>ETG 4950C Sr. Design Proj 3</td>
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<td>PHY 2054/2049 Physics II 4</td>
<td>CET/EET Approved Elective 4</td>
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<td>ETI 2110 Quality Control 3</td>
<td>ETI 4635 Tech Admin 3</td>
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<td>CET/EET Approved Elective 3</td>
<td>ENC 3241 Writing for Tech Pros 3</td>
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<td>ETI 3671 Tech Econ Anal 2</td>
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</table>
1. **UCF General Education Program (31 hrs)**
   - Communication Foundations (9 hrs)
   - Cultural and Historical Foundations (9 hrs)
   - Mathematical Foundations (3 hrs)
   - Social Foundations (3 hrs)
   - Science Foundations (7 hrs)

2. **Engineering Technology Core Courses (17 hrs)**
   - MAP 3401: Problem Analysis (3 hrs)
   - ETI 3651C: Computer Applications (3 hrs)
   - ETI 3671: Technical Economic Analysis (2 hrs)
   - ETI 2110: Industrial Quality Control (3 hrs)
   - ETI 4635: Technology Administration (3 hrs)
   - ENC 3241: Writing for the Technical Professional (3 hrs)

3. **Required Technical Courses (15 hrs)**
   - ETI 4640: Process Planning & Scheduling (3 hrs)
   - CET 4427: Applied Database I (3 hrs)
   - CET 3383: Applied Systems Analysis I (3 hrs)
   - CET 4505: Applied Operating Systems I (3 hrs)
   - CET 4527: Applied Operating Systems II (3 hrs)

4a. **Technical Electives (12/13 hrs)**
    Choose four from the following:
    - ETI 3690: Technical Sales (3 hrs)
    - ETI 4661C: Applied Facilities Planning (3 hrs)
    - ETI 4186: Applied Reliability (3 hrs)
    - ETI 4700: Occupational Safety (3 hrs)
    - ETI 4205: Applied Logistics (3 hrs)
    - CET 3198C: Digital Systems (4 hrs)
    - CET 4138C: Digital Programmable Devices (4 hrs)
    - CET 4333C: Computer Organization & Design (4 hrs)
    - CET 4523C: Applied Systems Analysis II (3 hrs)

4b. **UCF Major Elective (7 hrs included in the SCC programs)**

---

**5. Departmental Exit Requirements**
- Earn a graduating UCF and overall GPA’s ≥ 2.000

**6. Foreign Language Requirements (0-8 hrs)**
- Admission: 2 years of one foreign language in high school, or 1 year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
- Graduation: None.

**7. Approved Technical Electives**
Students should consult with the ENT Department for a list of the approved technical electives and the terms when specific courses of this type are to be offered.

**8. University Graduation Requirements**
- 2.000 GPA in all work attempted (both UCF and overall)
- 60 semester hours earned after any CLEP award
- 48 semester hours of upper division credit completed
- 32 semester hours of regular courses completed at UCF
- A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits are permitted
- Complete the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit (if applicable)

**Total Semester Hours Required:** 128 hours

**Related Programs:** None

**Related Minors:** None.

**Transfer Notes:**
- Students transferring from any Florida public institution with an AA degree or with the general education program (GEP) requirements of that institution met have thereby satisfied UCF GEP requirements.
- Students entering a UCF undergraduate program and having a previously earned baccalaureate degree from an accredited institution have thereby satisfied UCF GEP requirements. (See also the section on the GEP found elsewhere in this catalog.)
- Courses taken from Community Colleges do not substitute for Upper Division Courses.
- Courses transferred must be formally evaluated for equivalency credit. The student must provide all supporting information to the ENT Department for this evaluation.
- ENT Departmental Residency Requirements consist of at least 32 semester hours of regularly-scheduled 3000 or 4000 level courses taken from the UCF ENT Department.

**Tentative Course Schedule for Transferring Students**
The tentative course schedule listed below is a guide for those students who plan on completing their upper division engineering technology degree requirements in two years. Many students choose to spread out these requirements over a longer period of time. All engineering students should meet with their faculty advisor to develop and maintain an appropriate plan of study.

**Junior Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>15 hrs</th>
<th>Spring</th>
<th>13 hrs</th>
</tr>
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<tbody>
<tr>
<td>Humanities</td>
<td>3</td>
<td>CET 3383 Analytical 1</td>
<td>3</td>
</tr>
<tr>
<td>Social Science</td>
<td>3</td>
<td>PSC/PHY XXXX</td>
<td>4</td>
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<tr>
<td>ETI 2110 Ind Qual Control</td>
<td>3</td>
<td>Hum Elective</td>
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<td>MAP 3401 Prob Analysis</td>
<td>3</td>
<td>Tech Elective</td>
<td>3</td>
</tr>
<tr>
<td>Bio Science</td>
<td>3</td>
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</tr>
<tr>
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<td>Fall</td>
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<td>------------</td>
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<td>Summer</td>
<td>9</td>
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<td>ETI 3651C Computer Appl 3</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>ENC 3241 Tech Rept Writing 3</td>
<td></td>
</tr>
<tr>
<td>Senior Year</td>
<td>13</td>
<td>CET 4505 Appl Oper Sys I 3</td>
<td>14</td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td>CET 4427 Appl Database I 3</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>ETI 4640 Process Plan &amp; Sched 3</td>
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<td></td>
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<td>Tech Elective 4</td>
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<tr>
<td></td>
<td></td>
<td>Tech Elective 3</td>
<td></td>
</tr>
</tbody>
</table>
ELEMENmARY EDUCATION: BACHELOR OF SCIENCE

College of Education
Instructional Programs Department, ED346
(407) 823-2939
Coordinator: Dr. Donna Camp, ED354, (407) 823-2010,
E-mail: camp@email.ucf.edu
Web Address: http://pegasus.cc.ucf.edu/~ucfed/

Admission Requirements
- have on file in the University admissions office passing scores on all parts of the College Level Academic Skills Test (CLAST) (No alternatives)
- have on file in the University admissions office a score at or above the 40th percentile on the SAT (950) or ACT (20 enhanced)
- present an overall GPA of 2.5
- achieve a "C" or better grade in EDG 2701, Professional Teaching Practices
- complete a formal application for admission to a particular teacher education program
- meet any special departmental requirements

Degree Requirements
- Students should consult with an advisor
- The courses designated in 1 (General Education) and 2 (Common Program Prerequisites) should usually be completed in the first 60 hours
- Students should consult with an advisor to complete a formal application for admission to a particular teacher education program

1. UCF General Education Program (36 hrs)
   A. Communication Foundations
      - 9 hrs
   B. Cultural-Historical Foundations
      - 9 hrs
   C. Mathematical Foundations
      - 6 hrs
         Select MAC 1104 College Algebra or
         MGF 1203 Finite Math
         Select STA 2014 Principles of Statistics
   D. Social Foundations
      - 6 hrs
         Select SYG 2000 General Sociology
         ECO 2013 Princ of Economics or
         POS 2041 Amer Nat Gov't
   E. Science Foundations
      - 6 hrs
         plus one lab
   At least one course taken to meet the natural science requirements in General Education and/or Prerequisites must include a laboratory component.

2. Common Program Prerequisites (22 hrs)
   EDF 2005 intro to Education
   *EDG 2701 Teaching Diverse Populations
   EME 1040 Intro to Technology
   MAE 2801 Elementary School Math
   - A total of 9 hours in communications, including a speech course
     (may be completed with the General Education)
   - A total of 9 hours in humanities (may be completed within the General Education)
   - A total of 9 hours of Math with MGF, MGT, MAC, 3 hrs
     and STA prefixes excluding MAT 1033 and computer courses (6 hours in General Education)
   - A total of 9 hours in the social sciences to include
     Psychology or human growth and development (6 hours in General Education)
   - A total of 9 hours of natural/physical science including 3 hrs

   one laboratory component (6 hours in General Education)

   *In addition to EDG 2701, students must take 6 additional hours with an international or diversity focus. The eligible courses will be determined by the institution in which the student is enrolled for their lower division course work.

3. RECOMMENDED SEQUENCE

   Semester I (15 hrs)
   EDF 4323 Professional Teaching Practices
      (Required prior to Internship I)
   EDF 4214 Classroom Learning Principles
   LAB 3414* Children's Literature
   RED 3012* Foundations of Reading
      (Required prior to Internship I)
   HLP 4722* Teaching Elementary Health & PE

   Semester II (Internship I Block) (15 hrs)
   EDE 3942** Internship I
      6 hrs
   RED 4519* Dia & Cor Read Strat (PR: RED 3012)
      3 hrs
   MAE 4326* How Children Learn Math
      3 hrs
   EEX 4005* Teaching/Management Tech. Ex Ed
      Student in Reg. Setting
      3 hrs

   Summer (3 hrs)
   EDF 4603 Analysis of Critical Issues in Ed.
      3 hrs

   Semester III (15 hrs)
   SCE 3310* Teach Science in Elem School
      3 hrs
   SSE 3312* Teaching Soc Sci in the Elem Sch
      3 hrs
   LAB 4314* Teaching Language Arts in Elem
      3 hrs
   ARE 4313* Teaching Art in Elem Sch
      3 hrs
   MUE 3210* Teaching Music in the Elem School
      3 hrs

   Semester IV (12 hrs)
   EDE 4943*** Internship II**
      12 hrs

   Electives
   Variable

   Total Required 120 hrs

   *All specialization courses must be completed with a letter grade of "C" or better before registering for Internship II.
   **A student must have completed the portfolio process for Internship I satisfactorily before student teaching.
   ***A student must have completed the portfolio process for Internship II satisfactorily before student teaching.

4. Foreign Language Requirements (0-6 hrs)
   State University System foreign language admission requirement:
   2 years in high school or 1 year of college instruction in a single foreign language.
   (This applies to those students admitted to the University without the required 2 units of foreign language in high school)

5. Departmental Exit Requirements:
   Achieve a 2.5 GPA in all courses within the major

6. University Minimum Exit Requirements
   - A 2.0 GPA in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Transfer notes:
Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.
* Acceptable substitutes:
While other courses may be acceptable, these courses are prerequisites for upper division coursework.

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ENGINEERING/PHYSICS TRACK IN
APPLIED MATHEMATICS:
BACHELOR OF SCIENCE

College of Arts and Sciences
Department of Mathematics, PH 403, (407) 823-6284
E-mail: math@ucf.edu
Dr. P. Rautenstrauch, (407) 823-2493

The Department of Mathematics offers special courses for students in the Honors Program. These courses are designated with an H such as MAC 2311H, MAC 2312H, MAC 2313H, MAC 3930H, and MAP 2302H.

Admission Requirements None

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- All mathematics courses except MAC 2311, 2312, 2313 (or MAC 2281, 2282, 2283), and MAP 2302 must either be taken from, or approved by, the Department of Mathematics at UCF.
- Students must complete one full sequence of calculus; either Calculus with Analytic Geometry (MAC 2311, 2312, 2313) or Calculus for Engineers and Scientists (MAC 2281, 2282, 2283). Only complete calculus sequences will be accepted.
- Departmental Residency Requirement: at least 21 semester hours of regularly scheduled 3000-4000 level courses must be taken from the UCF Math Department.
- Students must earn at least a "C" in each required course.
- Students should consult with a departmental advisor.
- Courses designated in sections 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

1. UCF General Education Program (39 hrs)
   [15 are dupl.]
   A. Communication Foundations
      9 hrs
   B. Cultural and Historical Foundations
      9 hrs
   C. Mathematical Foundations
      Select MAC 2311 Calculus I
      4 hrs
      Select COP 3502C Computer Science I
      3 hrs
   D. Social Foundations
      6 hrs
   E. Science Foundations
      Select BSC 2010C General Biology
      4 hrs
      Select PHY 2048 & L Physics for Sci & Engr I
      4 hrs

2. Common Program Prerequisites (23 hrs)
   COP 3502C* Computer Science I
   3 hrs
   MAC 2311** Calculus I
   4 hrs
   MAC 2312** Calculus II
   4 hrs
   MAC 2313** Calculus III
   4 hrs
   BSC 2010C* General Biology
   4 hrs
   PHY 2048**L Physics for Sci & Eng I w/lab
   4 hrs

   *See Transfer Notes for possible substitutes
   **At UCF the calculus sequence MAC 2281, 2282, 2283 is preferred as a substitute for the sequence MAC 2311, 2312, 2313. However, students who plan to transfer to another institution within the SUS may want to take the sequence MAC 2311, 2312, 2313 to ensure transferability.

3. Basic Core Requirements (10 hrs)
   PHY 2049&L Physics for Sci & Eng II w/lab
   4 hrs
   Select one course
   3 hrs

4. Advanced Core Requirements (60 hrs)
   Select one course
   MHF 2300 Logic and Proof
   3 hrs
   COT 3100 Intro to Discrete Structures
   3 hrs
   Select one course
   MAP 4103 Mathematical Modeling
   3 hrs
   EML 3034 Modeling Meth in Mech. & Aero Eng
   3 hrs
   PHZ 3151 Computer Methods in Physics
   3 hrs
   MAP 4153 Vector and Tensor Analysis
   3 hrs
   MAP 4307 Appl of Complex Variables
   3 hrs
   MAP 4363 Appl Boundary Value Prob I
   3 hrs
   MAP 4364 Appl Boundary Value Prob II
   3 hrs
   MAA 4226 Advanced Calculus I
   4 hrs
   Select one course
   EGN 3420 Engineering Analysis
   3 hrs
   COT 4500 Numerical Calculus
   3 hrs
   Select one course
   MAS 3106 Linear Algebra
   4 hrs
   MAD 4203 Combinatorics & Graph Theory
   3 hrs
   Select one course
   EGN 3310 Engineering Analysis - Statics
   3 hrs
   PHY 3221 Mechanics I
   3 hrs
   Select one course
   EGN 3321 Engineering Analysis - Dynamics
   3 hrs
   PHY 4222 Mechanics II
   3 hrs
   Select one course
   EGN 3373 Principles of Electrical Engineering
   3 hrs
   PHY 3101 Physics for Eng & Sci I
   3 hrs
   Select one course
   CHS 1440 Fund. of Chemistry for Eng.
   4 hrs
   CHM 2045C Chemistry Fundamentals
   4 hrs
   Select one course
   EGN 3358 Thermo-Fluids-Heat Transfer
   3 hrs
   PHY 3503 Thermal & Statistical Physics
   3 hrs

Select one course
   EML 3701 Fluid Mechanics
   3 hrs
   CWR 3201 Engineering Fluid Mechanics
   3 hrs
   PHY 3101 Physics for Eng & Sci III
   3 hrs
   (PHY 3101 may be selected only if EGN373 is also taken)
   EIN 4118 Industrial Applications of Computers
   3 hrs
   PHZ 3113 Intro. to Theoretical Methods of Physics
   3 hrs
   Select one course
   EGN 3331 Mechanics of Materials
   3 hrs
   CHM 2046 Chemistry Fundamentals II
   3 hrs
   ESI 4312 Operations Research
   3 hrs
   EML 3601 Solid Mechanics
   3 hrs
   EML 4220 Vibration Analysis
   3 hrs
   EEL 3122C Electrical Networks
   3 hrs
   PHY 4605 Wave Mechanics II
   3 hrs
   or any MAA, MAD, MAP, or MAS course
   3 hrs
   Select one course
   CES 4100 Structural Analysis I
   3 hrs
   EGN 3331 Mechanics of Materials
   3 hrs
   EIN 3304 Intro. to Indust. Eng. & Mngmnt Sys
   3 hrs
   EAS 3101 Aerodynamics I
   3 hrs
   EML 3601 Solid Mechanics
   3 hrs
   EEL 3122 Electrical Networks
   3 hrs
   or any PHY, PHZ, AST, MAA, MAD, MAP, or MAS course
   3 hrs

5. Restricted Electives (9 hrs)
   Select three courses
9. University Minimum Exit Requirements
- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 45 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST, and 9 hrs of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Applied Mathematics, Computer Science, Engineering, Math, Physics, Statistics

Related Minors: Applied Computer Science, Computer Science, Engineering, Math, Physics, Statistics

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements
- Courses taken at community colleges do not substitute for Upper Division courses
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
- COP 3502C*: may use any programming language course with a COP prefix.
- BSC 2010C*: may use any laboratory BSC or CHM course which is designed for majors.
- PHY 2048*: may use any PHY course with a lab; however, PHY 2048 is a prerequisite for PHY 2049 which must be taken.

Engineering/Physics Track in Applied Mathematics
Tentative Course Schedule

First Year Sequence - 28 hours

Fall  (14 hrs)
MAC 2281  Calculus for Sci & Eng I  4 hrs
CHS 1440  Fund. of Chem. for Eng  4 hrs
or CHM 2045C will substitute
ENC 1101  English Composition I  3 hrs
ECO 2013  Principles of Economics I  3 hrs
or ECO 2023 or POS 2041 will substitute

Spring  (14 hrs)
MAC 2282  Calculus for Sci & Eng II  4 hrs
ENC 1102  English Composition II  3 hrs
PHY 2048  Physics for Eng & Sci I  3 hrs
PHY 2048L Physics Lab I  1 hr
SPC 1016  Oral Comm. for Tech. Prof.  3 hrs
or SPC 1600C will substitute

Second Year Sequence - 29 hours

Fall  (14 hrs)
MAC 2283  Calculus for Sci & Eng III  4 hrs
PHY 2049  Physics for Eng & Sci II  3 hrs
PHY 2049L Physics Lab II  1 hr
EGN 3310 Eng. Analysis - Statics  3 hrs
or PHY 3221 will substitute
MHF 2300  Logic and Proof  3 hrs

Spring  (15 hrs)
MAP 2302  Differential Equations  3 hrs
EGN 3373 Principles of Elec. Eng. or PHY 3101 will substitute
STA 3032 Prob. & Stats for Eng. or STA 2023 will substitute
EGN 3321 Engineering Analysis - Dynamics  3 hrs
or PHY 4222 will substitute
Cultural and Historical Foundations 1a  3 hrs

Third Year Sequence - 31 hours

Fall  (16 hrs)
MAP 4153  Vector - Tensor Analysis  3 hrs
Mathematics Elective - Select from:  4 hrs
MAS 3106  Linear Algebra
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>MAD 4203</td>
<td>Comb. and Graph Theory</td>
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<tr>
<td>EGN 3343</td>
<td>Thermodynamics</td>
<td>3 hrs</td>
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<td>or EGN 3358 or PHY 3503 will substitute</td>
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<tr>
<td>Engineering or Physics Elective*</td>
<td>3 hrs</td>
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<tr>
<td>Engineering, Physics, Mathematics, or Statistics Elective*</td>
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<tr>
<td>or any MAA, MAD, MAP, or MAS course</td>
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<tr>
<td>Spring</td>
<td>(15 hrs)</td>
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<tr>
<td>MAP 4103</td>
<td>Math Modeling</td>
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<td>or EML 3034 or PHZ 3151 will substitute</td>
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<tr>
<td>Engineering, Physics, Mathematics, or Statistics Elective*</td>
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<tr>
<td>Cultural and Historical Foundations 1b</td>
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<td>Cultural and Historical Foundations 2</td>
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<td>Social Foundations 2</td>
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**Fourth Year Sequence - 32 hours**

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<td>Fall</td>
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<tr>
<td>Unrestricted Elective</td>
<td>3 hrs</td>
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<tr>
<td>MAP 4363</td>
<td>Applied boundary Value Prob. I</td>
<td>3 hrs</td>
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<tr>
<td>EGN 3420</td>
<td>Engineering Analysis</td>
<td>3 hrs</td>
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<tr>
<td>or COT 4500 will substitute</td>
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<tr>
<td>MAA 4226</td>
<td>Advanced Calculus</td>
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<td>or MAA 5210 will substitute</td>
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<tr>
<td>Engineering, Physics, or Mathematics Elective*</td>
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<td></td>
</tr>
<tr>
<td>Select Engineering Elective</td>
<td>3 hrs</td>
<td></td>
</tr>
<tr>
<td>or any MAA, MAD, MAP, or MAS course</td>
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</tr>
<tr>
<td>Spring</td>
<td>(16 hrs)</td>
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</tr>
<tr>
<td>MAP 4364</td>
<td>Applied Boundary Value Prob. II</td>
<td>3 hrs</td>
</tr>
<tr>
<td>MAP 4307</td>
<td>Application of Complex Analysis</td>
<td>3 hrs</td>
</tr>
<tr>
<td>or MAA 5404 will substitute</td>
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<tr>
<td>Chemistry, Engineering, or Mathematics Elective*</td>
<td>3 hrs</td>
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<tr>
<td>Engineering, Physics, or Mathematics Elective*</td>
<td>3 hrs</td>
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<tr>
<td>BSC 2010C</td>
<td>General Biology</td>
<td>4 hrs</td>
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</table>

*Substitutions may be made with the approval of the Mathematics Standards Committee.

Students wishing to complete a double major in both Engineering and Applied Mathematics will also need to meet all the requirements in the College of Engineering. To minimize the total hours taken for both majors, students should select an advanced engineering course for the unrestricted elective.

Students wishing to complete a double major in both Physics and Applied Mathematics will also need to meet all the requirements in the School of Engineering. To minimize the total hours taken for both majors, students should select an advanced physics course for the unrestricted elective.
ENGINEERING TECHNOLOGY -
DESIGN CONCENTRATION:
BACHELOR OF SCIENCE IN
ENGINEERING TECHNOLOGY
(BSET)

College of Engineering
Engineering Technology (ENT) Department
UCF Research Pavilion Building, Suite 493
12424 Research Park Parkway
Orlando, FL 32826
Coordinator: Prof. J. E. Walsh, PE
(407) 384-2154, FAX: (407) 384-2157
Web Address: http://www-ent.engr.ucf.edu

Admission Requirements None

Degree Requirements
• Students should check with their ENT faculty advisor frequently to insure that they are making proper progress toward the degree.

1. UCF General Education Program (27 hrs)
   A. Communication Foundations
      If possible, engineering technology students should take SPC 1016 instead of SPC 1600C. See course descriptions.
   B. Cultural and Historical Foundations
   C. Mathematical Foundations
      1. Requirement moved to Engineering Tech Core
      2. CGS 1060C or STA 2014
   D. Social Foundations
   E. Science Foundations
      Requirements moved to Engineering Tech Core

2. Common Program Prerequisites (CPR) (10/12 hrs)
   MAC 2253 or MAC 2311 Calculus I
   MAC 2254 or MAC 2312 Calculus II
   PHY 2053C or PHY 2048/L Physics I/Lab

3. Engineering Technology Core Requirements (28 hrs)
   ANT 2511, BSC 1020, BSC 1030, BOT 1000, GEO 1200, GEO 2370, or GLY 1030
   ENC 3241 Writing for the Technical Professional
   MAC 1105 College Algebra
   MAC 1114 College Trigonometry
   MAC 2252 or MAC 2311 Calculus I
   MAC 2254 or MAC 2312 Calculus II
   PHY 2053C College Physics I
   ETG 3541 Applied Mechanics
   ETE 3651C Computer Applications
   ETE 3671 Technical Economic Analysis
   ETE 2110 Industrial Quality Control
   ETE 4635 Technology Administration

4. Technical Specialization
   Lower Level Required and Elective Courses (60 hrs)
   CET 2123C Microprocessor Electronics I
   CHM 1032, 1032L General Chemistry, Lab
   CET 2364 Systems Applications in C
   EET 3085 Electricity and Electronics
   EGN 1111C Engr Computer Graphics
   Approved Lower Level Technical Electives

   Upper Level Required Courses (18 hrs)
   EST 4502C Metrology & Instrumentation
   ETD 3350C Applied CADD
   ETG 2530C Strength of Materials
   ETI 3421 Materials & Processes
   ETM 4220 Applied Energy Systems

   Upper Level Technical Elective (Select 5) (15 hrs)
   ETC 4241C Construction Materials & Methods
   ETC 4242 Construction Contracts & Specfictns
   ETC 4414C Applied Structural Design I
   ETC 4415C Applied Structural Design II
   ETM 4331C Applied Fluid Mechanics
   ETM 4512C Applied Design of Machine Elements

5. Departmental Graduation Requirements (3 hrs)
   • ETG 4950C Senior Design Project
   • Earn a graduating UCF and overall GPA's ≥ 2.000

6. Foreign Language Requirements (0-8 hrs)
   Admission: 2 years of one foreign language in high school, or 1 year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
   Graduation: None.

7. Approved Technical Electives
   Students should consult with the ENT Department for a list of the approved technical electives and the terms when specific courses of this type are to be offered.

8. University Graduation Requirements
   • 2.000 GPA in all work attempted (both UCF and overall)
   • 60 semester hours earned after any CLEP award
   • 48 semester hours of upper division credit completed
   • 32 semester hours of regular courses completed at UCF
   • A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits are permitted
   • Complete the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit (if applicable)

Total Semester Hours Required 128 hours

Related Programs: Engineering Technology (Operations Concentration).
Related Minors: None.

Transfer Notes:
• Students transferring from any Florida public institution with an AA degree or with the general education program (GEP) requirements of that institution met have thereby satisfied UCF GEP requirements.
• Students entering a UCF undergraduate program and having a previously-earned baccalaureate degree from an accredited institution have thereby satisfied UCF GEP requirements. (See also the section on the GEP found elsewhere in this catalog.)
• Courses taken from Community Colleges do not substitute for Upper Division Courses.
• Courses transferred must be formally evaluated for equivalency credit. The student must provide all supporting information to the ENT Department for this evaluation.
• ENT Departmental Residency Requirements consist of at least 32 semester hours of regularly-scheduled 3000 or 4000 level courses taken from the UCF ENT Department.
• PHY 2048/L and 2049/L substitute for PHY 2053C and PHY 2054C respectively.
Tentative Schedule for the Design Concentration

The tentative course schedule listed below is a guide for those students who plan on completing their upper division engineering technology degree requirements in two years. Many students choose to spread out these requirements over a longer period of time. All engineering students should meet with their faculty advisor to develop and maintain an appropriate plan of study.

### Junior Year

#### Fall

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<tr>
<th>Course Code</th>
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<tr>
<td>MAC 2353/2311</td>
<td>Calculus I</td>
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<td>ETG 3541</td>
<td>Appl Mechanics</td>
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<td>ETI 2110</td>
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#### Spring

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<tr>
<td>MAC 2354/2312</td>
<td>Calculus II</td>
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<tr>
<td>ETM 4220</td>
<td>Energy Systems</td>
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<td>ETG 2530C</td>
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<tr>
<td>ETM 4331C</td>
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<td>ETI 3651C</td>
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### Senior Year

#### Fall

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<tr>
<td>ETC 4415C</td>
<td>App Struct Des II</td>
<td>3</td>
</tr>
<tr>
<td>ETM 4512C</td>
<td>App Des Mach Elem3</td>
<td>3</td>
</tr>
<tr>
<td>ETC 4241C</td>
<td>Construction Meth</td>
<td>3</td>
</tr>
<tr>
<td>ENC 3241</td>
<td>Tech Report Writ</td>
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#### Spring

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<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>EST 4502C</td>
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<tr>
<td>ETG 4950C</td>
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<td>ETC 4242C</td>
<td>Contract &amp; Spec</td>
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<td>ETI 4635</td>
<td>Tech Admin</td>
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<td>ETC 3671</td>
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</table>
ENGINEERING TECHNOLOGY - OPERATIONS CONCENTRATION:
BACHELOR OF SCIENCE IN ENGINEERING TECHNOLOGY (BSET)

College of Engineering
Engineering Technology (ENT) Department
UCF Research Pavilion Building, Suite 493
12424 Research Park Parkway
Orlando, FL 32826
Coordinator: Prof. J. E. Walsh, PE,
(407) 384-2154, FAX: (407) 384-2157
Web Address: http://www-ent.engr.ucf.edu

Degree Requirements

1. UCF General Education Program (27 hrs)
   A. Communication Foundations
      If possible, engineering technology students should take SPC 1016 instead of SPC 1600C. See course descriptions.
   B. Cultural and Historical Foundations
   C. Mathematical Foundations
      1. Requirement moved to Engineering Tech Core
      2. CGS 1060 or STA 2014
   D. Social Foundations
      6 hrs
   E. Science Foundations
      Requirements moved to Engineering Tech Core
   2. Common Program Prerequisites (CPR) (10/12 hr)
      MAC 2233 or MAC 2311 Calculus I
      MAC 2234 or MAC 2312 Calculus II
      PHY 2053C or PHY 2048/L Physics I/Lab
   3. Engineering Technology Core Requirements (28 hr)
      ANT 2511, BSC 1020, BSC 1030, BOT 1000,
      GEO 1200, GEO 2370, or GLY 1030
      ENC 3241 Writing for the Technical Professional
      MAC 1105 College Algebra
      MAC 1114 College Trigonometry
      MAC 2353 or MAC 2311 Calculus I
      MAC 2354 or MAC 2312 Calculus II
      PHY 2053C College Physics I
      ETG 3541 Applied Mechanics
      ETI 3651C Computer Applications
      ETI 3671 Technical Economic Analysis
      ETI 2110 Industrial Quality Control
      ETI 4635 Technology Administration

4. Technical Specialization (60 hrs)
   Lower Level Required and Elective Courses (27 hrs)
   CET 2123C Microprocessor Electronics I
   CHM 1032, 1032L General Chemistry, Lab
   CET 2364 Systems Applications in C
   EET 3085C Electricity and Electronics
   EGN 1111C Engr Computer Graphics
   Approved Lower Level Technical Electives

   Upper Level Required Courses (18 hrs)
   EST 4502C Metrology & Instrumentation
   ETD 3350C Applied CADD
   ETG 2530C Strength of Materials
   ETI 3421 Materials & Processes
   ETM 4220 Applied Energy Systems

   Upper Level Technical Elective (Select 5) (15 hrs)
   ETI 3690 Technical Sales
   ETI 4186 Applied Reliability
   ETI 4205 Applied Logistics
   ETI 4640 Process Planning & Work Measurement
   ETI 4661C Applied Facilities Planning & Design
   ETI 4700 Occupational Safety
   ETM 4331C Applied Fluid Mechanics

5. Departmental Graduation Requirements (3 hrs)
   ETG 4950C Senior Design Project
   Earn a graduating UCF and overall GPA's ≥ 2.00.

6. Foreign Language Requirements (0-8 hrs)
   Admission: 2 years of one foreign language in high school, or 1 year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
   Graduation: None.

7. Approved Technical Electives
   Students should consult with the ENT Department for a list of the approved technical electives and the terms when specific courses of this type are to be offered.

8. University Graduation Requirements
   2.000 GPA in all work attempted (both UCF and overall)
   60 semester hours earned after any CLEP award
   48 semester hours of upper division credit completed
   32 semester hours of regular courses completed at UCF
   A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits are permitted
   Complete the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit (if applicable)

Total Semester Hours Required 128 hours

Related Programs: Engineering Technology (Operations Concentration).

Related Minors: None.

Transfer Notes:
   Students transferring from any Florida public institution with an AA degree or with the general education program (GEP) requirements of that institution met have thereby satisfied UCF GEP requirements.
   Students entering a UCF undergraduate program and having a previously earned baccalaureate degree from an accredited institution have thereby satisfied UCF GEP requirements. (See also the section on the GEP found elsewhere in this catalog.)
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   Courses transferred must be formally evaluated for equivalency credit. The student must provide all supporting information to the ENT Department for this evaluation.
   ENT Departmental Residency Requirements consist of at least 32 semester hours of regularly-scheduled 3000- or 4000-level courses taken from the UCF ENT Department.
   PHY 2048/L and 2049/L substitute for PHY 2053C and PHY 2054C respectively.
Tentative Course Schedule for the Operations Concentration

The tentative course schedule listed below is a guide for those students who plan on completing their upper division engineering technology degree requirements in two years. Many students choose to spread out these requirements over a longer period of time. All engineering students should meet with their faculty advisor to develop and maintain an appropriate plan of study.

<table>
<thead>
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<th>Junior Year</th>
<th>13/14 hrs</th>
<th>Spring</th>
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<td></td>
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</tr>
<tr>
<td>MAC 2253/2311 Calculus I</td>
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<td>MAC 2254/2312 Calculus II</td>
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<tr>
<td>PHY 2053/2048 Physics I</td>
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<td>ETG 3541 Mechanics</td>
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<tr>
<td>ETI 2110 Quality Control</td>
<td>3</td>
<td>ETM 4220 Energy Systems</td>
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</tr>
<tr>
<td>ETI 4640 Proc Plan &amp; Sch</td>
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<td>ETI 4186 Appl Reliability</td>
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</tr>
<tr>
<td>Summer</td>
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<td></td>
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<tr>
<td>ETI 4700 Occup Safety</td>
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<td>ETI 4635 Tech Admin</td>
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<td>ETM 4331C Appl Fluid Mech</td>
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<tr>
<td>ETI 3421 Matri &amp; Process</td>
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<td>ENC 3241 Tech Report Writ</td>
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<tr>
<td>ETI 4205 App Logistics</td>
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<td>ETG 4590 Sr Design Proj</td>
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<tr>
<td>ETD 3330C Appl CAD</td>
<td>3</td>
<td>EST 4502C Metro I Instr</td>
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</tr>
<tr>
<td>ETI 3651C Computer Appl</td>
<td>3</td>
<td>ETI 4661C Appl Fac Plan</td>
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<tr>
<td>ETI 3671 Tech Econ Anal</td>
<td>2</td>
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ENGLISH - CREATIVE WRITING:
BACHELOR OF ARTS

College of Arts and Sciences
English Department, FA 301, E-mail: english@ucf.edu
Dr. D. Trouard, (407) 823-2212

Admission Requirements  None

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students must earn at least a "C" in each required course
- Students should consult with a departmental advisor
- Departmental Residency Requirement consists of at least 15 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF English Department
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

Honors in English Degree: Additional Requirements  (9 hrs)
- Application and admission through the English Honors Committee
- Fulfill University requirements for Honors in the Major
- Grade of "B" or better in 5000 level English elective (3 hrs), Directed Readings (3 hrs), and Thesis hours (3 hrs).
- Successful completion and oral defense of honors thesis

1. UCF General Education Program  (36 hrs)
   A. Communication Foundations
      Select  SPC 1600C Fund of Oral Com  3 hrs
   B. Cultural and Historical Foundations  9 hrs
   C. Mathematical Foundations
      Select  MGF 1203 Finite Mathematics  3 hrs
      (may substitute a higher level math)
   D. Social Foundations  6 hrs
   E. Science Foundations  6 hrs

2. Common Program Prerequisites
   ENC 1101*  Composition I  GEP
   ENC 1102*  Composition II  GEP
   *See Transfer Notes for possible substitutes

3. Restricted Electives  (36 hrs)
   Choose two of the following:  6 hrs
   ENG 3014  Theory & Tech of Literary Study
   CRW 3013  Creative Writing for English Majors
   ENC 3211  Theory & Practice of Tech Writing
   Choose three of the following:  9 hrs
   ENL 2012  English Literature I
   ENL 2021  English Literature II
   AML 3031  American Literature I
   AML 3051  American Literature II
   Choose two of the following:  6 hrs
   ENL 4311  Chaucer
   ENL 4333  Shakespeare
   ENL 4341  Milton and His Age
   LIN 3010  Principles of Linguistics
   LIN 4100  History of the English Language
   LIN 4680  Modern English Grammar
   Choose two of the following:  6 hrs
   CRW 3120  Fiction Writing Workshop
   CRW 3211  Creative Nonfiction Writing

   CRW 3310  Poetry Writing Workshop
   ENC 3310  Magazine Writing I
   Choose two of the following:  6 hrs
   CRW 4122  Adv Fiction Writing Workshop
   CRW 4320  Adv Poetry Writing Workshop
   CRW 4224  Adv Creative Nonfiction Writing
   Choose one of the following:  3 hrs
   CRW 3311  Structure of Verse
   CRW 3410  Writing Scripts
   CRW 3540  Literary Magazines
   CRW 4114  History of Prose Style

4. Departmental Exit Requirements
- Maintain a minimum GPA of 2.0 in upper division required courses
- Computer Competency met by completion of CRW 3013

5. Foreign Language Requirements  (0-8 hrs)
Admission: Met by graduation requirement
Graduation: Three semesters or equivalent proficiency exam. With departmental approval, a cultural/multicultural or related course may be used to satisfy one semester of the Graduation requirement.

6. Electives  (variable)
Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

7. University Minimum Exit Requirements
- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required  120 hours

Related Programs: Technical Writing, Literature

Related Minors: Creative Writing, Literature, Linguistics, Technical Writing, Writing

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements
- Courses taken at community colleges do not substitute for Upper Division courses
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites to the BA in Creative Writing if taken prior to transferring to UCF:
- ENC 1101* & 1102*: may use any two lower level courses, taught in the English Department, and each having a 6,000 word requirement. ENC 1101 & 1102, however, are prerequisites for all subsequent English courses and will need to be taken for the major.


ENGLISH - LITERATURE: BACHELOR OF ARTS

College of Arts and Sciences
English Department, FA 301, E-mail: english@ucf.edu
Dr. D. Trouard, (407) 823-2212

Admission Requirements None

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students must earn at least a "C" in each required course.
- Students should consult with a departmental advisor.
- Departmental Residency Requirement consists of at least 15 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF English Department.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

Honors in English Degree:
Honors in English Degree: Additional Requirements (10 hrs)
- Application and admission through the English Honors Committee
- Fulfill University requirements for Honors in the Major
- Grade of "B" or better in 5000 level English elective (3 hrs), Directed Readings (3 hrs), and Thesis hours (3 hrs).
- Successful completion and oral defense of honors thesis

1. UCF General Education Program (36 hrs)
A. Communication Foundations
   Select SPC 1600C Fund of Oral Com 3 hrs
B. Cultural and Historical Foundations
   Select MGF 1203 Finite Mathematics 3 hrs
   Select CGS 1060C Intro to Computer Sc or STA 2014 Principles of Statistics 3 hrs
D. Social Foundations
   6 hrs
E. Science Foundations
   6 hrs

2. Common Program Prerequisites
   ENC 1101* Composition I GEP
   ENC 1102* Composition II GEP
   *See Transfer Notes for possible substitutes

3. Core requirements (12 hrs)
   ENL 2012 English Literature I 3 hrs
   ENL 2021 English Literature II 3 hrs
   AML 3031 American Literature I 3 hrs
   AML 3051 American Literature II 3 hrs

4. Upper Division Restricted Electives (24 hrs)
   Choose two of the following: 6 hrs
   ENG 3014 Theory & Tech of Literary Study
   CRW 3013 Creative Writing for English Majors
   ENC 3211 Theory & Practice of Tech Writing
   Choose one of the following: 3 hrs
   ENL 4311 Chaucer
   ENL 4341 Milton
   ENL 4333 Shakespeare
   Choose one of the following: 3 hrs
   LIN 3010 Principles of Linguistics
   LIN 4100 History of the English Language
   LIN 4680 Modern English Grammar
   Choose four upper level courses: 12 hrs
   AML, ENL & LIT prefix

5. Departmental Exit Requirements
   - Maintain a minimum GPA of 2.0 in upper division required courses.
   - Computer Competency met by completion of ENG 3014.

6. Foreign Language Requirements (0-8 hrs)
   Admission: Met by graduation requirement
   Graduation: Three semesters or equivalent proficiency exam. With departmental approval, a cultural/multicultural or related course may be used to satisfy one semester of the Graduation requirement.

7. Electives (variable)
   Select primarily from upper level courses, with departmental advisor’s approval. May be outside of the department.

8. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Creative Writing, Technical Writing

Related Minors: Creative Writing, Linguistics, Literature, Technical Writing, Writing

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites to the BA in Literature if taken prior to transferring to UCF:
- ENC 1101* & 1102*: may use any two lower level courses, taught in the English Department, and each having a 6,000 word requirement. However ENC 1101 & 1102 are prerequisites for all subsequent English courses and will need to be taken for the major.
ENGLISH - TECHNICAL WRITING:
BACHELOR OF ARTS

College of Arts and Sciences
English Department, FA 301, E-mail: english@ucf.edu
Dr. D. Trouard, (407) 823-2212

Admission Requirements None

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students must earn at least a "C" in each required course
- Students should consult with a departmental advisor
- Departmental Residency Requirement consists of at least 15 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF English Department
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

Honors in English Degree: Additional Requirements (10 hrs)
- Application and admission through the English Honors Committee
- Fulfill University requirements for Honors in the Major
- Grade of "B" or better in 5000 level English elective (3 hrs), Directed Readings (3 hrs), and Thesis hours (3 hrs).
- Successful completion and oral defense of honors thesis

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
      Select SPC 1600C Fund of Oral Com 3 hrs
   B. Cultural and Historical Foundations 9 hrs
   C. Mathematical Foundations 6 hrs
      Select MGF 1203 Finite Mathematics 3 hrs
      (may substitute a higher level math)
   D. Social Foundations 6 hrs
   E. Science Foundations 6 hrs

2. Common Program Prerequisites
   ENC 1101* Composition I GEP
   ENC 1102* Composition II GEP
   *See Transfer Notes for possible substitutes

3. Core Courses - Basic (18 hrs)
   Choose two of the following:
   ENL 2012 English Literature I 6 hrs
   ENL 2021 English Literature II
   AML 3031 American Literature I
   AML 3051 American Literature II
   Required Basic Course
   ENC 3311 Advanced Expository Writing 3 hrs

4. Core requirements-Advanced (24 hrs)
   ENC 4293 Technical Documentation I 3 hrs
   ENC 4294 Technical Documentation II 3 hrs
   ENC 4295 Technical Documentation III 3 hrs
   ENC 4215 Techniques of Tech Publication 3 hrs
   ENC 4218 Visual Elements in Documentation 3 hrs
   LIT 4433 Technical and Sci Literature 3 hrs

   Optional course
   ENC 4941 Tech Writing & Editing Internship

5. Departmental Exit Requirements
- Maintain a minimum GPA of 2.0 in upper division required courses
- Computer Competency met by completion of ENC 4293

6. Foreign Language Requirements (0-8 hrs)

   Admission: Met by graduation requirement

   Graduation: Three semesters or equivalent proficiency exam. With departmental approval, a cultural/multicultural or related course may be used to satisfy one semester of the Graduation requirement.

7. Electives (variable)
   Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

8. University Minimum Exit Requirements
- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted.
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Creative Writing, Literature

Related Minors: Creative Writing, Literature, Linguistics, Technical Writing, Writing

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements
- Courses taken at community colleges do not substitute for Upper Division courses
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information

Acceptable Substitutes for common program prerequisites to the BA in Technical Writing if taken prior to transferring to UCF:
- ENC 1101* & 1102*: may use any two lower level courses, taught in the English Department, and each having a 6,000 word requirement. However ENC 1101 & 1102 are prerequisites for all subsequent English courses and will need to be taken for the major.
ENGLISH LANGUAGE ARTS
EDUCATION: BACHELOR OF
SCIENCE

College of Education
Instructional Programs, ED346, (407) 823-2939
Coordinator: Dr. Janet Allen, ED353, (407) 823-6125,
E-mail: allenj@pegasus.cc.ucf.edu
Web Address: http://pegasus.cc.ucf.edu/~ucfed/

Admission Requirements:
- have on file in the University admissions office passing scores on all parts of the College Level Academic Skills Test (CLAST) (No alternative)
- have on file in the University admissions office a score at or above the 40th percentile on the SAT (950) or ACT (20 enhanced)
- present an overall GPA of 2.5
- achieve a "C" or better grade in EDG 4323, Professional Teaching Practices, including successful completion of the tutorial component or equivalent
- complete a formal application for admission to a particular teacher education program
- meet any special departmental requirements

Degree Requirements:
- Students should see an advisor
- The courses designated in 1 (General Education) and 2 (Common Program Prerequisites) should usually be completed in the first 60 hours

1. UCF General Education Program
   (36 hrs)
   A. Communication Foundations
      9 hrs
   B. Cultural-Historical Foundations
      9 hrs
   C. Mathematical Foundations
      6 hrs
   D. Social Foundations
      6 hrs
   E. Science Foundations
      6 hrs
   plus one lab
   At least one course taken to meet the natural science requirements in General Education and/or prerequisites must include a laboratory component.

2. Common Program Prerequisites**
   (18 hrs)
   EDF 2005 Intro to Education
       3 hrs
   *EDG 2701 Teaching Diverse Populations
       3 hrs
   EME 1040 Intro to Technology
       3 hrs
   SPC 1600C Fundamentals of Oral Comm
       GEP
   PSY 2013 Gen Psychology
       GEP
   MAC 1105 College Algebra or
       GEP
   MGF 1203 Finite Math
   LIT 2110 World Lit I
   LIT 2120 World Lit II
   ENL 2012 Eng Lit I to 1798
   ENL 2021 Eng Lit II to 1950

*In addition to EDG 2701, students must take 6 additional hours with an international or diversity focus. The eligible courses will be determined by the institution in which the student is enrolled for their lower division course work. (These courses must be identified in the college/university catalog.)

3. Specialization Requirements (21 hrs)
   English Specialization requirements total 30 hours, 15 of which should be taken during the first two years in college. Those courses listed below and not taken during the first two years in college should be completed prior to Internship II.
   AML 3031 American Lit I
       3 hrs
   AML 3051 American Lit II
       3 hrs
   CRW 3013 Intro Creative Writing
       3 hrs
   ENC 3311 Advanced Expository Writing
       3 hrs
   LIN 4680 Mod Eng Grammar
       3 hrs
   LIT 2000 Literary Analysis
       3 hrs
   Restricted Elective-English or English Ed
       3 hrs

4. Education Core Requirements: (6 hrs)
   EDF 4603 Analysis of Critical Issues in Ed.
       3 hrs
   EDF 4214 Classroom Learning Principles
       3 hrs

5. Prerequisite to Internship I (9 hrs)
   A student must have completed the portfolio process for Internship I Satisfactorily before student teaching.
   EDF 4323 Professional Teaching Practices
       3 hrs
   LAE 4464 Adol Lit
       3 hrs
   LAE 4XXX Lit Strat for Middle/Secondary Teach
       3 hrs

6. Internship I Block (13 hrs)
   LAE 4360 Eng Instructional Analysis
       4 hrs
   LAE 4342 Teach Lang/Comp
       3 hrs
   ESE 3940 Internship I
       6 hrs

7. Internship II (ESE 4943) 6-12 (12 hrs)
   A student must have completed the portfolio process for Internship II Satisfactorily before student teaching.

8. Electives (to meet 120 hour requirement) Variable

9. Foreign Language Requirements (0-6 hrs)
   State University System foreign language admission requirement: 2 years in high school or 1 year of college instruction in a single foreign language. (This requirement applies to those students admitted to the University without the required 2 units of foreign language in high school)

10. Departmental Exit Requirements:
    Achieve a 2.5 GPA in all courses within the major

11. University Minimum Exit Requirements
    - A 2.0 GPA in all work attempted (both UCF and overall)
    - 60 semester hours earned after CLEP awarded
    - 48 semester hours of upper division credit completed
    - 30 semester hours in regular courses completed at UCF
    - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Transfer notes:
Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

*Acceptable Substitutes:
Another literature course (3 hrs) and other English electives (9 hrs) may be acceptable substitutes; however, for certification purposes students should take the listed courses.
ENVIRONMENTAL ENGINEERING: BACHELOR OF SCIENCE

College of Engineering
Civil & Environmental Engineering Department (CEE), ENGR 207B, (407) 823-2841, FAX: (407) 823-3315, Home Page http://www.cee.engr.ucf.edu
Dr. Manoj Chopra, E-Mail: chopra@mail.ucf.edu

Admission Requirements:
All entering students are required by UCF to attend Orientation before registering for their first semester at UCF. Orientation includes engineering academic advisement and registration for first-semester UCF classes; see also the section, Orientation, found elsewhere in this catalog.

Degree Requirements
- Each engineering student is assigned a qualified engineering academic advisor in the department of his/her major. Each student should seek academic advisement before registering for classes each semester to minimize excess hours and to ensure that satisfactory academic progress is being maintained.

1. UCF General Education Program for Engineering Students (38 hrs)
The UCF General Education Program (GEP) is described in the section, General Education Program, found elsewhere in this catalog. Engineering students should closely study the requirements of the UCF GEP and the allowable substitutions detailed in paragraphs A. through E. below to minimize excess hours. Students transferring to UCF from within the Florida State University/Community College Systems should complete the GEP and the Common Program Prerequisites before transferring.

A. Communication Foundations 9 hrs
1. Take ENC 1101
2. Take ENC 1102
3. SPC 1016 is the preferred substitute for SPC 1600C for engineering students.

See the descriptions of these courses in the section, Alphabetical Listing of Courses, later in this catalog.

B. Cultural and Historical Foundations 9 hrs
C. Mathematical Foundations 7 hrs
1. Take MAC 2281, Calculus for Scientists and Engineers I, (4 hrs)
   NOTE: College algebra and trigonometry are prerequisites for MAC 111. See the course descriptions.
2. Take STA 3052 (3 hrs).
   NOTE: Calculus II is the prerequisite for this course.

D. Social Foundations 6 hrs
1. Take ECO 2013 or ECO 2023.

E. Science Foundations 7 hrs
1. Take PHY 2048/48L.
2. Take either GEO 1200 or GEO 2370.

2. Common Program Prerequisites (CPP's) (19 hrs)
These courses are specifically required for all engineering students of the Florida State University System. CPP courses are also available at other Florida post-secondary schools and may be transferred directly to UCF programs. All engineering students must remain in the Calculus sequence with which they begin. Students who begin with MAC 2281 Calculus for Scientists and Engineers I, must continue with MAC 2282 and MAC 2283. Students who begin with MAC 2311 Calculus with Analytical Geometry I, must continue with MAC 2312 and MAC 2313. The individual courses in these two Calculus sequences are not interchangeable. NOTE: MAC 2281 and PHY 2048/48L also satisfy UCF GEP sub-requirements, as do ENC 1101, ENC 1102, the Humanities courses, and the Social Science courses.

CHM 2045/45L Chemistry Fundamentals I 4 hrs
MAC 2281 Calculus for Scientists & Engineers I GEP
(MAC 2311 will substitute)
MAC 2282 Calculus for Scientists & Engineers II 4 hrs
(MAC 2312 will substitute)
MAC 2283 Calculus for Scientists & Engineers III 4 hrs
(MAC 2313 will substitute)
MAP 2302 Differential Equations 3 hrs
PHY 2048/48L Physics for Engineers & Scientists I GEP
PHY 2049/49L Physics for Engineers & Scientists II 4 hrs
ENC 1101 Composition I GEP
ENC 1102 Composition II GEP

Humanities Courses GEP
Social Science Courses GEP
Humanities or Social Sciences GEP

3. Courses Required for the Major (60 hrs)
The College of Engineering requires all engineering students to achieve a minimum 2.250 GPA in completing these courses, together with technical elective courses listed in 4. below and with the senior design courses listed in 5. below. Independent study courses generally do satisfy major requirements and normally are awarded grades of I, S, or U.

EGN 1006 Intro to the Engineering Profession 1 hr
EGN 1930 ST: Engineering Concepts & Methods 1 hr
CHM 2046/46L Chemistry Fundamentals II w/Lab 4 hrs
EGR 3110 Engineering Analysis - Statics 3 hrs
EGR 3211 Engineering Analysis - Dynamics 3 hrs
EGR 3311 Mechanics of Materials 3 hrs
EGR 3343 Thermodynamics 3 hrs
EGR 3365 Structure & Properties of Materials 3 hrs
EGR 3613 Engineering Economic Analysis 2 hrs
EGR 3930 ST: Principles of Electrical Engineering 3 hrs
EGR 4624 Engineering Administration 3 hrs
ENV 3001 Intro to Environmental Engineering 3 hrs
STA 3052 Probability & Statistics for Engineers GEP
CWR 3201 Engineering Fluid Mechanics 3 hrs
CWR 4101C Hydrology 3 hrs
CWR 4203C Hydraulics 3 hrs
EES 4111C Biological Process Control 3 hrs
EES 4202C Chemical Process Control 3 hrs
ENV 4120 Air Pollution Control 3 hrs
ENV 4341 Solid Waste Management 3 hrs
ENV 4561 Environmental Engng-Process Design 4 hrs
ENV 4563 Environmental Control Systems 3 hrs

4. Approved Technical Electives (5 hrs)
Technical electives are available in the BSEnvE program to address specific student interests in a variety of technical areas. Students should consult with their assigned academic advisor for a list of the approved technical electives and the terms when specific courses of this type are to be offered.

5. Departmental Graduation Requirements (6 hrs)
- Approved EnvE Design Course I 3 hrs
- Approved EnvE Design Course II 3 hrs
- Earn a graduating GPA of 2.250 in each of the following areas: the Engineering Core and in the EnvE Option, which includes the Major Courses from 3. above and the Approved EnvE Design Courses.

201
EnvE students must take the Engineering Intern Exam during their Senior year.

6. Foreign Language Requirements (0-8 hrs)
Admission: 2 years of one foreign language in high school, or 1 year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
Graduation: None.

7. University Minimum Graduation Requirements
- A 2.000 GPA in all work attempted (both UCF and overall).
- 60 semester hours earned after any CLEP award.
- 48 semester hours of upper division credit completed.
- 32 semester hours of regular courses completed at UCF.
- A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits are permitted.
- Complete the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit (if applicable).

Total Semester Hours Required: 128 hrs

Related Programs: Chemistry, Civil Engineering.

Related Minors: Chemistry, Environmental Studies, Mathematics.

Transfer Notes:
- Courses taken from Community Colleges do not substitute for Upper Division Courses
- Courses transferred must be formally evaluated for equivalency credit. The student must provide all supporting information with his/her petition for this evaluation.

Tentative Course Schedule for Entering Freshmen
The tentative course schedule listed below is a guide for those students who plan on completing their degree in four years. All engineering students should meet with their faculty advisor to develop and maintain an appropriate plan of study.

Environmental Engineering - 128 semester hours required

FIRST YEAR
Fall 14 hrs
*ENC 1101 English Comp I 3
MAC 2281 Calc Sci & Eng I 4
*ECO 2013 or ECO 2023 Economics I, II 3
*SPC 1016 Tech Presentations 3
EGN 1006 Intro to Engr 1

SECOND YEAR
Fall 16 hrs
MAC 2283 Calc Sci & Eng III 4
*CHM 2045 Chemistry Funds I 4
*HUM/AMH/EUH I 3
EGN 3310 Engr Anal-Statics 3
EGN 3613 Eng'ng Econ Anal 2

Summer 9 hrs
*ANT/PSY/SYG or *GEO/GLY/BSC
EGN 3343 Thermodynamics 3
ENV 3001 Intro to Environ Eng 3
Spring 15 hrs
*ENC 1102 English Comp II 3
MAC 2282 Calc Sci & Eng II 4
*PHY 2048/L Phys Engr I w/lab 4
*ANT/PSY/SYG or *GEO/GLY/BSC 3
EGN 1930 ST Eng Cone & Meth 1

THIRD YEAR
Fall 15 hrs
CWR 3201 Engr Fluid Mech 3
EGN 3365 Strctr & Prop Mats 3
EGN 3331 Mech of Materials 3
EGN 3930 ST: Prin Elec Eng 3
STA 3032 Prob/Stats for Eng 3
Spring 15 hrs
CWR 4101C Hydrology 3
CWR 4203C Hydraulics 3
ENV 4120 Air Pollution Contrl 3
*Culture/Historical Elective 3
ENV 4341 Solid/Haz Waste 3

FOURTH YEAR
Fall 13 hrs
ENV 4563 Envrnmntl Cont Sys 3
ENV 4561 Process Design 4
EES 4202C Cheml Proc Control 3
EGN 4624 Engineering Admin 3
Spring 14 hrs
Approved Proj Design Course 3
Approved Proj Design Course 3
EES 4111C Biolgcl Proc Cntr 3
Technical Elective 3
Technical Elective 2

Notes:
1. Courses marked with an asterisk (*) are also available from most Community Colleges and are often part of their Pre-Engineering AA programs. Most of these courses are part of the UCF General Education Program; see the section on the GEP elsewhere in this catalog for further information.
2. EGN 1006 and EGN 1930 are required courses for incoming freshmen only. The credits for these two courses (one hour each) may, with prior approval of the department academic advisor, be moved to the area 4. Approved Technical Electives.
EXCEPTIONAL STUDENT EDUCATION: BACHELOR OF SCIENCE

College of Education
Exceptional Education Department (407) 823-2036
Coordinator: Dr. Martha Lue, ED305, (407) 823-2036,
E-mail: mbell@pegasus.cc.ucf.edu
Web Address: http://pegasus.cc.ucf.edu/~ucfed/

Admission Requirements:
- Have on file in the University admissions office passing scores on all parts of the College Level Academic Skills Test (CLAST) (No alternatives)
- Have on file in the University admissions office a score at or above the 40th percentile on the SAT (950) or ACT (20 enhanced)
- Present an overall GPA of 2.5
- Achieve a "C" or better grade in EDF 4323, Professional Teaching Practices, 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
- Meet any special departmental requirements

Degree Requirements:
- Students should consult with an advisor
- Students must earn at least a "C" in each required Exceptional Education course
- The courses designated in 1 (General Education) and 2 (Common Program Prerequisites) should usually be completed in the first 60 hours.

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural-Historical Foundations 9 hrs
   C. Mathematical Foundations 6 hrs
   Select MAC 1105 College Algebra or MGF 1203 Finite Math
   Select STA 2014 Principles of Statistics
   D. Social Foundations 6 hrs
   Select PSY 2013 Gen. Psychology
   E. Science Foundations 6 hrs
   plus one lab

At least one course taken to meet the natural science requirements in General Education and/or Prerequisites must include a laboratory component.

2. Common Program Prerequisites (22 hrs)
   EDF 2005 Intro to Education 3 hrs
   *EDG 2701 Teaching Diverse Populations 3 hrs
   EME 1040 Intro to Technology 3 hrs
   MAE 2801 Elementary School Math 4 hrs
   - A total of 9 hours in communications, including a speech course (may be completed with the General Education)
   - A total of 9 hours in humanities (may be completed within the General Education)
   - A total of 9 hours of Math with MGF, MGT, MAC, 3 hrs and STA prefixes excluding MAT 1033 and computer courses (6 hours in General Education)
   - A total of 9 hours in the social sciences to include Psychology or human growth and development (6 hours in General Education)
   - A total of 9 hours of natural/physical science including 3 hrs one laboratory component (6 hrs in General Education)
   *In addition to EDG 2701, students must take 6 additional hours with an international or diversity focus. The eligible courses will be determined by the institution in which the student is enrolled for their lower division course work. (These courses must be identified in the college/university catalog.)

3. Education Core Requirements: (9 hrs)
   EDF 4323 Professional Teaching Practices 3 hrs
   EDF 4603 Analysis of Critical Issues in Ed 3 hrs
   EDF 4214 Classroom Learning Principles 3 hrs

4. Internship I Prerequisites (9 hrs)
   A student must have completed the portfolio process for Internship I Satisfactorily before student teaching. The following courses must be taken before registering for Internship I:
   EDF 4323 Professional Teaching Practices 3 hrs
   RED 3012 Basic Found of Reading 3 hrs
   EEX 2010 Intro to Special Ed 3 hrs
   EEX 3241 Methods Academic Skills ExEd 3 hrs

5. Specialization Core Requirements (15 hrs)
   EEX 3102 Lang Dev & Comm Dis 3 hrs
   EEX 3221 Assessment of Ex Students 3 hrs
   EEX 4601 Intro to Behavior Mgmt 3 hrs
   EEX 3243 Tech for Ex Adolescents Adults 3 hrs
   EEX 4753 Parent Professional Collaboration 3 hrs

6. Specialization Area (Choose One) (9 hrs)
   Emotionally Handicapped
   EED 3250 Behavioral Issues of the E H 3 hrs
   EED 4243 Teach Emotionally Handicapped 3 hrs
   EED 4210 Curriculum & Prog Adaptation EH 3 hrs
   Specific Learning Disability (9 hrs)
   ELD 4011 Intro. to Specific Lrning Disab 3 hrs
   LAE 4313 Lang Arts in Elem Schools 3 hrs
   ELD 4242 Program Planning for SLD 3 hrs
   Mentally Handicapped (9 hrs)
   EMR 4011 Intro. to Mental Retardation 3 hrs
   LAE 4314 Lang Arts in Elem Schools 3 hrs
   EMR 4372 Curr Methods & Materials for Retarded Persons 3 hrs

7. Internship I (EEX 3943.01) (6 hrs)

8. Internship II (EEX 4943.04) (12 hrs)
   A student must have completed the portfolio process for Internship II Satisfactorily before student teaching.

9. Electives (w/advisor's approval) (variable)

10. Foreign Language Requirements (0-6 hrs)
    State University System foreign language admission requirement: 2 years in high school or 1 year of college instruction in a single foreign language. (This requirement applies to those students admitted to the University without the required 2 units of foreign language in high school)

11. Departmental Exit Requirements
    Achieve a 2.5 GPA in all courses within the major

12. University Minimum Exit Requirements
    - A 2.0 GPA in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

**Total Semester Hours Required**

120 hours

**Transfer notes:**
- Courses taken at community colleges do not substitute for Upper Division courses
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.
### FILM PRODUCTION/SCREENWRITING: BACHELOR OF ARTS

**College of Arts and Sciences**  
Film, Communication Building, (407) 823-3456  
E-mail: film@ucf.edu  
Mr. Anthony B. Major  
Limited Access program.

#### Admission Requirements
- Students should apply to become Film majors only after completing all requirements for admission.
- Applications to become a Film major are required by January 15 for admission to the subsequent Fall term.
- Attain an overall minimum 2.5 GPA based on a minimum of 36 semester hours of college work before applying. Note: meeting the minimum GPA does not guarantee admission since students are admitted on a space available basis.
- Submission of a 500 to 1000 word essay describing their background, artistic experiences, creative influences, personal objectives, and future career goals.
- Provide a resume, transcripts, and two letters of recommendation.
- Providing a portfolio is optional. If submitted, the portfolio must consist of no more than three samples. Writing samples - maximum 15 pages. Video samples - maximum 10 minutes. Slides, photographs, and storyboards - maximum 3 samples.

#### Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students are required to earn a grade of "B" in all courses used for the major.
- Students should consult with a departmental advisor.
- Departmental Residency Requirement consists of at least 24 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF Film program.
- 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.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

#### 1. UCF General Education Program (36 hrs)
- **A. Communication Foundations**
  - 9 hrs
- **B. Cultural and Historical Foundations**
  - 9 hrs
- **C. Mathematical Foundations**
  - Select _MGF 1203 Finite Mathematics_ (may substitute a higher level math) - 3 hrs
  - Prefer _CGS 1060C Intro to Computer Sci_ - 3 hrs
- **D. Social Foundations**
  - 6 hrs
- **E. Science Foundations**
  - 6 hrs

#### 2. Common Program Prerequisites (6 hrs)
- **FIL 2400** History of the Motion Pictures - 3 hrs
- **FIL 3106** Introduction to Scriptwriting - 3 hrs
- *See Transfer Notes for possible substitutes*

#### 3. Core requirements (24 hrs)
- **FIL 3201C** Introduction to Film Production - 3 hrs
- **FIL 3503** Film Theory and Criticism - 3 hrs
- **FIL 4111C** Intermediate Scriptwriting - 3 hrs
- **FIL 4202C** Intermediate Film Production - 3 hrs
- **FIL 4208** Film Directing - 3 hrs
- **FIL 4607** Film Production Management - 3 hrs

#### 4. Upper level Core requirements (6 hrs)
- Complete both courses within one of the 2 emphasis areas.
- Must complete the Core before taking these courses.
- An area of emphasis must be declared prior to the senior year.

**Production**
- **FIL 4203C** Advanced Film Production - 3 hrs
- **FIL 4211** Post Production Workshop - 3 hrs

**Screenwriting**
- **FIL 4112C** Advanced Scriptwriting - 3 hrs
- **FIL 4113** Scriptwriting Workshop - 3 hrs

#### 5. Restricted Upper Division Elective (12 hrs)
Select from upper level FIL courses designed for majors (excluding core courses)

#### 6. Departmental Exit Requirements
- To avoid delaying graduation, you must request a review of requirements before registering for your last term.
- A student must maintain at least an average GPA of 3.0 in all courses used in the Film major.
- Computer Competency met by FIL 4111C.

#### 7. Foreign Language Requirements (0-8 hrs)
- Admission: Met by graduation requirement
- Graduation: One year college level or equivalent proficiency exam.

#### 8. Electives (variable)
Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

#### 9. University Minimum Exit Requirements
- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted.
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable).

**Total Semester Hours Required**: 120 hours

**Related Programs**: Animation, Art, Creative Writing, Music, Theatre, Radio/TV

**Related Minors**: Art, Creative Writing, Music, Theatre

**Transfer notes**:
- "C" grades from other institutions do not meet departmental requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

**Acceptable Substitutes** for common program prerequisites:
- **FIL 2400**: may substitute FIL 3401 Film History to 1945 plus FIL 3402 Film History 1945 to present.
- **FIL 3106**: may substitute CRW 3410 Writing Scripts or equivalent lower level scriptwriting course.
### Finance: Bachelor of Science in Business Administration

#### Admissions Requirements
- Completion of the UCF General Education Program or an AA degree from a Florida Public Community College
- See Common Program Prerequisites

#### Degree Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
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<tbody>
<tr>
<td>1. UCF General Education Program</td>
<td>36 hrs</td>
</tr>
<tr>
<td>A. Communication Foundations</td>
<td>9 hrs</td>
</tr>
<tr>
<td>B. Cultural and Historical Foundations</td>
<td>9 hrs</td>
</tr>
<tr>
<td>C. Mathematical Foundations</td>
<td>9 hrs</td>
</tr>
<tr>
<td>Select MAC 1105 College Algebra</td>
<td>3 hrs</td>
</tr>
<tr>
<td>Select CGS 2100C Comp Fundamentals for Bus</td>
<td>3 hrs</td>
</tr>
<tr>
<td>D. Social Foundations</td>
<td>3 hrs</td>
</tr>
<tr>
<td>Select ECO 2013 Principles of Economics I</td>
<td>3 hrs</td>
</tr>
<tr>
<td>or ECO 2023 Principles of Economics II</td>
<td>3 hrs</td>
</tr>
<tr>
<td>Select one: PSY 2013, SYG 2000, ANT 2000</td>
<td>3 hrs</td>
</tr>
<tr>
<td>E. Science Foundation</td>
<td>6 hrs</td>
</tr>
</tbody>
</table>

#### 2. Common Program Prerequisites
- ACG 2021 Principles of Financial Accounting
- ACG 2071 Principles of Managerial Accounting
- ECO 2013 Principles of Macroeconomics
- ECO 2023 Principles of Microeconomics
- *MAC 2233 Concepts of Calculus
- *STA 2023 or (QMB 2100) Statistics
- CGS 2100C Computer Fundamentals for Business

*At UCF, students who have completed MAC 2233 and STA 2023 will be waived from ECO 3401. Students who have not completed both classes with a "C" or better must take ECO 3401.

#### 3. Required for All Business Majors

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
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<tbody>
<tr>
<td>(33 hrs)</td>
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<tr>
<td>Common Body of Knowledge</td>
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<tr>
<td>First Semester in the College of Business Administration:</td>
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<tr>
<td>Students must demonstrate competency in micro-computer applications</td>
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<tr>
<td>during their first semester in College of Business Administration courses.</td>
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<tr>
<td>Students who fail to demonstrate competency will not be permitted to</td>
<td></td>
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<tr>
<td>continue enrollment in the business program. Computer competency must be</td>
<td></td>
</tr>
<tr>
<td>met by taking the computer competency exam or by earning a &quot;C&quot; or better in</td>
<td></td>
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<tr>
<td>CGS 2100C or its equivalency.</td>
<td></td>
</tr>
<tr>
<td>GEB 3031 Cornerstone</td>
<td>6 hrs</td>
</tr>
<tr>
<td>ECO 3401 Quantitative Business Tools I</td>
<td>3 hrs</td>
</tr>
<tr>
<td>First or subsequent semesters depending on major:</td>
<td></td>
</tr>
<tr>
<td>BUL 3130 Legal &amp; Ethical Environments of Business</td>
<td>3 hrs</td>
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<tr>
<td>ECO 3411 Quantitative Business Tools II</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FIN 3403 Business Finance</td>
<td>3 hrs</td>
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<tr>
<td>MAN 3025 Management of Organizations</td>
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<tr>
<td>MAN 3504 Quality and Productivity Management</td>
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</tr>
<tr>
<td>MAR 3023 Marketing</td>
<td>3 hrs</td>
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<tr>
<td>Last Semester:</td>
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<tr>
<td>GEB 4361 Business in the International Environment</td>
<td>3 hrs</td>
</tr>
<tr>
<td>MAN 4720 Strategic Management</td>
<td>3 hrs</td>
</tr>
</tbody>
</table>

#### 4. Special College and/or Department Requirements
- Grades of "D" do not transfer into the program and students must have a "C" or better in each common program prerequisites class.
- The Finance Major Curriculum consists of a total of 27 semester hours in addition to FIN 3403. Students are required to earn a grade of "C" or better in FIN 3403 and all other classes taken toward the major and to have a 2.0 overall average.

#### 5. Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 3303</td>
<td>Financial Markets</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FIN 3404</td>
<td>Intermediate Corporate Finance</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FIN 3504</td>
<td>Investment Analysis</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FIN 4453</td>
<td>Financial Models</td>
<td>3 hrs</td>
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</table>

Select two of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 4313</td>
<td>Management of Financial Institutions</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FIN 4324</td>
<td>Commercial Bank Management</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FIN 4514</td>
<td>Portfolio Analysis and Management</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FIN 4503</td>
<td>Speculative Financial Markets</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FIN 4604</td>
<td>International Financial Management</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FIN 4424</td>
<td>Adv Topics in Financial Management</td>
<td>3 hrs</td>
</tr>
<tr>
<td>REE 4303</td>
<td>Real Estate Investment Analysis</td>
<td>3 hrs</td>
</tr>
</tbody>
</table>

#### 6. Restricted Electives

Select three of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 3101</td>
<td>Intermediate Financial Accounting I</td>
<td>3 hrs</td>
</tr>
<tr>
<td>ACG 3111</td>
<td>Intermediate Financial Accounting II</td>
<td>3 hrs</td>
</tr>
<tr>
<td>ACG 3361</td>
<td>Cost Accounting</td>
<td>3 hrs</td>
</tr>
<tr>
<td>ACG 4401</td>
<td>Accounting Systems I</td>
<td>3 hrs</td>
</tr>
<tr>
<td>ECO 4412</td>
<td>Economic Statistics &amp; Econometrics</td>
<td>3 hrs</td>
</tr>
<tr>
<td>ECP 4403</td>
<td>Bus, Government, &amp; Industrial Orgs</td>
<td>3 hrs</td>
</tr>
<tr>
<td>ECP 4603</td>
<td>Urban &amp; Regional Economic Problems</td>
<td>3 hrs</td>
</tr>
<tr>
<td>ECP 4703</td>
<td>Managerial Economics</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FIN 4313</td>
<td>Management of Financial Institutions</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FIN 4324</td>
<td>Commercial Bank Management</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FIN 4503</td>
<td>Speculative Financial Markets</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FIN 4514</td>
<td>Portfolio Analysis and Management</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FIN 4604</td>
<td>International Financial Management</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FIN 4424</td>
<td>Adv Topics in Financial Management</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FIN 4906</td>
<td>Independent Study</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FIN 4941</td>
<td>Internship</td>
<td>3 hrs</td>
</tr>
<tr>
<td>REE 4303</td>
<td>Real Estate Investment Analysis</td>
<td>3 hrs</td>
</tr>
<tr>
<td>REE 4103</td>
<td>Real Estate Appraisal</td>
<td>3 hrs</td>
</tr>
<tr>
<td>REE 4204</td>
<td>Real Estate Finance</td>
<td>3 hrs</td>
</tr>
<tr>
<td>REE 4433</td>
<td>Real Estate Law</td>
<td>3 hrs</td>
</tr>
<tr>
<td>RMI 3011</td>
<td>Principles of Risk and Insurance</td>
<td>3 hrs</td>
</tr>
<tr>
<td>TAX 4001</td>
<td>Federal Income Tax</td>
<td>3 hrs</td>
</tr>
</tbody>
</table>

*No class may be used more than once*

#### 7. Foreign Language Requirements

- Admission: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
- Graduation: None
8. University Minimum Exit Requirements
- A 2.000 GPA in all work attempted (Overall, UCF, COB, Major)
- 60 semester hours earned after any CLEP award
- 48 semester hours of upper division credit completed
- 30 semester hours of coursework completed in residency (last 30 hours) at UCF
- A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Military credit permitted
- Completion of the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit (if applicable)

9. Electives
As necessary to result in 120 total credit hours

***Total Semester Hours Required 120 hours

Community/Junior College Transfer Notes
- Common Program Prerequisites for the State University System for College of Business Administration programs include Financial Accounting, Managerial Accounting, Macroeconomics, Microeconomics, Calculus, Statistics, and a relevant computer class. At UCF Business, students who have completed the calculus and statistics class will be waived from Business Quantitative Tools I. Students who have completed either the calculus or the statistics, but not both, must take Quantitative Tools I.
- Subject to the general grade and residence requirements, credit will be granted for transferred course work equivalent to that required in the UCF Business program. Grades of "D" do not transfer into the program and students must have a "C" or better in each common program prerequisites class.
- ACG X001 and X011 will substitute for ACG 2021 at UCF
- Florida Public Community College students are advised to complete the Associate of Arts degree, to include the general education requirements, the common program prerequisites for the SUS system, and college algebra.
- 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 (junior, senior) course areas and cannot be satisfied with freshman, sophomore level courses.
- A minimum of 12 semester hours must be completed at UCF within each individual major.
- Orientation and advising are two of the most valuable tools that a student can make use of when transferring to UCF. Be sure that you take advantage of both.

FOUR YEAR PLAN OF STUDY - FINANCE

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall 15 hrs</th>
<th>Spring 15 hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101*</td>
<td>3</td>
<td>ENC 1102*</td>
</tr>
<tr>
<td>Cult-Hist I*</td>
<td>3</td>
<td>Cult-Hist II*</td>
</tr>
<tr>
<td>SPC 1600C</td>
<td>3</td>
<td>Art/Music/Lit</td>
</tr>
<tr>
<td>***Elective</td>
<td>3</td>
<td>MAC 1105*</td>
</tr>
<tr>
<td>***Elective</td>
<td>3</td>
<td>CGS 2100C</td>
</tr>
</tbody>
</table>

Must complete 9 hours in a summer semester

<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Fall 15 hrs</th>
<th>Spring 15 hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 2013*</td>
<td>3</td>
<td>ECO 2023*</td>
</tr>
<tr>
<td>ACG 2021*</td>
<td>3</td>
<td>ACG 2071*</td>
</tr>
<tr>
<td>Science</td>
<td>3</td>
<td>Science</td>
</tr>
<tr>
<td>Psy/Soc/Ant</td>
<td>3</td>
<td>***Elective</td>
</tr>
<tr>
<td>***Elective</td>
<td>3</td>
<td>***Elective</td>
</tr>
</tbody>
</table>

* "C" or better grade required in each class
Must complete CLAST requirement

Finance majors must have "C" or better in each class in the major to include FIN 3403 and a 2.0 GPA in major

Transfer students must complete a minimum of twelve (12) hours in Finance at UCF

<table>
<thead>
<tr>
<th>Junior</th>
<th>Fall 15 hrs</th>
<th>Spring 15 hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GEB 3031</strong></td>
<td>6</td>
<td>FIN 3303</td>
</tr>
<tr>
<td>ECO 3401</td>
<td>3</td>
<td>FIN 3404</td>
</tr>
<tr>
<td>MAR 3023</td>
<td>3</td>
<td>ECO 3411</td>
</tr>
<tr>
<td>FIN 3403</td>
<td>3</td>
<td>MAN 3025</td>
</tr>
<tr>
<td>BUL 3130</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Pass Computer Competency Exam in same term Cornerstone completed

<table>
<thead>
<tr>
<th>Senior</th>
<th>Fall 15 hrs</th>
<th>Spring 15 hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 4453</td>
<td>3</td>
<td>MAN 4720</td>
</tr>
<tr>
<td>MAN 3504</td>
<td>3</td>
<td>GEB 4361</td>
</tr>
<tr>
<td>FIN 3504</td>
<td>3</td>
<td>FIN Elective</td>
</tr>
<tr>
<td>~FIN Elective</td>
<td>3</td>
<td>FIN Elective</td>
</tr>
</tbody>
</table>

~Select from required list taught by Finance department

***General electives as required to reach 120 semester hours to include at least 60 semester hours outside the College of Business Administration. Economics courses in the Common Program Prerequisites and the Common Body of Knowledge count toward the 60 hours outside Business Administration.
FOREIGN LANGUAGE COMBINATION: BACHELOR OF ARTS

College of Arts and Sciences
Department of Foreign Languages & Literatures, FA 523
E-mail: foreignlanguage@ucf.edu
Dr. B. H. Decker, (407) 823-2472

Admission Requirements
None

Placement in Language courses
- Placement in Foreign language courses is based on one year of high school language being equivalent to one semester of college work. For example, four years of one high school foreign language place the student in the first semester of the third year.
- Native speakers or students who have received advanced education abroad must substitute select classes.

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Language combinations may consist of French, German or Spanish as a first language and any of those three as a second language, as well as Italian.
- 24 credits in the first language and 15 credits in the second must be taken at the 3000 level or above.
- At least 33 hours must be taken in Foreign Language courses taught in a foreign language.
- Students must earn at least a "C" in each upper division foreign language course.
- Departmental Residency Requirement consists of at least 21 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF Department of Foreign Languages and Literatures.
- Language credit by exam will not be given in courses lower in level than those in which students are presently enrolled. Native speakers will be allowed credit by Examination in literature courses only.
- Students must see their departmental advisor for counseling and schedule approval before registering.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

1. UCF General Education Program (36 hrs)
A. Communication Foundations 9 hrs
B. Cultural and Historical Foundations 9 hrs
C. Mathematical Foundations
   Select MGF 1203 Finite Mathematics 3 hrs
   (may substitute a higher level math)
   Prefer CGS 1060C Intro to Computer Sci 3 hrs
D. Social Foundations 6 hrs
E. Science Foundations 6 hrs

2. Common Program Prerequisites (0-12 hrs)
   Completion of Intermediate level or proficiency.

3. Core requirements-first language (24 hrs)
   (French, German or Spanish)
   Composition (select one)
   SPN 3420* Composition 3 hrs
   FRE 3420* Composition
   GER 3420* Composition
   Oral Communication (select one)
   SPN 3760* Adv Spanish Oral Communication
   FRE 3760* Adv French Oral Communication
   GER 3760* Adv German Oral Communication
   * A native or near-native speaker must substitute an alternate upper-division language course in consultation with a departmental advisor.

   Literature (select one sequence) 6 hrs
   SPW 3100 & 3101 Survey of Spanish Literature
   SPW 3130 & 3131 Survey of Latin American Literature
   FRW 3100 & 3101 Survey of French Literature
   GEW 3100 & 3101 Survey of German Literature
   Linguistics (select one) 3 hrs
   FOL 3730 Romance Philology
   GER 3780 German Phonetics and Diction
   SPN 4801 Spanish Morphosyntax
   SPN 4800 Spanish American Syntax
   SPN 4780 Spanish Phonetics
   Restricted Electives in the first language 9 hrs
   (chosen with departmental advisor)

4. Core requirements-second language (15 hrs)
   (French, German, Spanish, or Italian)
   Composition (select one)
   SPN 3420, FRE 3420, GER 3420, ITA 3420
   Advanced Oral Communication (select one) 3 hrs
   SPN 3760, FRE 3760, GER 3760, or ITA 3760
   Restricted Electives in the second language 9 hrs
   (chosen with departmental advisor)

5. Departmental Exit Requirements
- Earn a grade of "C" or higher in at least 39 hrs of upper division Foreign Language courses
- Students are required to take a departmental exit exam
- Computer Competency met by CGS 1060C or equivalent

6. Foreign Language Requirements (0-16 hrs)
   Admission: Met by Graduation requirements.
   Graduation: Met by degree program requirements (four semesters or proficiency).

7. Electives (variable)
   Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

8. University Minimum Exit Requirements
- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: French, Spanish

Related Minors: French, German, Italian, Judaic Studies, Latin American and Iberian Area Studies, Russian Area Studies, Spanish

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated by the department chair for equivalency credit. The student must provide all supporting information.
FOREIGN LANGUAGE EDUCATION—FRENCH: BACHELOR OF SCIENCE

College of Education
Instructional Programs Department, ED346, (407) 823-2939
Coordinator: Dr. Karen Verkler, ED256, (407) 823-5235,
E-mail: kverkler@pegasus.cc.ucf.edu
Web Address: http://pegasus.cc.ucf.edu/~ucfed/

Admission Requirements:
- have on file in the University admissions office passing scores on all parts of the College Level Academic Skills Test (CLAST) (No alternatives)
- have on file in the University admissions office a score at or above the 40th percentile on the SAT (950) or ACT (20 enhanced)
- present an overall GPA of 2.5
- achieve a “C” or better grade in EDG 4323, Professional Teaching Practices, 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
- meet any special departmental requirements

Degree Requirements:
- Students should see an advisor
- The courses designated in 1 (General Education) and 2 (Common Program Prerequisites) should usually be completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural-Historical Foundations 9 hrs
   C. Mathematical Foundations 6 hrs
   D. Social Foundations 6 hrs
   E. Science Foundations 6 hrs
       plus one lab

At least one course taken to meet the natural science requirements in General Education and/or Prerequisites must include a laboratory component.

2. Common Program Prerequisites (15 hrs)
   EDF 2005 Intro to Education 3 hrs
   *EDG 2701 Teaching Diverse Populations 3 hrs
   EME 1040 Intro to Technology 3 hrs
   FRE 2200 Intermid French Lang & Civ I 3 hrs
   FRE 2201 Intermid French Lang & Civ II 3 hrs

Must demonstrate proficiency by testing or completion of intermediate level courses.
*In addition to EDG 2701, students must take 6 additional hours with an international or diversity focus. The eligible courses will be determined by the institution in which the student is enrolled for their lower division course work. (These courses must be identified in the college/university catalog.)

NOTE: 15 hours of General Program Prerequisites are required for admission to the upper division major and must come from the following areas: courses in elementary and intermediate grammar, composition and conversation; culture and civilization in the target language.

3. Education Core Requirements (9 hrs)
   EDG 4323 Professional Teaching Practices 3 hrs

EDF 4603 Analysis Critical Issues in Education 3 hrs
EDF 4214 Classroom Learning Principles 3 hrs

4. Internship I (ESE 3940) (6 hrs)
   - A student must have completed the portfolio process for Internship I satisfactorily before student teaching.
   - At least 50% of all required foreign language and foreign language methods courses must be completed before doing Internship I.

5. Specialization Requirements (20 hrs)
   FLE 3063 Foreign Lang as Human Behavior 2 hrs
   FLE 4360 Foreign Lang Instructional Analysis 4 hrs
   FLE 4314 Foreign Lang K-6 2 hrs
   FRE 3240 French Composition 3 hrs
   FRE 3244 French Conversation 3 hrs
   FRW 3100 Survey French Lit I 3 hrs
   FRW 3101 Survey French Lit II 3 hrs

6. Upper Division Restricted Electives (12 hrs)
   Select 4 upper division courses in French with advisor’s approval.

7. Other Cognate Requirements (6 hrs)
   LIN 3010 Principles of Linguistics or 3 hrs
   LIN 4440 Sounds & Forms of Language or 3 hrs
   LIN 4801 Language and Meaning 3 hrs
   ANT 2410 Cultural Anthropology 3 hrs

8. Internship II (ESE 4943) (12 hrs)
   - A student must have completed the portfolio process for Internship II Satisfactorily before student teaching.
   - At least 80% of all required foreign language courses and all methods courses must be completed before registering for Internship II.

9. Foreign Language Requirements (0-6 hrs)
   State University System foreign language admission requirement: 2 years in high school or 1 year of college instruction in a single foreign language. (This requirement applies to those students admitted to the University without the required 2 units of foreign language in high school)

10. Electives (to meet 120 hour requirement) Variable

11. Departmental Exit Requirements:
   Achieve a 2.5 GPA in all courses within the major

12. University Minimum Exit Requirements
   - A 2.0 GPA in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Transfer notes:
Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.
FOR FOREIGN LANGUAGE EDUCATION
SPANISH: BACHELOR OF SCIENCE

College of Education
Instructional Programs Department, ED346, (407) 823-2939
Coordinator: Dr. Karen Verkler, ED256, (407) 823-5235,
E-mail: kverkler@pegasus.cc.ucf.edu
Web Address: http://pegasus.cc.ucf.edu/~ucfed/

Admission Requirements
- have on file in the University Admissions Office passing scores on all parts of the College Level Academic Skills Test (CLAST) (No alternatives)
- have on file in the University Admissions Office a score at or above the 40th percentile on the SAT (950) or ACT (20 enhanced)
- present an overall GPA of 2.5
- achieve a “C” or better grade in EDG 4323, Professional Teaching Practices, 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
- meet any special departmental requirements

Degree Requirements
- Students should see an advisor
- The courses designated in 1 (General Education) and 2 (Common Program Prerequisites) should usually be completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural-Historical Foundations 9 hrs
   C. Mathematical Foundations 6 hrs
   D. Social Foundations 6 hrs
   E. Science Foundations 6 hrs
   plus one lab

At least one course taken to meet the Natural Science requirements in General Education and/or Prerequisites must include a laboratory component.

2. Common Program Prerequisites (15 hrs)
   EDF 2005 Intro to Education 3 hrs
   EDG 2701 Teaching Diverse Populations 3 hrs
   EME 1040 Intro to Technology 3 hrs
   SPN 2230 Intro to Spanish Language and Civilization I 3 hrs
   SPN 2231 Intro to Spanish Language and Civilization II 3 hrs

   Must demonstrate proficiency by testing or completion of intermediate level courses.
   *In addition to EDG 2701, students must take 6 additional hours with an international or diversity focus. The eligible courses will be determined by the institution in which the student is enrolled for their lower division course work. (These courses must be identified in the college/university catalog.)

NOTE: 15 hours of General Program Prerequisites are required for admission to the upper division major and must come from the following areas: courses in elementary and intermediate grammar, composition and conversation; culture and civilization in the target language.

3. Education Core Requirements (9 hrs)
   EDG 4323 Professional Teaching Practices 3 hrs

4. Internship I (ESE 3940) (6 hrs)
   - A student must have completed the portfolio process before student teaching.
   - At least 50% of all required foreign language and foreign language methods courses must be completed before registering for Internship I.

5. Specialization Requirements (20 hrs)
   FLE 3063 For Language as Human Behavior 2 hrs
   FLE 4360 For Language Instructional Analysis 4 hrs
   FLE 4314 For Language K-6 2 hrs
   SPN 4410 Advanced Spanish Conversation 3 hrs
   SPN 3420 Spanish Composition 3 hrs
   SPW 3100 Survey Spanish Lit I 3 hrs
   SPW 3101 Survey Spanish Lit II 3 hrs

6. Upper Division Restricted Electives (12 hrs)
   Select 4 upper division courses in Spanish with advisor’s approval.

7. Other Cognate Requirements (6 hrs)
   LIN 3010 Principles of Linguistics or
   LIN 4440 Sounds & Forms of Language or
   LIN 4801 Language and Meaning
   ANT 2410 Cultural Anthropology 3 hrs

8. Internship II (ESE 4943) (12 hrs)
   A student must have completed the portfolio process for Internship II before student teaching.

9. Foreign Language Requirements (0-6 hrs)
   State University System foreign language admission requirement: 2 years in high school or 1 year of college instruction in a single foreign language. (This requirement applies to those students admitted to the University without the required 2 units of foreign language in high school)

10. Electives (to meet 120 hour requirement) Variable

11. Departmental Exit Requirements
   Achieve a 2.5 GPA in all courses within the major

12. University Minimum Exit Requirements
   - A 2.0 GPA in all work attempted (both UCF and overall)
   - 50 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Transfer notes:
Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.
FORENSIC SCIENCE-ANALYSIS TRACK: BACHELOR OF SCIENCE

College of Arts and Sciences
Department of Chemistry, CH 329, (407) 823-6205
E-mail: chemistry@ucf.edu
Dr. B. Fookes

Admission Requirements None

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Departmental Residency Requirement consists of at least 15 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF Department of Chemistry.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

1. UCF General Education Program (38 hrs)
   A. Communication Foundations
   B. Cultural and Historical Foundations
   C. Mathematical Foundations
      Select MAC 2233 Applied Calculus I 3 hrs
      Select STA 2023 Statistical Methods I 3 hrs
   D. Social Foundations
   E. Science Foundations
      Select PHY 2053 College Physics (PR: MAC 1105 and MAC 1114) 4 hrs
      Select BSC 2010C General Biology 4 hrs

2. Common Program Prerequisites (15 hrs)
   BSC 2010C General Biology GEP
   CHM 2045C* Chem Fund I 4 hrs
   CHM 2046 & L Chem Fund II with Lab 4 hrs
   MAC 2253* Applied Calculus I GEP
   MAC 2254* Applied Calculus II 3 hrs
   PHY 2053C* College Physics I GEP
   PHY 2054C* College Physics II 4 hrs

*See Transfer Notes for possible substitutes

3. Core requirements (51 hrs)
   CHM 2210 Organic Chem. I 3 hrs
   CHM 2211 & L Organic Chem II with lab 5 hrs
   CHM 3102C Analytical Chemistry 5 hrs
   COP 2200 Computer Programming 3 hrs
   STA 2023 Statistical Methods I GEP
   CHS 3501 Intro to Forensic Science 3 hrs
   CHS 3505C Forensic Microscopy 3 hrs
   CHS 3530C Foren Anal of Controlled Subs 3 hrs
   CHS 3511C Trace Evidence 3 hrs
   CHS 3595 Foren Sci in the Courtroom 3 hrs
   CHS 3533C Foren Serology: Classical Meth 3 hrs
   CHS 4591 Forensic Science Internship 6 hrs
   CHM 3410 Physical Chemistry I 4 hrs
   CHM 4130C Advanced Analytical Chemistry 4 hrs
   Select one course
   ENC 3211 Theory & Prac Tech Writing
   ENC 3241 Writing for Tech Professional

4. Restricted Electives (12 hrs)
   Select 12 hours
   MCB 3020C General Microbiology

BCH 4053 Biochemistry I
BCH 4054 Biochemistry II
BCH 4103L Biochemical Methods Lab
CHM 3212L Organic Chemistry Lab
CHM 5450 Polymer Chemistry
CHM 5451L Polymer Chemistry Lab
CHM 5235 Molecular Spectroscopy
PCB 3523 Molecular Biology I
PCB 4524 Molecular Biology II
CCJ XXXX Select Criminal Justice courses; (Requires prior approval. Not to exceed 6 hrs)

5. Departmental Exit Requirements
- Achieve at least a "C" GPA (2.0) in all UCF Chemistry courses and an overall 2.0 GPA in all Forensic Science courses used to satisfy this requirement.
- Grades earned in CHM 4930 and CHM 4912 will not be applied in the determination of the Chemistry GPA.
- Computer Competency met by a Computer Science course or by departmental assessment.

6. Foreign Language Requirements (0-8 hrs)
   Admission: 2 years high school, or 1 year college language (or equivalent proficiency exam) prior to graduation.
   Graduation: None

7. Electives (variable)
   Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

8. University Minimum Exit Requirements
- "D" grades from other institutions do not meet departmental requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
- CHM 2045C: may use CHM 1040 plus CHM 1041
- MAC 2253 & 2254: may use MAC 2311 & 2312
- PHY 2053 & 2054: Program admission requirements may permit substitution by Organic Chemistry (CHM 2210 & 2211)

Total Semester Hours Required 128 hours

Related Programs: Chemistry, Forensic Science-Serology Track

Related Minors: Chemistry

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
- CHM 2045C: may use CHM 1040 plus CHM 1041
- MAC 2253 & 2254: may use MAC 2311 & 2312
- PHY 2053 & 2054: Program admission requirements may permit substitution by Organic Chemistry (CHM 2210 & 2211)
FORENSIC SCIENCE-SEROLOGY TRACK: BACHELOR OF SCIENCE

College of Arts and Sciences
Department of Chemistry, CH 223, (407) 823-0163
E-mail: chemistry@ucf.edu

Dr. J. Ballantyne

Admission Requirements: None

Degree Requirements:
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Departmental Residency Requirement consists of at least 15 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF Department of Chemistry.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

1. UCF General Education Program (38 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural and Historical Foundations 9 hrs
   C. Mathematical Foundations
      - Select MAC 2233 Applied Calculus I 3 hrs
      - Select STA 2023 Statistical Methods I 3 hrs
   D. Social Foundations 6 hrs
   E. Science Foundations
      - Select PHY 2053 College Physics (PR:MAC 1103 and MAC 1114) 4 hrs
      - Select BSC 2010C General Biology 4 hrs

2. Common Program Prerequisites (15 hrs)
   BSC 2010C General Biology GEP
   CHM 2045C* Chem Fund I 4 hrs
   CHM 2046 & L Chem Fund II with lab 4 hrs
   MAC 2233* Applied Calculus I GEP
   MAC 2254* Applied Calculus II 3 hrs
   PHY 2053C* College Physics I GEP
   PHY 2054C* College Physics II 4 hrs
   *See Transfer Notes for possible substitutes

3. Core requirements (40 hrs)
   CHM 2210 Organic Chem. I 3 hrs
   CHM 2211 & L Organic Chem. II with lab 5 hrs
   CHM 3120C Analytical Chemistry 5 hrs
   COP 2200 Computer Programming 3 hrs
   STA 2023 Statistical Methods I GEP
   CHS 3501 Intro to Forensic Science 3 hrs
   CHS 3505C Forensic Microscopy 3 hrs
   CHS 3530C Foren Anal of Controlled Subs 3 hrs
   CHS 3511C Trace Evidence 3 hrs
   CHS 3595 Foren Sci in the Courtroom 3 hrs
   CHS 3533C Foren Serology: Classical Meth 3 hrs
   CHS 4591 Forensic Science Internship 6 hrs

4. Required courses (32 hrs)
   MCB 3020C General Microbiology 5 hrs
   BCH 4034 Biochemistry I 3 hrs
   BCH 4054 Biochemistry II 3 hrs
   PCB 3233 & L Immunology and Lab 4 hrs
   BCH 4103L Biochemical Methods Lab 2 hrs
   PCB 3523 Molecular Biology I 3 hrs
   PCB 4524 Molecular Biology II 3 hrs
   BSC 3404C Quantitative Biological Methods 3 hrs
   CHS 4534 Foren Serology: Molec Methods 3 hrs
   PCB 3063 Genetics 3 hrs

5. Departmental Exit Requirements:
   - Achieve at least a "C" GPA (2.0) in all UCF Chemistry courses and an overall 2.0 GPA in all Forensic Science courses used to satisfy this requirement.
   - Grades earned in CHM 4930 and CHM 4912 will not be applied in the determination of the Chemistry GPA.
   - Computer Competency met by a Computer Science course or by departmental assessment.

6. Foreign Language Requirements (0-8 hrs)
   Admission: 2 years high school, or 1 year college language (or equivalent proficiency exam) prior to graduation.
   Graduation: none

7. Electives (variable)
   Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

8. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted.
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable).

Total Semester Hours Required: 128 hours

Related Programs: Chemistry, Forensic Science-Analyses Track

Related Minors: Chemistry

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
- CHM 2045C*: may use CHM 1040 plus CHM 1041
- MAC 2253* & 2254*: may use MAC 2311 & 2312.
- PHY 2053* & 2054*: Program admission requirements may permit substitution by Organic Chemistry (CHM 2210 & 2211)

Related Departmental Programs:
- Forensic Science- Chemistry
- Forensic Science- Genetic Track
- Forensic Science- Nicholas Institute Program
- Forensic Science- Evidence Track
- Forensic Science- Analysis Track

Degree requirements:
- A 2.0 GPA (2.0) in all upper level courses attempted (both UCF and overall)
- A minimum of 128 semester hours
- A 3.0 GPA (2.0) in all Forensic Science courses used to satisfy this requirement.
# FRENCH: BACHELOR OF ARTS

**College of Arts and Sciences**  
**Department of Foreign Languages & Literatures**  
FA 523, E-mail: foreignlanguage@ucf.edu  
Dr. B. H. Decker, (407) 823-2472

## Admission Requirements
None

### Placement in Language courses
- Placement in Foreign Language courses is based on one year of high school language being equivalent to one semester of college work. For example, four years of high school French place the student in the first semester of the third year.
- Native speakers, or students who have received advanced education in French-speaking societies, may not take lower division French courses. They must substitute Third-year level composition and conversation courses.

### Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- 36 credits in French must be taken at the 3000 level or above
- At least 6 of the 36 French credits must be at the 4000 level
- At least 30 hours must be taken in Foreign Language courses taught in French
- Students must earn at least a "C" in each upper division French course
- Departmental Residency Requirement consists of at least 18 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF Department of Foreign Languages and Literatures
- Language credit by exam will not be given in courses lower in level than those in which students are presently enrolled. Native speakers will be allowed Credit by Examination in literature courses only.
- Students must see their advisor to obtain proper counseling and have their schedule approved before registering for courses in their major
- Courses designated in 1 (Gen Ed Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

## 1. UCF General Education Program (36 hrs)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Communication Foundations</td>
<td>9 hrs</td>
</tr>
<tr>
<td>B. Cultural and Historical Foundations</td>
<td>9 hrs</td>
</tr>
<tr>
<td>C. Mathematical Foundations</td>
<td>3 hrs</td>
</tr>
<tr>
<td>Select MGF 1203 Finite Mathematics (may substitute a higher level math)</td>
<td>3 hrs</td>
</tr>
<tr>
<td>Prefer CGS 1060C Intro to Computer Sci</td>
<td>3 hrs</td>
</tr>
<tr>
<td>D. Social Foundations</td>
<td>6 hrs</td>
</tr>
<tr>
<td>E. Science Foundations</td>
<td>6 hrs</td>
</tr>
</tbody>
</table>

## 2. Common Program Prerequisites (0-14 hrs)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 1120*</td>
<td>4 hrs</td>
</tr>
<tr>
<td>FRE 1121*</td>
<td>4 hrs</td>
</tr>
<tr>
<td>FRE 2200*</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FRE 2201*</td>
<td>3 hrs</td>
</tr>
<tr>
<td>* May be met by proficiency test or completion of FRE 2201</td>
<td></td>
</tr>
</tbody>
</table>

## 3. Core requirements (18 hrs)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 3420*</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FRE 3760*</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FRW 3100</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FRW 3101</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FRE 4780*</td>
<td>3 hrs</td>
</tr>
<tr>
<td>FOL 3730</td>
<td>3 hrs</td>
</tr>
</tbody>
</table>

* A native or near-native French speaker must substitute alternate upper-division French courses in consultation with a departmental advisor.

## 4. Upper Division Restricted Electives (18 hrs)

- French literature beyond the survey level (taught in French)
- French courses

## 5. Departmental Exit Requirements
- Earn a grade of "C" or higher in at least 36 hours of upper division French courses
- Students are required to take a departmental exit exam
- Computer Competency met by CGS 1060C or equivalent

## 6. Foreign Language Requirements (0-16 hrs)

### Admission:
Met by Graduation requirements.

### Graduation:
Met by Common Program Prerequisites.

### 7. Electives Variable
Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

## 8. University Minimum Exit Requirements
- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

### Total Semester Hours Required
120 hours

### Related Programs:
- Spanish, Foreign Language Combination

### Related Minors:
- French, German, Italian, Judaic Studies, Latin American and Iberian Area Studies, Russian Area Studies, Spanish

### Transfer notes:
- "D" grades from other institutions do not meet departmental requirements
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated by the department chair for equivalency credit. The student must provide all supporting information.
GENERAL BUSINESS: BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

Faculty Advisor: B. Moore, BA 325, (407) 823-5256

Admission Requirements

- Completion of the UCF General Education program or an AA degree from a Florida Public Community College
- See Common Program Prerequisites

Degree Requirements

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural and Historical Foundations 9 hrs
   C. Mathematical Foundations
      Select MAC 1105 College Algebra 3 hrs
      Select CGS 2100C Computer Fundamentals for Bus 3 hrs
   D. Social Foundations
      Select ECO 2013 Principles of Economics I or ECO 2023 Principles of Economics II 3 hrs
      or
      Select one: PSY 2013, SYG 2000, ANT 2000 3 hrs
   E. Science Foundation 6 hrs

2. Common Program Prerequisites
   ACG 2021 Principles of Financial Accounting
   ACG 2071 Principles of Managerial Accounting
   ECO 2013 Principles of Economics I
   ECO 2023 Principles of Economics II
   *MAC2233 Concepts of Calculus
   *STA2023 (or QMB2100) Statistics
   CGS 2100C Computer Fundamentals for Business
   *At UCF, students who have completed MAC2233 and STA2023 will be waived from ECO3401. Students who have not completed both classes with a "C" or better must take ECO3401.

3. Required for All Business Majors (33 hrs)
   First Semester in the College of Business Administration:
   Students must demonstrate competency in micro-computer applications during their first semester in College of Business Administration courses. Students who fail to demonstrate competency will not be permitted to continue enrollment in the business program. Computer competency can be met by taking the computer competency exam or by earning a "C" or better in CGS 2100C or its equivalency.
   GEB 3031 Cornerstone 6 hrs
   ECO 3401 Quantitative Business Tools I 3 hrs
   First or subsequent semesters depending on major:
   BUL 3130 Legal & Ethical Environments of Business 3 hrs
   ECO 3411 Quantitative Business Tools II 3 hrs
   FIN 3403 Business Finance 3 hrs
   MAN 3025 Management of Organizations 3 hrs
   MAN 3504 Quality and Productivity Management 3 hrs
   MAR 3023 Marketing 3 hrs
   Last Semester:
   GEB 4361 Business in the International Environment 3 hrs
   MAN 4720 Strategic Management 3 hrs

4. Special college and/or department requirements:
   - Grades of "D" do not transfer into the program and students must have a "C" or better in each common program prerequisites class.
   - Students wanting to major in General Business must apply for admission to the major
   - Within the College of Business Administration the first day of class is mandatory.
   - Final exams will be given during Exam Week.
   - A transfer student to this program must take a minimum of twelve (12) semester hours in the major at UCF.

5. Two (2) additional upper level courses beyond the Common Body of Knowledge:
   One in Finance (FIN prefix) and one in Marketing (MAR prefix). The one (1) required Finance course must be one of the four courses listed below. One or more of the remaining three courses in the list can be selected as restricted electives for students majoring in General Business. Other upper level Finance courses are also available as restricted electives for those students that would like to specialize in investments, corporate finance, institutions, or real estate. Please see a Finance Department advisor. (FIN 3403 is prerequisite for these four classes.)
   - FIN 3303 Financial Markets
   - FIN 3404 Intermediate Corporate Finance
   - FIN 3453 Financial Models
   - FIN 3504 Investment Analysis

6. Restricted Electives: A minimum of seven (7) additional upper level courses from at least three (3) different departments (Accounting, may not use BUL 3320 Business Law I or BUL 3321 Business Law II, Economics, Finance, Hospitality Management, Management, Marketing) taught by the College of Business Administration.

7. Students wishing to complete the General Business major as a second major within the College of Business Administration must complete 24 hours in the second major beyond the courses required for the first major.

8. Foreign Language Requirements (0-8 hrs)
   Admission: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
   Graduation: None

9. University Minimum Exit Requirements
   - A 2.000 GPA in all work attempted (Overall, UCF, COB, Major)
   - 60 semester hours earned after any CLEP award
   - 48 semester hours of upper division credit completed
   - 30 semester hours of coursework completed in residency (last 30 hours) at UCF
   - A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Military credit permitted
   - Completion of the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit (if applicable)

10. Electives
    As necessary to result in 120 total credit hours

***Total Semester Hours Required 120 hours

Community/Junior College Transfer Notes
- Common Program Prerequisites for the State University System for College of Business Administration programs include Financial Accounting, Managerial Accounting, Macroeconomics, Microeconomics, Calculus, Statistics, and a relevant computer class. At UCF Business, students who have completed the calculus and statistics class will be waived from Business
Quantitative Tools I. Students who have completed either the calculus or the statistics, but not both, must take Quantitative Tools I.

- Subject to the general grade and residence requirements, credit will be granted for transferred course work equivalent to that required in the UCF Business program. Grades of "D" do not transfer into the program and students must have a "C" or better in each common program prerequisites class.
- ACG X001 and X011 will substitute for ACG 2021 at UCF
- Florida Public Community College students are advised to complete the Associate of Arts degree, to include the general education requirements, the common program prerequisites for the SUS system, and college algebra.
- 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 (junior, senior) course areas and cannot be satisfied with freshman, sophomore level courses.
- A minimum of 12 semester hours must be completed at UCF within each individual major.
- Orientation and advising are two of the most valuable tools that a student can make use of when transferring to UCF. Be sure that you take advantage of both.

FOUR YEAR PLAN OF STUDY - GENERAL BUSINESS

Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>15 hrs</th>
<th>Spring</th>
<th>15 hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101*</td>
<td>3</td>
<td>ENC 1102*</td>
<td>3</td>
</tr>
<tr>
<td>Cult-Hist I*</td>
<td>3</td>
<td>Cult-Hist II*</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1600C</td>
<td>3</td>
<td>Art/Music/Lit</td>
<td>3</td>
</tr>
<tr>
<td>***Elective</td>
<td>3</td>
<td>MAC 1105*</td>
<td>3</td>
</tr>
<tr>
<td>***Elective</td>
<td>3</td>
<td>CGS 2100C</td>
<td>3</td>
</tr>
</tbody>
</table>

Must complete 9 hrs in a summer semester.

Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>15 hrs</th>
<th>Spring</th>
<th>15 hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 2013*</td>
<td>3</td>
<td>ECO 2023*</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2021*</td>
<td>3</td>
<td>ACG 2071*</td>
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<td>Science</td>
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<td>3</td>
</tr>
<tr>
<td>Psy/Soc/Ant</td>
<td>3</td>
<td>***Elective</td>
<td>3</td>
</tr>
<tr>
<td>***Elective</td>
<td>3</td>
<td>***Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

* "C" or better grade required in each class.
Must complete CLAST requirement.

Transfer students must complete a minimum of twelve (12) hours in Business at UCF.

- Select from list in catalog.

Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>15 hrs</th>
<th>Spring</th>
<th>15 hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>**GEB 3031</td>
<td>6</td>
<td>ECO 3411</td>
<td>3</td>
</tr>
<tr>
<td>ECO 3401</td>
<td>3</td>
<td>~FIN Elective</td>
<td>3</td>
</tr>
<tr>
<td>MAR 3023</td>
<td>3</td>
<td>MAR Elective</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3403</td>
<td>3</td>
<td>MAN 3025</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BUL 3130</td>
<td>3</td>
</tr>
</tbody>
</table>

**Pass Computer Competency Exam in same term Cornerstone completed.

BUS Electives must be selected from at least three (3) different departments in the College of Business.

Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>15 hrs</th>
<th>Spring</th>
<th>15 hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS Elective</td>
<td>3</td>
<td>MAN 4720</td>
<td>3</td>
</tr>
<tr>
<td>MAN 3504</td>
<td>3</td>
<td>GEB 4361</td>
<td>3</td>
</tr>
<tr>
<td>BUS Elective</td>
<td>3</td>
<td>BUS Elective</td>
<td>3</td>
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<tr>
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<td>3</td>
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<tr>
<td>BUS Elective</td>
<td>3</td>
<td>BUS Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

***General electives as required to reach 120 semester hours to include at least 60 semester hours outside the College of Business Administration. Economics courses in the Common Program Prerequisites and the Common Body of Knowledge count toward the 60 hours outside Business Administration.
GENERAL STUDIES TRACK: BACHELOR OF ARTS OR BACHELOR OF SCIENCE

College of Arts and Sciences
Liberal Studies Program, FA 207A
E-mail: generalstudies@ucf.edu
Dr. Donald E. Jones, (407) 823-0144

The General Studies Track is a university-wide program leading to either the Bachelor of Arts or the Bachelor of Science in Liberal Studies, depending on the majority of course areas selected.

The program is administered through the College of Arts and Sciences and is designed for general studies education and academic flexibility. It recognizes that there are many combinations of courses which meet the needs of individual students.

Admission Requirements None

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students must earn at least a "C" in each required course
- Students should consult with a departmental advisor
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural and Historical Foundations 9 hrs
   C. Mathematical Foundations 6 hrs
      Select MGF 1203 Finite Mathematics (may substitute a higher level math) 3 hrs
      Select CGS 1060C Intro to Computer Sci or STA 2014 Principles of Statistics (may substitute a higher level computer science or statistics course) 3 hrs
   D. Social Foundations 6 hrs
   E. Science Foundations 6 hrs

2. Common Program Prerequisites (0 hrs)
   None

3. Restricted Electives (36 hrs)
   - Students must complete two different subject area concentrations from those specified below
   - Students must take a minimum of 18 hours of approved courses in each selected subject area (excluding GEP courses).
   - Students are strongly encouraged to take upper level courses in each area

   Arts
   Art, Music, or Theatre

   Behavioral and Social Sciences
   Anthropology, Psychology, Sociology, Political Science, Economics, Social Work

   Biological Sciences

   Business Administration

   Communication

   Computer Science

   Education

   Engineering

   Health

   Humanities
   History, Philosophy, Humanities, Judaic Studies, or Religious studies

   Languages
   Letters
   English, Foreign Literature, or Comparative Literature

   Mathematical Sciences
   Mathematics and Statistics

   Physical Sciences
   Astronomy, Chemistry, Forensic Science, Physical Geography, Geology, Physics, or Meteorology

   Public Affairs

5. Required Minor (18 hrs minimum)
   Student must complete a minor from those offered at UCF.

6. Program Exit Requirements
   - A minimum GPA of 2.0 is required for all courses taken in each of the subject areas and minor
   - Computer Competency met by appropriate courses or departmental exam

7. Foreign Language Requirements (0-8 hrs)
   Admission-BA: Met by graduation requirement
   Admission-BS: 2 years high school, or 1 year college language (or equivalent proficiency exam) prior to graduation.
   Graduation-BA: One year or equivalent proficiency exam.
   Graduation-BS: One semester or equivalent proficiency exam, or one course with a multicultural dimension

8. Electives (variable)
   Select primarily from upper level courses, with departmental advisor’s approval. May be outside of the department.

9. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Liberal Arts Track

Related Minors: All minors

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.
The industry is facing a severe shortage of qualified people to work in the broad area of Information Technology (IT). Computer Science is only a small fraction of this IT umbrella; it includes computer application development, system administration, network administration, database administration, etc.

This GS-CIT track fills the gap between the fully accredited degree program in Computer Science which emphasizes the scientific aspects of computing, and the needs of the IT industry for people with skills in broader areas of information technology.

By housing this track within General Studies, students can accentuate those areas of computer information and application, while deemphasizing the mathematical and physical science components of Computer Science.

The program is administered through the College of Arts and Sciences and is designed for academic flexibility. It recognizes that there are many combinations of courses which meet the needs of individual students.

Admission Requirements None

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students must earn at least a "C" in each required course
- Students should consult with departmental advisors within both the Liberal Studies program and Computer Science.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural and Historical Foundations 9 hrs
   C. Mathematical Foundations 6 hrs
   D. Social Foundations 6 hrs
   E. Science Foundations 6 hrs

2. Common Program Prerequisites (0 hrs)
   None

3. Required Minor in CIT (36 hrs)
   - Students must complete a minor in Computer Information Technology (CIT). See the CIT minor for requirements.

4. Restricted Electives (18 hrs)
   - Students must complete a minimum of 18 hours of approved courses in each selected subject area (excluding GEP courses).
   - Students are strongly encouraged to take upper level courses in each area

Arts
- Art, Music, or Theatre

Behavioral and Social Sciences
- Anthropology, Psychology, Sociology, Political Science, Economics, Social Work

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Total Semester Hours Required 120 hours

Related Programs: Computer Science, Liberal Arts Track
Related Minors: All minors
HEALTH INFORMATION MANAGEMENT: BACHELOR OF SCIENCE

College of Health and Public Affairs
Trailer 534  (407) 823-2353
Undergraduate Program Director: Carol Barr
E-mail: barr@pegasus.cc.ucf.edu
Web Address: http://www.cohpa.ucf.edu/health.pro/

Admission Requirements - LIMITED ACCESS
Acceptance to the university does not necessarily constitute admission to the upper division health information management program.
>- SEPARATE APPLICATION to the limited access program must be made directly to the program prior to February 1 of the year admission is sought
>- UCF application must also be submitted by the program deadline of February 1st
>- Student must complete all general education, foreign language admissions, and program prerequisites prior to the start of the program
>- All applicants must have a minimum overall GPA of 2.50 and complete all program prerequisite courses with at least a grade of "C" (No CLEP, TSD or AP credit may be used for prerequisite courses)

Degree Requirements
>- Students should complete the General Education Program, Foreign Language Admissions and the Common Program Prerequisites Requirements before transferring within the Florida Public University/Community College System
>- Students should consult with a departmental advisor
>- The courses designated in sections 1 and 2 below may be taken at a Florida Community College, and should usually be completed in the first 60 hours
>- A minimum overall GPA of 2.5 and a minimum grade of "C" in prerequisite and major courses is required for admission to, continuation in, and graduation from the Health Information Program
>- UCF Residency Requirement: 31 hours
>- The courses designated in sections 1 (General Education) and 2 (Common Program Prerequisites) should usually be completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural Historical Foundations 9 hrs
   C. Mathematical Foundations 6 hrs
     Select MAC 1105
     Select C 1060C and STA 2014
   D. Social Foundations 6 hrs
   E. Science Foundations 6 hrs
     Select BSC 2010C
     Select CHM 1032

2. Common Program Prerequisites (17 hrs)
   ZOO 3733C Human Anatomy* 4 hrs
   PCB 3703C Human Physiology* 4 hrs
   STA 2014 Statistics GEP
   CGS 2100C Computer Science for Business* 3 hrs
   ACG 2021 Principles of Financial Accounting 3 hrs
   ACG 2071 Principles of Managerial Accounting 3 hrs
   * see transfer notes

3. Core Requirements (68 hrs)
   APB 3600 Introduction to Pharmacology 3 hrs
   COM 3110 Business and Professional Communications 3 hrs
   HSA 3170 Health Care Finance 3 hrs
   HSA 4193 Health Care Automation 3 hrs
   HSA 4700 Intro to Research in Health Prof 3 hrs
   HSC 3531 Medical Terminology 3 hrs
   HSC 3640 Health Law 3 hrs
   HSC 4550 Pathophysiologic Mechanisms 3 hrs
   MAN 3025 Management of Organizations 3 hrs
   MRE 3000 Foundations of Health Information Management 4 hrs
   MRE 3110C Health Record Organization & Management 4 hrs
   MRE 3800L Professional Practice Exp. I 2 hrs
   MRE 3810L Professional Practice Exp. II 2 hrs
   MRE 4202 Coding Procedures I 4 hrs
   MRE 4203 Coding Procedures II 3 hrs
   MRE 4304 Professional Development Issues in Health Information Management 3 hrs
   MRE 4312C Health Information Department Management 4 hrs
   MRE 4500 Performance Improvement 3 hrs
   MRE 4830L Professional Practice Exp. III 2 hrs
   MRE 4832L Professional Practice Exp. IV 2 hrs
   MRE 4835 Management Affiliation 5 hrs
   MRE 4218 Health Information Management Systems 3 hrs

4. Upper Division Restricted Electives None

5. Departmental Exit Requirements (120 hrs)
   A 2.5 overall GPA is required for graduation.
   Upon completion of the approved program, the student is eligible to submit an application for writing the national registration examination administered by the American Health Information Management Association to qualify as a Registered Record Administrator.

6. Electives None

7. Foreign Language Requirements (0-8 hrs)
   Admissions: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
   Graduation: None

8. University Minimum Exit Requirements (120 hrs)
   -> A "C" GPA (2.0) in all work attempted (both UCF and overall)
   -> 60 semester hours earned after CLEP awarded
   -> 48 semester hours of upper division credit completed
   -> 30 semester hours in regular courses completed at UCF
   -> A maximum of 45 hrs of extension, correspondence, CLEP, credit by Exam and Armed Forces credits permitted
   -> Complete the General Education Program, the Gordon Rule, the CLAST and 9 hrs of Summer credit (if applicable)

Related Programs: Health Services Administration, Business, Computer Science

Related Minors: Health Services Administration, Business, Computer Science
Transfer Notes:
Community College Equivalents:
Human Anatomy & Physiology I & II (BSC X085 and X086) 8
Statistics (STA 2014 or any other statistics course) 3
Computer Science for Business (CGS 1060 or any other computer science course) 3

Tentative Course Schedule for Entering Freshmen

<table>
<thead>
<tr>
<th></th>
<th>Freshman Year*</th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall</td>
<td>Freshman</td>
<td>Spring</td>
</tr>
<tr>
<td></td>
<td>14 hrs</td>
<td>16 hrs</td>
<td></td>
</tr>
<tr>
<td>ENC 1101</td>
<td>3</td>
<td>ENC 1102</td>
<td>3</td>
</tr>
<tr>
<td>CHM 1032</td>
<td>3</td>
<td>STA 2014</td>
<td>3</td>
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<tr>
<td>HSC 2000</td>
<td>2</td>
<td>BSC 2010C</td>
<td>4</td>
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<tr>
<td>MAC 1105</td>
<td>3</td>
<td>EUH 2000 or HUM 2211</td>
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<tr>
<td>PSY 2013 or SYG 2000</td>
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<td>or AMH 2010</td>
<td>3</td>
</tr>
<tr>
<td>or ANT 2000</td>
<td></td>
<td>POS 2041 or ECO 2013</td>
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</tr>
</tbody>
</table>

*Plan your required 9 summer hours into your course of study

<table>
<thead>
<tr>
<th></th>
<th>Sophomore Year</th>
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<tbody>
<tr>
<td></td>
<td>Fall</td>
<td>13 hrs</td>
<td>Spring</td>
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<td></td>
<td></td>
<td>13 hrs</td>
<td></td>
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<tr>
<td>ACG 2021</td>
<td>3</td>
<td>ACG 2071</td>
<td>3</td>
</tr>
<tr>
<td>ZOO 3733C</td>
<td>4</td>
<td>PCB 3703C</td>
<td>4</td>
</tr>
<tr>
<td>EUH 2001 or HUM 2230</td>
<td>3</td>
<td>SPC 1600C</td>
<td>3</td>
</tr>
<tr>
<td>or AMH 2020</td>
<td></td>
<td>One Course: ARH 2050</td>
<td>3</td>
</tr>
<tr>
<td>CGS 2100C</td>
<td>3</td>
<td>ARH 2051, MUL 2010, 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>THE 1020, REL 2300, PHI 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2010, LIT 2110, LIT 2120</td>
<td>3</td>
</tr>
<tr>
<td>Summer</td>
<td>8 hrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Foreign Lang I)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Foreign Lang II)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| if not satisfied in high school

|                      | Junior Year    |          |          |
|                      | Fall           | 15 hrs   | Spring   |
|                      |                | 13 hrs   |          |
| HSA 4193**           | 3              | MRE 4202 | 4        |
| HSC 4550**           | 3              | MRE 3110 | 4        |
| MRE 3000             | 4              | MRE 3810L| 2        |
| MRE 3800L            | 2              | APB 3600 | 3        |
| HSC 3531**           | 3              |          |          |
| Summer               | 8 hrs          |          |          |
| MAN 3025**           | 3              |          |          |
| MRE 4830L            | 2              |          |          |
| HSC 3640**           | 3              |          |          |

|                      | Senior Year    |          |          |
|                      | Fall           | 12 hrs   | Spring   |
|                      |                | 14 hrs   |          |
| MRE 4312             | 3              | MRE 4304 | 3        |
| HSA 3170**           | 3              | MRE 4218 | 3        |
| MRE 4500             | 3              | MRE 4832L| 2        |
| MRE 4203             | 3              | HSA 4700**| 3 |
|                      |                | COM 3110**| 3 |
| Sumemr               | 5 hrs          |          |          |
| MRE 4835             | 5              |          |          |

**NOTE: The asterisked courses may be taken at any time during the two years. The MRE courses are offered only during the semester in which they appear on this schedule and are restricted to majors only.
### Health Sciences - Athletic Training Track: Bachelor of Science

**College of Health and Public Affairs**  
TR 544  
(407) 823-3470  
Undergraduate Program Director: Vincent Hudson  
E-mail: vhudson@pegasus.cc.ucf.edu  
Web Address: http://www.cohpa.ucf.edu/health.pro/

**Admission Requirements**  
None

**Degree Requirements**

- Students should complete the General Education Program and the Common Program Prerequisites before transferring within the Florida Public University/Community College System
- Students should consult with a departmental advisor
- The courses designated in sections 1 and 2 below may be taken at a Florida Community College, and should usually be completed in the first 60 hours
- Students must earn at least a "C" in each required course
- UCF Residency Requirement: 30 hours
- The courses designated in sections 1 (General Education) and 2 (Core Requirements) should usually be completed in the first 60 hours
- Students may only begin the athletic training program track in the fall semester and must have:
  A. Acceptance to the University as an undergraduate student in Health Sciences.
  B. A minimum 3.0 overall grade point average.
  C. Completion of an AA degree from a Florida Community College; or completion of UCF's General Education Program.

#### 1. UCF General Education Program

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>A. Communication Foundations</td>
<td>9 hrs</td>
<td></td>
</tr>
<tr>
<td>B. Cultural Historical Foundations</td>
<td>9 hrs</td>
<td></td>
</tr>
<tr>
<td>C. Mathematical Foundations</td>
<td>6 hrs</td>
<td></td>
</tr>
<tr>
<td>Select MAC 1105</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select STA 2014 or 2023</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Social Foundations</td>
<td>6 hrs</td>
<td></td>
</tr>
<tr>
<td>Select POS 2041</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select PSY 2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Science Foundations</td>
<td>6 hrs</td>
<td></td>
</tr>
<tr>
<td>BSC 2010C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHM 2045</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**2. Core Requirements**

The following courses are required before entering the professional phase of the athletic training program. These 20 hours of required courses must have a grade of "C" or better.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BSC 2010C</td>
<td>General Biology I and Lab</td>
<td>GEP</td>
</tr>
<tr>
<td>ZOO 3733C</td>
<td>Human Anatomy</td>
<td>4 hrs</td>
</tr>
<tr>
<td>PCB 3703C</td>
<td>Human Physiology</td>
<td>4 hrs</td>
</tr>
<tr>
<td>CHM 2045</td>
<td>General Chemistry I</td>
<td>GEP</td>
</tr>
<tr>
<td>PHY 2053</td>
<td>Coll Physics I (algebra based)</td>
<td>4 hrs</td>
</tr>
<tr>
<td>PHY 2048</td>
<td>University Physics I (calculus based)</td>
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**3. Professional Phase**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PET 3620C</td>
<td>Principles of Athletic Training</td>
<td>3 hrs</td>
</tr>
<tr>
<td>PET 3670C</td>
<td>Practicum in Athletic Training I</td>
<td>4 hrs</td>
</tr>
<tr>
<td>PET 4351</td>
<td>App Exercise and Human Phys</td>
<td>3 hrs</td>
</tr>
<tr>
<td>PET 3623C</td>
<td>Art &amp; Science Athletic Training I</td>
<td>3 hrs</td>
</tr>
<tr>
<td>PET 3671C</td>
<td>Practicum in Athletic Training II</td>
<td>4 hrs</td>
</tr>
<tr>
<td>PET 4660C</td>
<td>Org and Adm in Athletic Training</td>
<td>3 hrs</td>
</tr>
<tr>
<td>PET 4630C</td>
<td>Ther Exercise in Athletic Training</td>
<td>4 hrs</td>
</tr>
<tr>
<td>PET 4632C</td>
<td>Ther Mod in Athletic Training</td>
<td>4 hrs</td>
</tr>
<tr>
<td>PET 4624C</td>
<td>Art &amp; Sci of Athletic Training II</td>
<td>3 hrs</td>
</tr>
<tr>
<td>PET 4315C</td>
<td>Biomechanics of Sport</td>
<td>3 hrs</td>
</tr>
<tr>
<td>PET 4672C</td>
<td>Practicum in Athletic Training II</td>
<td>4 hrs</td>
</tr>
<tr>
<td>HSA 4700</td>
<td>Health Science Research</td>
<td>3 hrs</td>
</tr>
<tr>
<td>PET 4606</td>
<td>App Fitness in Sport</td>
<td>3 hrs</td>
</tr>
<tr>
<td>PET 4673C</td>
<td>Practicum in Athletic Training IV</td>
<td>4 hrs</td>
</tr>
<tr>
<td>APB 3600</td>
<td>Introduction to Pharmacology</td>
<td>3 hrs</td>
</tr>
<tr>
<td>HUN 2002</td>
<td>Modern Concepts of Nutrition</td>
<td>3 hrs</td>
</tr>
<tr>
<td>PET XXXX</td>
<td>Legal Issues in Athletics</td>
<td>3 hrs</td>
</tr>
<tr>
<td>PET 4932</td>
<td>Senior Seminar</td>
<td>1 hr</td>
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</table>

**4. Upper Division Restricted Electives**

None

**5. Departmental Exit Requirements**

(120 hrs)

**6. Electives**

(variable)

**7. Foreign Language Requirements**

(0-8 hrs)  
Admissions: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.

Graduation: None

**8. University Minimum Exit Requirements**

- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hrs of Summer credit (if applicable)

**Total Semester Hours Required**: 120 hrs

**Related Programs**: Gerontology Certificate, Business, Public Administration

**Related Minors**: Business, Computer Sciences, Gerontology, Information Systems, and Public Administration. Courses leading to a Certificate in Gerontology are appropriate. Electives in advanced scientific, clinical or quantitative subjects are also advisable.

**Transfer Notes**:

- General Biology with Lab (BSC 1010/L)  
- Human Anatomy and Physiology I & II (BSC 2010C and 2023)
- X093 or BSC 1105 and 3 MAC 1114
- X094 or BSC 201 OC and X086

**Tentative Course Schedule for Entering Freshmen**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>ENC 1101</td>
<td>Computer Science I</td>
<td>3 hrs</td>
</tr>
<tr>
<td>Fall</td>
<td>PSY 2013</td>
<td>Abnormal Psychology</td>
<td>3 hrs</td>
</tr>
<tr>
<td>Fall</td>
<td>HSC 2000</td>
<td>Human Anatomy and Physiology I &amp; II</td>
<td>4 hrs</td>
</tr>
<tr>
<td>Fall</td>
<td>MAC 1105</td>
<td>Introduction to Pharmacology</td>
<td>3 hrs</td>
</tr>
<tr>
<td>Fall</td>
<td>CHM 2045</td>
<td>Modern Concepts of Nutrition</td>
<td>4 hrs</td>
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</tbody>
</table>

*Plan your required 9 summer hours into your course of study*
**Sophomore Year**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
<th>Courses</th>
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<tbody>
<tr>
<td>Fall</td>
<td>14</td>
<td>PHY 2053C 4 &lt;br&gt; ZOO 3733C 4 &lt;br&gt; CGS 2100 or STA 2014 3 &lt;br&gt; EUH 2000 or HUM 2211 3 &lt;br&gt; or AMH 2010 EUH 2001 or HUM 2230 3 &lt;br&gt; or AMH 2020 3</td>
</tr>
<tr>
<td>Spring</td>
<td>13</td>
<td>PET 3620C 3 &lt;br&gt; PET 3670C 4 &lt;br&gt; PET 4351 3 &lt;br&gt; Elective 3</td>
</tr>
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**Summer**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Courses</th>
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<tr>
<td>8</td>
<td>(Foreign Lang I) 4 &lt;br&gt; (Foreign Lang II) 4 &lt;br&gt; if not satisfied in high school</td>
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**Junior Year**

<table>
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<tr>
<th>Semester</th>
<th>Hours</th>
<th>Courses</th>
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<tr>
<td>Fall</td>
<td>13</td>
<td>PET 3620C 3 &lt;br&gt; PET 3670C 4 &lt;br&gt; PET 4351 3 &lt;br&gt; Elective 3</td>
</tr>
<tr>
<td>Spring</td>
<td>13</td>
<td>PET 3623C 3 &lt;br&gt; PET 3671C 4 &lt;br&gt; PET 4660C 3 &lt;br&gt; Elective 3</td>
</tr>
</tbody>
</table>

**Summer**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>PET 4630C 4 &lt;br&gt; PET 4632C 4</td>
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</tbody>
</table>

**Senior Year**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>14</td>
<td>PET 4624C 3 &lt;br&gt; PET 4315C 3 &lt;br&gt; HUN 2002 3 &lt;br&gt; PET 4672C 4 &lt;br&gt; PET 4932 1</td>
</tr>
<tr>
<td>Spring</td>
<td>13</td>
<td>HSC 4700 3 &lt;br&gt; PET 4606 3 &lt;br&gt; PET 4673C 4 &lt;br&gt; APB 3600 3</td>
</tr>
</tbody>
</table>

**Notes:**
- electives must be approved by the advisor.
- the liberal arts core is completed in the first year.
HEALTH SERVICES ADMINISTRATION: BACHELOR OF SCIENCE

College of Health and Public Affairs
TR 534 (407) 823-2359
Undergraduate Program Director: TBA
Web Address: http://www.cohpa.ucf.edu/health.pro/

Admission Requirements
None

Degree Requirements
- Students should complete the General Education Program and the Common Program Prerequisites before transferring within the Florida Public University/Community College System
- Students should consult with a departmental advisor
- The courses designated in sections 1 and 2 below may be taken at a Florida Community College, and should usually be completed in the first 60 hours
- Students must earn at least a "C" in each required course
- UCF Residency Requirement: 30 hours
- The courses designated in sections 1 (General Education) and 2 (Common Program Prerequisites) should usually be completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural Historical Foundations 9 hrs
   C. Mathematical Foundations 6 hrs
   Select MAC 1105
   Select STA 2014 or 2023
   D. Social Foundations 6 hrs
   Select ECO 2023
   E. Science Foundations 6 hrs

2. Common Program Prerequisites (9 hrs)
   CGS 2100 Computer Fund for Business Applications 3 hrs
   ECO 2023 Principles of Economics (Micro) GEP
   ACG 2021 Financial Accounting 3 hrs
   ACG 2071 Managerial Accounting 3 hrs

3. Core Requirements (42 hrs)
   STA 2014 or 2023 Statistical Methods GEP
   HSA 3122 U.S. Health Care Systems 3 hrs
   ECO 2013 Principles of Economics I 3 hrs
   MAN 3025 Management of Organizations 3 hrs
   MAR 3023 Marketing 3 hrs
   HSC 4500 Epidemiology 3 hrs
   HSC 4564 Health Care Needs of the Elderly 3 hrs
   HSC 3531 Medical Terminology 3 hrs
   HSC 4651 Health Care Ethics 3 hrs
   HSC 3640 Health Law 3 hrs
   HSA 4180 Organization and Management of Health Agencies 3 hrs
   HSA 4193 Health Care Automation 3 hrs
   HSA 3170 Health Care Finance 3 hrs
   HSA 4700 Health Science Research Methods 3 hrs
   HSA 4120 Community Health Services 3 hrs

4. Upper Division Restricted Electives None
5. Departmental Exit Requirements (120 hrs)
6. Electives (variable)

Students are encouraged to work on courses that will enhance their background in the health care industry. These may be used to build minors offered by the University. Examples include: Business, Computer Sciences, Information Systems, and Public Administration. Courses leading to a Certificate in Gerontology are appropriate. Electives in advanced scientific, clinical or quantitative subjects are also advisable.

7. Foreign Language Requirements (0-8 hrs)
   Admissions: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
   Graduation: None

8. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hrs of Summer credit (if applicable)

Total Semester Hours Required 120 hrs

Related Programs: Gerontology Certificate, Business, Public Administration, Health Information Management

Related Minors: Business, Computer Sciences, Gerontology, Information Systems, and Public Administration. Courses leading to a Certificate in Gerontology are appropriate. Electives in advanced scientific, clinical or quantitative subjects are also advisable.

Transfer Notes:
Students with an Associate of Science degree in a health care clinical discipline may receive up to 30 hours of directed field experience. Students will be evaluated by their academic advisor. Generic students without the Associate of Science degree should select elective hours with their advisor and complete the general education program or AA degree program.

Computer Science (CGS 1060 or any other CGS computer science course) 3 hrs

Honors

Honors Option Requires:
- Completion of a 3 credit directed readings course
- Completion of a 3 credit thesis course
- Open to students with a 3.5 GPA in Health Services Administration
- Cumulative UCF 3.2 GPA
- Completion of 60 semester hours of college credit, including 12 graded upper division hours at UCF

Tentative Course Schedule for Entering Freshmen

<table>
<thead>
<tr>
<th>Fall</th>
<th>Freshman Year*</th>
</tr>
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<tbody>
<tr>
<td>ENC 1101</td>
<td>ENC 1102</td>
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<td>PSY 2013 or SYG 2000</td>
<td>ECO 2013</td>
</tr>
<tr>
<td>or ANT 2000</td>
<td>PSC 1121 or CHM 1020</td>
</tr>
<tr>
<td>HSC 2000</td>
<td>MUL 2010 or THE 1020</td>
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<tr>
<td>MAC 1105</td>
<td>or REL 2300 or PHI 2010</td>
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<tr>
<td>Elective</td>
<td>SPC 1600C</td>
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</tbody>
</table>

14 hrs | 15 hrs
Summer
CGS 2100C 3 hrs

*Plan your required 9 summer hours into your course of study

Sophomore Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>12 hrs</th>
<th>Spring</th>
<th>15 hrs</th>
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<tbody>
<tr>
<td>ACG 2021</td>
<td>3</td>
<td>ACG 2071</td>
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<tr>
<td>ECO 2023</td>
<td>3</td>
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<tr>
<td>BSC 1020</td>
<td>3</td>
<td>HSA 3122</td>
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<tr>
<td>EUH 2000 or HUM 2211</td>
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<td>EUH 2001 or HUM 2230</td>
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<tr>
<td>or AMH 2010</td>
<td></td>
<td>or AMH 2020</td>
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<td></td>
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Fall and Spring: 15 hrs

Summer
(Foreign Lang I) 4 hrs
(Foreign Lang II) 4 hrs

if not satisfied in high school

Junior Year

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<td>HSA 3170</td>
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Senior Year

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<td>HSC 4564</td>
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<td>HSA 4180</td>
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<tr>
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</table>

Notes:
Students are urged to have access to a personal computer, modem, and appropriate software to interact with the University and professors.

A variety of internship opportunities are available for HSA majors. An internship is not required but highly recommended.
HISTORY: BACHELOR OF ARTS

College of Arts and Sciences
History Department, FA 551, E-mail: history@ucf.edu
Dr. R. Crepeau, (407) 823-2224

Admission Requirements None

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students must earn at least a "C" in each history course for it to be counted toward the major.
- Students should consult with a departmental advisor.
- Departmental Residency Requirement consists of at least 18 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF History Department.
- Students must compile a portfolio of their written work completed inside and outside the classroom.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

1. UCF General Education Program (36 hrs)
   A. Communication Foundations
   9 hrs
   B. Cultural and Historical Foundations
   - Select AMH 2010 US History: 1492-1877
   - Select AMH 2020 US History: 1877-Present
   - Select from GEP list
   3 hrs
   C. Mathematical Foundations
   - Select MGF 1203 Finite Mathematics (may substitute a higher level math)
   - Prefer CGS 1060C Intro to Computer Sci
   3 hrs
   D. Social Foundations
   6 hrs
   E. Science Foundations
   6 hrs

2. Common Program Prerequisites
   AMH 2010* US History: 1492-1877
   AMH 2020* US History: 1877-Present
   *See Transfer Notes for possible substitutes
   3 hrs

3. Core Requirements (9 hrs)
   HIS 4150 History & Historians
   3 hrs
   Select one sequence
   - EUH 2000, 2001 Western Civilization I & II
   - WOH 2012, 2022 World Civilization I & II
   6 hrs

4. Upper Division Restricted Electives (21 hrs)
   Select six hours of approved History courses within three of the four geographic regions.
   - 1) Asian, African, and Middle Eastern
   - 2) British and European
   - 3) Latin American
   - 4) U.S. and Canadian
   18 hrs
   Select three hours of approved History courses
   3 hrs

5. Departmental Exit Requirements
   - Maintain a minimum GPA of 2.0 in upper division required courses attempted.
   - Submit a portfolio during the semester of graduation. The portfolio will include representative samples of the student's written work including, but not limited to, book critiques, in-class essay exams, and term papers.
   - Computer Competency met by completion of the major

6. Foreign Language Requirements (0-8 hrs)
   Admission: Met by graduation requirement
   Graduation: Two semesters or equivalent proficiency exam. Majors who are contemplating graduate school should complete two years of a foreign language, preferably one functional in their area of historical interest.

7. Electives (variable)
   Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

8. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Humanities


Transfer notes:
- "D" grades from other institutions do not meet departmental requirements.
- Courses taken at community colleges do not substitute for upper division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
- AMH 2010* & 2020*: may use any two introductory courses with an AMH, EUH, LAH, ASH, HIS or WOH prefix. However AMH 2010 and 2020 are prerequisites for all subsequent American History courses and will need to be taken for the major.
HOSPITALITY MANAGEMENT:
BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

Admission Requirements
- Completion of the UCF General Education program or an AA degree from a Florida Public Community College
- See Common Program Prerequisites

Degree Requirements
1. UCF General Education Program (36 hrs)
   A. Communication Foundations
   B. Cultural and Historical Foundations
   C. Mathematical Foundations
   Select MAC 1105 College Algebra 3 hrs
   Select CGS 2100C Computer Fundamentals for Bus 3 hrs
   D. Social Foundations
   Select ECO 2013 Principles of Economics I 3 hrs
   or ECO 2023 Principles of Economics II 3 hrs
   Select one: PST 2013, SYG 2000, ANT 2000 3 hrs
   E. Science Foundation
   6 hrs

2. Common Program Prerequisites
   ACG 2021 Principles of Financial Accounting
   ACG 2071 Principles of Managerial Accounting
   ECO 2013 Principles of Macroeconomics
   ECO 2023 Principles of Microeconomics
   *MAC2233 Concepts of Calculus
   *STA2023 (or QMB2100) Statistics
   CGS 2100 Computer Fundamentals for Business
   * At UCF, students who have completed MAC2233 and STA2023 will be waived from ECO3401. Students who have not completed both classes with a "C" or better must take ECO3401.

3. Required for All Business Majors (33 hrs)
   Common Body of Knowledge
   First Semester in the College of Business Administration:
   Students must demonstrate competency in micro-computer applications during their first semester in College of Business Administration courses. Students who fail to demonstrate competency will not be permitted to continue enrollment in the business program. Computer competency can be met by taking the computer competency exam or by earning a "C" or better in CGS 2100C or its equivalency.
   GEB 3031 Cornerstone 6 hrs
   ECO 3401 Quantitative Business Tools I 3 hrs
   First or subsequent semesters depending on major:
   HFT 3600 Legal Environment of Hospitality/Tourism 3 hrs
   ECO 3411 Quantitative Business Tools II 3 hrs
   FIN 3403 Business Finance 3 hrs
   MAN 3025 Management of Organizations 3 hrs
   MAN 3504 Quality and Productivity Management 3 hrs
   MAR 3023 Marketing 3 hrs
   Last Semester:
   GEB 4361 Business in the International Environment 3 hrs
   MAN 4720 Strategic Management 3 hrs

4. Special College and/or Department Requirements:
   - Grades of "D" do not transfer into the program and students must have a "C" or better in each common program prerequisites class.
   - Students seeking to major in Hospitality Management must apply for admission to the major
   - Students not in attendance at the first meeting of any College of Business course may be dropped from the course. It is the responsibility of the student to take whatever steps are necessary to determine if they have been officially dropped from a course. This does not remove the student's responsibility for dropping courses they do not intend to complete.
   - Final exams will be given during Exam Week only
   - A transfer student to this program must take a minimum of twelve (12) hours in hospitality management at UCF
   - A cooperative work experience of 800 hours is a graduation requirement

5. Required Courses: (18 hrs)
   HFT 3540 Guest Services Management 3 hrs
   HFT 4752 Guest Services Management II 3 hrs
   FSS 3223 Hospitality Enterprises Management I 3 hrs
   HFT 4210 Hospitality Enterprises Management II 3 hrs
   HFT 4250C Hospitality Operations I 3 hrs
   HFT 4717 Hospitality Operations II 3 hrs

6. Restricted Electives: Hospitality major should select any three (3) courses taught in the Hospitality Management Department and includes the following: FSS 3120, FSS 3301, FSS 3232C, FSS 3241, FSS 4284C, HFT 4473, HFT 4722, HFT 4735, HFT 4753, HFT 4754, HFT 4860, HFT 4932.

7. Hospitality Management Cooperative Education (0 hrs)
The cooperative education requirement provides students the opportunity to see how classroom theory is applied to the world of work. Hospitality students must complete a minimum of 800 clock hours (equivalent to 20 full time weeks) of paid study-related work experience in a hospitality or tourism enterprise. All work related experiences must be approved in advance by the departmental co-op advisor.

8. Foreign Language Requirements (0-8 hrs)
   Admission: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
   Graduation: None

9. University Minimum Exit Requirements
   - A 2.000 GPA in all work attempted (Overall, UCF, COB, Major)
   - 60 semester hours earned after any CLEP award
   - 48 semester hours of upper division credit completed
   - 30 semester hours of coursework completed in residency (last 30 hours) at UCF
   - A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Military credit permitted
   - Completion of the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit (if applicable)

10. Electives:
   As necessary to result in 120 total credit hours.

***Total Semester Hours Required 120 hours

Community/Junior College Transfer Notes
- Common Program Prerequisites for the State University System for College of Business Administration programs include Financial Accounting, Managerial Accounting, Macroeconomics, Microeconomics, Calculus, Statistics, and a relevant computer class. At UCF Business, students who have completed the calculus and statistics class will be waived from Business
Quantitative Tools I. Students who have completed either the calculus or the statistics, but not both, must take Quantitative Tools I.

- Subject to the general grade and residence requirements, credit will be granted for transferred course work equivalent to that required in the UCF Business program. Grades of "D" do not transfer into the program and students must have a "C" or better in each common program prerequisites class.
- ACG X001 and X011 will substitute for ACG 2021 at UCF.
- Florida Public Community College students are advised to complete the Associate of Arts degree, to include the general education requirements, the common program prerequisites for the SUS system, and college algebra.
- 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 (junior, senior) course areas and cannot be satisfied with freshman, sophomore level courses.
- A minimum of 12 semester hours must be completed at UCF within each individual major.
- Orientation and advising are two of the most valuable tools that a student can make use of when transferring to UCF. Be sure that you take advantage of both.

FOUR YEAR PLAN OF STUDY - HOSPITALITY MANAGEMENT

**Freshman**

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<th>Fall</th>
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<tr>
<td>ENC 1101*</td>
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<tr>
<td>Cult-Hist I*</td>
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<td>Cult-Hist II*</td>
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<td>SPC 1600C</td>
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<td>Art/Music/Lit</td>
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<td>***Elective</td>
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<td>MAC 1105*</td>
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<tr>
<td>***Elective</td>
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<td>CGS 2100C</td>
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*Must complete 9 hrs in a summer semester*

**Sophomore**

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<td>ECO 2013*</td>
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<td>ECO 2023*</td>
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<tr>
<td>ACG 2021*</td>
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<td>ACG 2071*</td>
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<td>***Elective</td>
<td>3</td>
<td>***Elective</td>
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</tbody>
</table>

*"C" or better grade required in each class*

*Must complete CLAST requirement*

Transfer students must complete a minimum of twelve (12) hours in Hospitality Management at UCF.

Cooperative work experience of 800 clock hours.

SPE CO-OP Office and HM Advisor

**Junior**

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<td>FSS 3223</td>
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<tr>
<td>MAR 3023</td>
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<td>HFT 3540</td>
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<td>HFT 4250C</td>
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**Pass Computer Competency Exam in same term Cornerstone completed**

Senior

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<td>ECO 3411</td>
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<td>HFT 4752</td>
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<td>HFT 4210</td>
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***General electives as required to reach 120 semester hours to include at least 60 semester hours outside the College of Business Administration. Economics courses in the Common Program Prerequisites and the Common Body of Knowledge count toward the 60 hours outside Business Administration.***
HUMANITIES: BACHELOR OF ARTS

College of Arts and Sciences
Philosophy Department, FA 411, E-mail: philosophy@ucf.edu
Dr. J. Riser, (407) 823-2273

Admission Requirements    None

Degree Requirements

- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students must earn at least a "C" in each required course.
- Students should consult with a departmental advisor.
- Departmental Residency Requirement consists of at least 15 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF Philosophy Department.
- Courses designated in 1 (General Ed Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural and Historical Foundations
      Select HUM 2211 Humanistic Tradition I 3 hrs
      Select HUM 2230 Humanistic Tradition II 3 hrs
      Select PHI 2010 Intro to Philosophy 3 hrs
   C. Mathematical Foundations
      Select MGF 1203 Finite Mathematics 3 hrs
      (may substitute a higher level math)
      Prefer CGS 1060C Intro to Computer Sci 3 hrs
   D. Social Foundations 6 hrs
   E. Science Foundations 6 hrs

2. Common Program Prerequisites

3. Core requirements (18 hrs)
   European history, literature or philosophy
      Select from EUH 3122, 3142, 3235, LIT 3082, 3313, 3383, 4043, ENL 4220, 4311, 4333, 4341, 4262, PHI 3700, 3803, PHP 3786, PHI 4400, 4420, HUM 4301, 4303
   Asian culture or philosophy
      Select from HUM 3320, 3401, ASH 4404, 4442, ANT 3360, 3363
   Music appreciation or theory
      Select from MUL 2010, 2016
   Mythology
      Select from CLA 3850, 3851

4. Upper Division Restricted Electives (30 hrs)
   Select courses within one of the two tracks, subject to departmental advisor approval. Majors with at least a 3.0 GPA are encouraged to take at least one Honors seminar, selected with the help of the departmental advisor.

Cultural Studies Track

- Ancient Greece 6 hrs
  Select from HUM 3431, 4301
- Hindu, Islamic, Judaic, or Christian culture 6 hrs
  Select from HUM 3418, 3417, 3553, JST 3100, 3401, 3402, 3751, HUM 4303
- History of philosophy 6 hrs
  Select from PHH 3100, 3400, 3601
- History of Art 6 hrs
  Select from ARH 3520, 4545, 4170, 4310, 4350, 4430, 4450, 4892, 4655, HUM 4301

5. Departmental Exit Requirements (0 hrs)

   - Maintain a minimum GPA of 2.0 in upper division required courses
   - Computer Competency met by CGS 1060C or a departmental exam

6. Foreign Language Requirements (0-8 hrs)
   Admission: Met by graduation requirement
   Graduation: Two semesters or equivalent proficiency exam. Majors who are contemplating graduate school should complete two years of a foreign language, preferably one functional in their area of historical interest.

7. Electives (variable)
   Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

8. University Minimum Exit Requirements

   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Philosophy

Related Minors: Philosophy, Humanities

Transfer notes:

- "D" grades from other institutions do not meet departmental requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.
INDUSTRIAL ENGINEERING: BACHELOR OF SCIENCE

College of Engineering
Industrial Engineering & Management Systems (IEMS)
Department, ENGR 307C, (407) 823-2204, FAX: (407) 823-3413, Home Page: http://ie.engr.ucf.edu/
Dr. Bill Thompson, E-Mail: wthompso@mail.ucf.edu

Admission Requirements:
All entering students are required by UCF to attend Orientation before registering for their first semester at UCF. Orientation includes engineering academic advisement and registration for first-semester UCF classes; see also the section, Orientation, found elsewhere in this catalog.

Degree Requirements

> Each engineering student is assigned a qualified engineering academic advisor in the department of his/her major. Each student should seek academic advisement before registering for classes each semester to minimize excess hours and to ensure that satisfactory academic progress is being maintained.

1. UCF General Education Program for Engineering Students (38 hrs)
The UCF General Education Program (GEP) is described in the section, General Education Program, found elsewhere in this catalog. Engineering students should closely study the requirements of the UCF GEP and the allowable substitutions detailed in paragraphs A. through E. below to minimize excess hours. Students transferring to UCF from within the Florida State University/Community College Systems should complete the GEP and the Common Program Prerequisites before transferring.

A. Communication Foundations
1. Take ENC 1101
2. Take ENC 1102
3. SPC 1016 is the preferred substitute for SPC 1600C for engineering students.

See the descriptions of these courses in the section, Alphabetical Listing of Courses, later in this catalog.

B. Cultural and Historical Foundations
9 hrs
1. Take MAC 2281, Calculus for Scientists and Engineers I, (4 hrs). NOTE: College algebra and trigonometry are prerequisites for Calculus I. See the course descriptions.
2. Take STA 3032 (3 hrs). NOTE: Calculus II is the prerequisite for this course.

C. Mathematical Foundations
7 hrs
1. Take MAC 2282, Calculus for Scientists and Engineers II, (4 hrs). NOTE: MAC 2281 will substitute
2. Take MAC 2283, Calculus for Scientists and Engineers III, (4 hrs). NOTE: MAC 2282 will substitute

D. Social Foundations
6 hrs
1. Take ECO 2013 or ECO 2023.

E. Science Foundations
7 hrs
1. Take PHY 2048/48L.
2. Take either GEO 1200 or GEO 2370.

2. Common Program Prerequisites (CPP’s) (19 hrs)
These courses are specifically required for all engineering students of the Florida State University System. CPP courses are also available at other Florida post-secondary schools and may be transferred directly to UCF programs. All engineering students must remain in the Calculus sequence with which they begin. Students who begin with MAC 2281 Calculus for Scientists and Engineers I, must continue with MAC 2282 and MAC 2283. Students who begin with MAC 2311 Calculus with Analytical Geometry I, must continue with MAC 2312 and MAC 2313. The individual courses in these two Calculus sequences are not interchangeable. NOTE: MAC 2281 and PHY 2048/48L also satisfy UCF GEP sub-requirements, as do ENC 1101, ENC 1102, the Humanities courses, and the Social Science courses.

CHS 1440 Fundamentals of Chemistry for Eng 4 hrs
(CHM 2045/45L will substitute)
MAC 2281 Calculus for Scientists & Engineers I GEP
(MAC 2311 will substitute)
MAC 2282 Calculus for Scientists & Engineers II 4 hrs
(MAC 2312 will substitute)
MAC 2283 Calculus for Scientists & Engineers III 4 hrs
(MAC 2313 will substitute)

MAP 2302 Differential Equations 3 hrs
PHY 2048/48L Physics for Scientists & Engineers I GEP
PHY 2049/49L Physics for Scientists & Engineers II 4 hrs
ENC 1101 Composition I GEP
ENC 1102 Composition II GEP

Humanities Courses GEP
Social Science Courses GEP
Humanities or Social Sciences GEP

3. Courses Required for the Major (62 hrs)
The College of Engineering requires all engineering students to achieve a minimum 2.250 GPA in completing these courses, together with the technical elective courses listed in 4. below and with the senior design courses listed in 5. below. Independent study courses generally do not satisfy major requirements and normally are awarded grades of I, S, or U.

EGN 1006 Intro to the Engineering Profession 1 hr
EGN 1111C Engineering Computer Graphics 2 hrs
EGN 1930 ST: Engineering Concepts & Methods 1 hr
EGN 3210 Engineering Analysis & Computation 3 hrs
EGN 3310 Engineering Analysis - Statics 3 hrs
EGN 3321 Engineering Analysis - Dynamics 3 hrs
EGN 3358 Thermo-Fluids-Heat Transfer or
EGN 3343 Thermodynamics 3 hrs
EGN 3365 Structure & Properties of Materials 3 hrs
EGN 3930 ST: Principles of Electrical Engineering 3 hrs
EGN 3613 Engineering Economic Analysis 2 hrs
EGN 4624 Engineering Administration 3 hrs
STA 3032 Probability & Statistics for Engineers GEP
EIN 3304 Introduction to IE & MS 2 hrs
EIN 3314C Work Measurement & Design 3 hrs
EIN 3354 Principles of Cost Engineering 3 hrs
EIN 4118C IE Applications of Computers 3 hrs
EIN 4243C Human Engineering 3 hrs
EIN 4333C Industrial Control Systems 3 hrs
EIN 4364C Industrial Planning & Design 3 hrs
EIN 4391C Manufacturing Engineering 3 hrs
ESI 4221 Empirical Methods for IE 3 hrs
ESI 4234 Quality Engineering 3 hrs
ESI 4312 Operations Research 3 hrs
ESI 4525C Systems Simulation 3 hrs

4. Approved Technical Electives (3 hrs)
Technical electives are available in the BSIE program to address specific student interests in a variety of technical areas. Students should consult with their assigned academic advisor for a list of the approved technical electives and the terms when specific courses of this type are to be offered.

5. Departmental Graduation Requirements (6 hrs)
- EIN 4116C Systems Analysis & Design 3 hrs
- EIN 4891C IE Senior Design Project 3 hrs
- Take the Engineering Intern Exam during the Senior year.
6. Foreign Language Requirements (0-8 hrs)
Admission: 2 years of one foreign language in high school, or 1 year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
Graduation: None.

7. University Minimum Graduation Requirements
- A 2.000 GPA in all work attempted (both UCF and overall).
- 60 semester hours earned after any CLEP award.
- 48 semester hours of upper division credit completed.
- 32 semester hours of regular courses completed at UCF.
- A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits are permitted.
- Complete the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit (if applicable).

Total Semester Hours Required: 128 hrs
Related Programs: Mechanical Engineering.
Related Minors: None.
Transfer Notes:
- Courses taken from Community Colleges do not substitute for Upper Division Courses.
- Courses transferred must be formally evaluated for equivalency credit. The student must provide all supporting information with his/her petition for this evaluation.

Tentative Course Schedule for Entering Freshmen
The tentative course schedule listed below is a guide for those students who plan on completing their degree in four years. All engineering students should meet with their faculty advisor to develop and maintain an appropriate plan of study.

**Industrial Engineering - 128 semester hours required**

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Notes:
1. Courses marked with an asterisk (*) are also available from most Community Colleges and are often part of their Pre-Engineering AA programs. Most of these courses are part of the UCF General Education Program; see the section on the GEP elsewhere in this catalog for further information.
2. EGN 1006 and EGN 1930 are required courses for incoming freshmen only. The credits for these two courses (one hour each) may, with prior approval of the department academic advisor, be moved to the area 4. Approved Technical Electives.
INTERPERSONAL COMMUNICATION: BACHELOR OF ARTS

College of Arts and Sciences
Nicholson School of Communication, COM 258, (407) 823-2852, E-mail: communication@ucf.edu
Dr. K. Phillip Taylor

Admission Requirements
Application to the Nicholson School of Communication needed. Only general University admission policies must be met.

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students should consult with a departmental advisor.
- School Residency Requirement consists of at least 24 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF School of Communication.
- Students electing both a major and minor in the School must take the minor courses in excess of the 120 hours required for graduation.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

1. UCF General Education Program (36 hrs)
   A. Communication Foundations
      Select ENC 1101 & 1102 Composition 6 hrs
      Select SPC 1600C Fund Oral Communication 3 hrs
   B. Cultural and Historical Foundations 9 hrs
   C. Mathematical Foundations 6 hrs
      Select MGF 1203 Finite Mathematics 3 hrs
      (may substitute a higher level math)
      Prefer CGS 1060C Intro to Computer Sci 3 hrs
   D. Social Foundations 6 hrs
   E. Science Foundations 6 hrs

2. Common Program Prerequisites
   SPC 1600C Fund Oral Communication GEP

3. Specific Program Requirements (2 hrs)
   CGS 2580C Word Processor Concepts 1 hr
   CGS 2581C Document Presentation Concepts 1 hr

4. Core requirements (27 hrs)
   COM 3011 Communication and Human Relations 3 hrs
   COM 3311 Communication Research Methods 3 hrs
   COM 3701 Humor in Communication or Gender Issues in Communication 3 hrs
   COM 4XXX Intercultural Communication 3 hrs
   SPC 3301 Interpersonal Comm 3 hrs
   SPC 4331 Nonverbal Communication 3 hrs
   SPC 4350 Studies in Listening 3 hrs
   SPC 4540 Attitudes and Communication 3 hrs
   SPC 4426 Group Dynamics 3 hrs

5. Upper Division Restricted Electives (9 hrs)
   A minimum of 9 upper division credit hours selected from the following Social Science courses in Anthropology, Criminal Justice, Legal Studies, Political Science, Psychology, Public Administration, and Sociology.

6. School Exit Requirements
   - Achieve an overall "C" GPA (2.0) in all required UCF Communication courses.
   - To avoid delaying graduation, you must request a review of requirements before registering for your last term.
   - Computer Competency met by a Computer Science course or by departmental assessment.

7. Foreign Language Requirements (0-8 hrs)
   Admission: Met by graduation requirement
   Graduation: One year or equivalent proficiency exam.

8. Electives (variable)
   Select primarily from upper level courses. May be outside of the School of Communication.

9. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall).
   - 60 semester hours earned after CLEP awarded.
   - 48 semester hours of upper division credit completed.
   - 30 semester hours in regular courses completed at UCF.
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted.
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable).

Total Semester Hours Required 120 hours

Related Programs: Organizational Communication
Related Minors: Organizational Communication

Transfer notes:
- "D" grades from other institutions do not meet school requirements.
- Courses taken at community colleges do not substitute for upper division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.
JOURNALISM: BACHELOR OF ARTS

College of Arts and Sciences
Nicholson School of Communication, COM 252, (407) 823-2858, E-mail: journalism@ucf.edu
Dr. T. O'Keefe
Limited Access program.

Admission Requirements
- Students should apply to become Journalism majors only after completing all requirements for admission. Deadlines are:
  - October 8, 1999 for Spring 2000
  - March 3, 1999 for Summer 2000
  - July 7, 2000 for Fall 2000
- Attain an overall minimum 2.25/4.00 GPA based on a minimum of 30 credit hours of college work. Note: meeting the minimum GPA does not guarantee admission since students are admitted on a space available basis. THE GPA CUT OFF FOR THE 1998-1999 YEAR WAS 2.5.
- Pass a grammar examination involving basic proficiency in grammar, punctuation, and word usage. Testing is conducted prior to and throughout each semester, and remedial options are provided.
- Pass a computer and Keyboard Proficiency Test (20 wpm). The test may be taken ONLY three times. Completion of a basic college keyboard or typing course with a grade of "C" will satisfy the requirement.

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- The Journalism faculty strongly recommends that majors work for a student newspaper. In addition, majors may obtain an 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 internship credit hours may be earned within the 120 semester hours required for graduation.
- Students must consult with a school advisor.
- School Residency Requirement consists of at least 24 semester hours including JOU 2100 and regularly scheduled 3000-4000 level courses taken from the UCF School of Communication.
- Students electing both a major and minor in the School must take the minor courses in excess of the 120 hours required for graduation.
- Courses designated in General Education Program and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

1. UCF General Education Program (36 hrs)
   A. Communication Foundations
      Select ENC 1101 & 1102 Composition 6 hrs
      Select SPC 1600C Fund Oral Communication 3 hrs
   B. Cultural and Historical Foundations
      9 hrs
   C. Mathematical Foundations
      Select MGF 1203 Finite Mathematics 3 hrs
      (may substitute a higher level math)
      Select CGS 1060C Intro to Computer Sci or
      STA 2014 Principles of Statistics 3 hrs
   D. Social Foundations
      6 hrs
   E. Science Foundations
      6 hrs
   2. Common Program Prerequisites
      SPC 1600C Fund Oral Communication 6 hrs

3. Core requirements (30 hrs)
   JOU 3004 History of American Journalism 3 hrs
   JOU 2100* News Reporting 3 hrs
   JOU 3101* Advanced News Reporting 3 hrs
   JOU 3201* Editing I 3 hrs
   JOU 3202* Editing II 3 hrs
   JOU 4104* Public Affairs Reporting 3 hrs
   JOU 4300* Feature Writing 3 hrs
   MMC 4200 Mass Communication Law 3 hrs
   MMC 4602 Contemporary Media Issues 3 hrs
   PGY 3610C *Photojournalism I 3 hrs
    *Prerequisite: Grammar Proficiency Examination and Keyboard Proficiency Test required. Some courses may also require a minimum grade of "C" in prerequisite courses.

4. Upper Division Restricted Electives (3 hrs)
   JOU/PGY Elective 3 hrs

5. Required Minor: (15 hrs minimum)
   Journalism majors must complete a minor in an academic area outside of the School of Communication. When no official minor is offered, students may complete a 15-credit-hour area of concentration approved by the Faculty.

6. School Exit Requirements
- To avoid delaying graduation, you must request a review of requirements before registering for your last term
- Achieve an overall "C" GPA (2.0) in required UCF Journalism courses. This GPA does not include Restricted Electives in the major or other electives.
- Computer Competency met by program admission test

7. Foreign Language Requirements (0-8 hrs)
   Admission: Met by graduation requirement
   Graduation: One year or equivalent proficiency exam

8. Electives (variable)
   Select primarily from upper level courses, with school advisor's approval. May be outside of the school.

9. University Minimum Exit Requirements
- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Technical Writing, Creative Writing

Related Minors: Creative Writing, History, Literature, Linguistics, Magazine Journalism, Political Science, Sociology, Technical Writing, Writing

Transfer notes:
- "D" grades from other institutions do not meet school requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.
LEGAL STUDIES: BACHELOR OF ARTS or BACHELOR OF SCIENCE

College of Health and Public Affairs
HPA 311, (407) 823-2603
Undergraduate Program Coordinator: David Slaughter
E-mail: dslaught@pegasus.cc.ucf.edu
Web Address: http://www.cohpa.ucf.edu/crim.jus/

Admission Requirements  None

Degree Requirements

- Students should complete the General Education Program before transferring within the Florida Public University/Community College System
- Students should consult with a departmental advisor
- The courses designated in section 1 below may be taken at a Florida Community College, and should usually be completed in the first 60 hours
- 33 hours of PLA coursework must be taken at UCF
- 2.0 in all PLA work at UCF and overall
- The courses designated in section 1 (General Education) should usually be completed in the first 60 hours.

1. UCF General Education Program  (36 hrs)
A. Communication Foundations  9 hrs
B. Cultural Historical Foundations  9 hrs
C. Mathematical Foundations  6 hrs
Select MGF 1203
Select CGS 1060C
D. Social Foundations  6 hrs
E. Science Foundations  6 hrs

2. Common Program Prerequisites  None

3. Core Requirements  (18 hrs)
PLA 3013  Law and the Legal System  3 hrs
PLA 3105  Legal Research  3 hrs
PLA 3155  Legal Writing  3 hrs
PLA 3203  Civil Practice and Procedure  3 hrs
PLA 3504  Property and Real Estate Law  3 hrs
PLA 4935  Capstone: Legal Issues  3 hrs

4. Upper Division Restricted Electives  (24 hrs)
24 additional hours of Legal Studies coursework selected in consultation with an advisor

5. Supporting Courses  (9 hrs)
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 so long as they are relevant to legal studies.

6. Specialization Certificates
Students may earn specialization certificates within the general program of study. The specializations do not substitute for the general legal studies degree requirement; they are earned within the general program by selecting particular courses to satisfy the legal studies restricted electives and supporting courses requirements. Students are not required to declare a specialization. The following specializations are offered:
- Law and Society
- Litigation and Advocacy
- Public Law
- Sports and Entertainment Law
- Criminal Law and Individual Liberties

7. Departmental Exit Requirements  (120 hrs)
Students must take a minimum of 33 hours of PLA courses at UCF. The total Semester Hours Required is 120.

8. Electives  (variable)

9. Foreign Language Requirements  (0-8 hrs)
Admissions: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
Graduation: Students pursuing the B.A. degree must demonstrate proficiency in a foreign language equivalent to one year. Students pursuing the B.S. degree must satisfy six (6) credit hours from the approved list of courses.

10. University Minimum Exit Requirements
- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam and Armed Forces credits permitted
- Completion of a 3 credit directed readings course
- Completion of a 3 credit thesis course
- Open to students with a 3.5 GPA in Legal Studies
- Completion of a 3 credit honors thesis course
- Completion of a 3 credit honors directed readings course
- Completion of a 3 credit honors internship course
- Completion of a 3 credit honors seminar course
- Completion of a 3 credit honors senior project course
- Completion of a 3 credit honors senior thesis course

Total Semester Hours Required  120 hours

Related Programs: Business Administration, Criminal Justice, History, Political Science, Public Administration, Sociology

Related Minors: Business Administration, Criminal Justice, Political Science, Public Administration, Sociology

Transfer Note:
Courses taken at community colleges do not substitute for Upper Division courses.

Honors
Honors Option Requires:
- Completion of a 3 credit directed readings course
- Completion of a 3 credit thesis course
- Completion of a 3 credit honors thesis course
- Completion of a 3 credit honors directed readings course
- Completion of a 3 credit honors seminar course
- Completion of a 3 credit honors senior project course
- Completion of a 3 credit honors senior thesis course

Minor
The Legal Studies Minor consists of 21 or more semester hours. Required courses: PLA 3013 plus a minimum of 15 semester hours of legal studies courses and 3 semester hours of law-related courses selected with the aid of an advisor.
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<td>*Plan your required 9 summer hours into your course of study</td>
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LIBERAL ARTS TRACK: BACHELOR OF ARTS

College of Arts and Sciences
Liberal Studies Program, FA 207A, E-mail: liberalarts@ucf.edu
Dr. Donald E. Jones, (407) 823-0144

The Liberal Arts Track is an honors-linked Bachelor of Arts degree program available to students seeking an individualized, inter-disciplinary, non-traditional major within the College of Arts and Sciences.

**Admission Requirements** None

**Degree Requirements**
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students must earn at least a "C" in each required course.
- Students should consult with a departmental advisor.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

1. **UCF General Education Program** (36 hrs)
   - A. Communication Foundations 9 hrs
   - B. Cultural and Historical Foundations 9 hrs
   - C. Mathematical Foundations 6 hrs
     - Select MGF 1203 Finite Mathematics 3 hrs
     - Select CGS 1060 Intro to Computer Sci or STA 2014 Principles of Statistics 3 hrs
   - D. Social Foundations 6 hrs
   - E. Science Foundations 6 hrs

2. **Common Program Prerequisites** None

3. **Core Requirements** (6 hrs)
   - an approved course in ethics 3 hrs
   - an approved course in critical thinking 3 hrs

4. **Restricted Electives** (36-42 hrs)
   - Select one
     - a. complete a minor from those offered at UCF 18 hrs
     - b. complete an approved individualized minor 18 hrs
   - Select one
     - a. complete a second minor offered at UCF 18+hrs
     - b. complete twelve hours of approved courses within each of two of the following areas:
       - Fine Arts
       - Natural Sciences
       - Social Sciences/Communication
       - Letters/Humanities
       - c. an approved, individualized curriculum 24 hrs

5. **Program Exit Requirements** (3 hrs)
   - IDS 4970 Thesis 3 hrs

- Students must take at least one Honors Seminar to meet the requirements of the Core or Restricted Electives (sections 3 and 4 above).
- Maintain a minimum GPA of 3.0 in all Liberal Arts Track courses.
- Computer Competency met by IDS 4970

6. **Foreign Language Requirements** (0-8 hrs)
   - Admission: Met by graduation requirement
   - Graduation: Two semesters or equivalent proficiency exam.

7. **Electives** (variable)
   - Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

8. **University Minimum Exit Requirements**
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

**Total Semester Hours Required** 120 hours

**Related Programs:** General Studies Track

**Related Minors:** All minors

**Transfer notes:**
- "D" grades from other institutions do not meet departmental requirements
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.
MANAGEMENT: BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

Admission Requirements

- Completion of the UCF General Education program or an AA degree from a Florida Public Community College
- See Common Program Prerequisites

Degree Requirements

1. UCF General Education Program (36 hrs)
   - A. Communication Foundations 9 hrs
   - B. Cultural and Historical Foundations 9 hrs
   - C. Mathematical Foundations
     - Select MAC 1105 College Algebra 3 hrs
     - Select CGS 2100C Computer Fundamentals for Bus 3 hrs
   - D. Social Foundations
     - Select ECO 2013 Principles of Economics I or ECO 2023 Principles of Economics II 3 hrs
     - Select one: PSY 2013, SYG 2000, ANT 2000 3 hrs
   - E. Science Foundation 6 hrs

2. Common Program Prerequisites
   - ACG 2021 Principles of Financial Accounting
   - ACG 2071 Principles of Managerial Accounting
   - ECO 2013 Principles of Macroeconomics
   - ECO 2023 Principles of Microeconomics
     - *MAC2233 Concepts of Calculus
     - *STA2023 (or QMB2100) Statistics
     - CGS 2100C Computer Fundamentals for Business
     - * At UCF, students who have completed MAC2233 and STA2023 will be waived from ECO3401. Students who have not completed both classes with a "C" or better must take ECO3401.

3. Required for All Business Majors (33 hrs)

   Common Body of Knowledge
   - First Semester in the College of Business Administration:
     Students must demonstrate competency in micro-computer applications during their first semester in College of Business Administration courses. Students who fail to demonstrate competency will not be permitted to continue enrollment in the business program. Computer competency can be met by taking the computer competency exam or by earning a "C" or better in CGS 2100C or its equivalency.
     - GEB 3031 Cornerstone 6 hrs
     - ECO 3401 Quantitative Business Tools I 3 hrs
   - First or subsequent semesters depending on major:
     - BUL 3130 Legal & Ethical Environments of Business 3 hrs
     - ECO 3411 Quantitative Business Tools II 3 hrs
     - FIN 3403 Business Finance 3 hrs
     - MAN 3025 Management of Organizations 3 hrs
     - MAN 3504 Quality and Productivity Management 3 hrs
     - MAR 3023 Marketing 3 hrs
   - Last Semester:
     - GEB 4361 Business in the International Environment 3 hrs
     - MAN 4720 Strategic Management 3 hrs

4. Special college and/or department requirements:
   - Grades of "D" do not transfer into the program and students must have a "C" or better in each common program prerequisites class.
   - Students wanting to major in Management must apply for admission to the major
   - Students not in attendance at the first meeting of any College of Business course may be dropped from the course. It is the responsibility of the student to take whatever steps are necessary to determine if they have been officially dropped from a course. This does not remove the student's responsibility for dropping courses they do not intend to complete.
   - Final exams will be given during Exam Week
   - A transfer student to this program must take a minimum of twelve (12) semester hours in Management at UCF

5. Tracks

   Students may choose from two tracks. Within the Management tracks, students can concentrate in four areas of concentration. Courses for each track and area of concentration are outlined below:

   A. Management Track

   1. Human Resource Management (24 hrs)
      - Required courses (9 hrs)
        - MAN 3301 Human Resource Management 3 hrs
        - MAN 4240 Organizational Theory & Behavior 3 hrs
        - BUL 4540 Employment Law 3 hrs
      - Elective Courses (15 hrs)
        - MAN 4101 Human Relations in Management 3 hrs
        - MAN 4310 Personnel Issues 3 hrs
        - MAN 4320 Recruitment & Selection 3 hrs
        - MAN 4330 Compensation Administration 3 hrs
        - MAN 4350 Training & Development 3 hrs
        - MAN 4402 Labor Relations Management 3 hrs
        - MAN 4941 Internship 3 hrs

   2. General (24 hrs)
      - Required courses (15 hrs)
        - ISM 3011 Management Information Systems 3 hrs
        - MAN 4101 Human Relations in Management 3 hrs
        - MAN 4240 Organizational Theory & Behavior 3 hrs
        - MAN 4600 International Management 3 hrs
        - MAN 4701 Business Ethics & Society 3 hrs
      - Restricted Elective Courses - Take three additional courses to be selected from any two other specialization areas.

   B. Management - Information Systems Track (27 hrs)

      - Required Courses (21 hrs)
        - ISM 3005 MIS Techniques 3 hrs
        - ISM 4113 Information System Analysis & Design 3 hrs
        - ISM 4130 Information Systems Implementation 3 hrs
        - ISM 4212 Database Management Systems 3 hrs
        - ISM 4220 Distributed Information Systems 3 hrs
        - ISM 4300 Information Technology Mgmt 3 hrs
        - MAN 4540 Mgmt Science & Decision Support 3 hrs

      - Plus two of the following:
        - MAN 4240 Organization Theory and Behavior 3 hrs
        - MAN 4595 Computer-Based Operations Mgmt 3 hrs
        - ISM XXXX (Any ISM prefix courses)

6. Foreign Language Requirements (0-8 hrs)

   Admission: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.

   Graduation: None

7. University Minimum Exit Requirements

   - A 2.000 GPA in all work attempted (Overall, UCF, COB, Major)
   - 60 semester hours earned after any CLEP award
   - 48 semester hours of upper division credit completed
   - 30 semester hours of coursework completed in residency (last 30 hours) at UCF
   - A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Military credit permitted
• Completion of the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit (if applicable)

8. Electives:
As necessary to result in 120 total credit hours.

***Total Semester Hours Required 120 hours

Community/Junior College Transfer Notes
• Common Program Prerequisites for the State University System for College of Business Administration programs include Financial Accounting, Managerial Accounting, Microeconomics, Calculus, Statistics, and a relevant computer class. At UCF Business, students who have completed the calculus and statistics class will be waived from Business Quantitative Tools I. Students who have completed either the calculus or the statistics, but not both, must take Quantitative Tools I.
• Subject to the general grade and residence requirements, credit will be granted for transferred course work equivalent to that required in the UCF Business program. Grades of “D” do not transfer into the program and students must have a “C” or better in each common program prerequisites class.
• ACG X001 and X011 will substitute for ACG 2013 at UCF.
• Florida Public Community College students are advised to complete the Associate of Arts degree, to include the general education requirements, the common program prerequisites for the SUS system, and college algebra.
• 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 (junior, senior) course areas and cannot be satisfied with freshman, sophomore level courses.
• A minimum of 12 semester hours must be completed at UCF within each individual major.
• Orientation and advising are two of the most valuable tools that a student can make use of when transferring to UCF. Be sure that you take advantage of both.

FOUR YEAR PLAN OF STUDY - MANAGEMENT

Freshman
Fall 15 hrs  Spring 15 hrs
ENC 1101* 3  ENC 1102* 3
Cult-Hist I* 3  Cult-Hist II* 3
SPC 1600C 3  MAC 1105* 3
***Elective 3  CGS 2100C 3

Sophomore
Fall 15 hrs  Spring 15 hrs
ECO 2013* 3  ECO 2023* 3
ACG 2021* 3  ACG 2071* 3
Science 3  Science 3
Psy/Soc/Ant 3  ***Elective 3
***Elective 3  ***Elective 3

Must complete 9 hrs in a summer semester

***Elective 3

* “C” or better grade required in each class
Must complete CLAST requirement

Transfer students must complete a minimum of twelve (12) hours in Management at UCF

Student should choose to concentrate in one area of study (Track Specializations)

HUMAN RESOURCE MANAGEMENT

Junior
Fall 15 hrs  Spring 15 hrs
**GEB 3031 6  MAN 4240 3
ECO 3401 3  MAN 3301 3
MAR 3023 3  ECO 3411 3
MAN 3025 3  FIN 3403 3
BUL 3130 3

**Pass Computer Competency Exam in same term Cornerstone completed

Senior
Fall 15 hrs  Spring 15 hrs
***Elective 3  MAN 4720 3
MAN 3504 3  MAN 4330 3
MAN 4401 3  MAN 4350 3
MAN 4320 3  MAN 4310 3
BUL 4540 3  GEB 4361 3

**General electives as required to reach 120 semester hours to include at least 60 semester hours outside the College of Business Administration. Economics courses in the Common Program Prerequisites and the Common Body of Knowledge count toward the 60 hours outside Business Administration.

GENERAL MANAGEMENT

Junior
Fall 15 hrs  Spring 15 hrs
**GEB 3031 6  ISM 3011 3
ECO 3401 3  MAR 3023 3
MAN 3504 3  ECO 3411 3
MAN 3025 3  FIN 3403 3
BUL 3130 3

**Pass Computer Competency Exam in same term Cornerstone completed

Senior
Fall 15 hrs  Spring 15 hrs
***Elective 3  MAN 4720 3
MAN 4240 3  MAN 4600 3
MAN 4701 3  MAN 4101 3
–MAN Elective 3  –MAN Elective 3
–MAN Elective 3  GEB 4361 3

– Three MAN Electives to be selected from any two other specialization areas

**General electives as required to reach 120 semester hours to include at least 60 semester hours outside the College of Business Administration. Economics courses in the Common Program Prerequisites and the Common Body of Knowledge count toward the 60 hours outside Business Administration.

MANAGEMENT INFORMATION SYSTEMS

Junior
Fall 15 hrs  Spring 15 hrs
**GEB 3031 6  MAR 3023 3
ECO 3401 3  MAN 3504 3
ISM 3005 3  ISM 4212 3
MAN 3025 3  ISM 4300 3
ECO 3411 3
**Pass Computer Competency Exam in same term Cornerstone completed**

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<td>FIN 3403</td>
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<td>3</td>
<td>GEB 4361</td>
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***General electives as required to reach 120 semester hours to include at least 60 semester hours outside the College of Business Administration. Economics courses in the Common Program Prerequisites and the Common Body of Knowledge count toward the 60 hours outside Business Administration.***

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MARKETING: BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

Admission Requirements
- Completion of the UCF General Education program or an AA degree from a Florida Public Community College
- See Common Program Prerequisites

Degree Requirements
1. UCF General Education Program (36 hrs)
   - Communication Foundations 9 hrs
   - Cultural and Historical Foundations 9 hrs
   - Mathematical Foundations
     - Select MAC 1105 College Algebra 3 hrs
     - Select CGS 2100C Computer Fundamentals for Bus 3 hrs
   - Social Foundations
     - Select ECO 2013 Principles of Economics I 3 hrs
     - or ECO 2023 Principles of Economics II 3 hrs
   - Select one: PST 2015, SYG 2000, ANT 2000 3 hrs
   - E. Science Foundation 6 hrs

2. Common Program Prerequisites
   - ACG 2021 Principles of Financial Accounting
   - ACG 2071 Principles of Managerial Accounting
   - ECO 2013 Principles of Macroeconomics
   - ECO 2023 Principles of Microeconomics
   - *MAC 2233 Concepts of Calculus
   - *STA 2023 (or QMB 2100) Statistics
   - CGS 2100C Computer Fundamentals for Business
   - At UCF, students who have completed MAC 2233 and STA 2023 will be waived from ECO 3401. Students who have not completed both classes with a "C" or better must take ECO 3401.

3. Required for All Business Majors (33 hrs)
   Common Body of Knowledge
   First Semester in the College of Business Administration:
   Students must demonstrate competency in microcomputer applications during their first semester in College of Business Administration courses. Students who fail to demonstrate competency will not be permitted to continue enrollment in the business program. Computer competency can be met by taking the computer competency exam or by earning a "C" or better in CGS 2100C or its equivalency.
   - GEB 3031 Cornerstone 6 hrs
   - ECO 3401 Quantitative Business Tools I 3 hrs
   First or subsequent semesters depending on major:
   - BUL 3130 Legal & Ethical Environments of Business 3 hrs
   - ECO 3411 Quantitative Business Tools II 3 hrs
   - FIN 3403 Business Finance 3 hrs
   - MAN 3025 Management of Organizations 3 hrs
   - MAN 3504 Quality and Productivity Management 3 hrs
   - MAR 3023 Marketing 3 hrs

   Last Semester:
   - GEB 4361 Business in the International Environment 3 hrs
   - MAN 4720 Strategic Management 3 hrs

4. Special college and/or department requirements:
   - Grades of "D" do not transfer into the program and students must have a "C" or better in each common program prerequisites class.
   - Students wanting to major in Marketing must apply for admission to the major
   - Students not in attendance at the first meeting of any College of Business course may be dropped from the course. It is the responsibility of the student to take whatever steps are necessary to determine if they have been officially dropped from a course. This does not remove the student's responsibility for dropping courses they do not intend to complete.
   - Final exams will be given during Exam Week
   - A transfer student to this program must take a minimum of twelve (12) semester hours in marketing at UCF
   - Students majoring in Marketing must earn a grade of "C" or better in each course applied toward the major, and a 2.0 overall average in the major. MAR 3023 is included in this requirement.

5. Required Courses (18 hrs)
   - MAR 3641 Marketing Intelligence 3 hrs
   - MAR 3503 Customer Behavior & Relation. Mktn 3 hrs
   - MAR 3613 Marketing Analysis and Research 3 hrs
   - MAR 3391 Mktn Comm & Professional Selling 3 hrs
   - MAR 4803 Marketing Management 3 hrs
   - MAR 4804 Marketing Strategy 3 hrs

6. Restricted Electives (9 hrs)
   Minimum of 3 courses required
   - MAR 3323 Advert., Sales Promo., Public Relations 3 hrs
   - MAR 3403 Sales Force Management 3 hrs
   - MAR 4156 International Marketing 3 hrs
   - MAR 4231 Retailing Management 3 hrs
   - MAR 4711 Sports Marketing 3 hrs
   - MAR 4712 Healthcare Marketing 3 hrs
   - MAR 4841 Services Marketing 3 hrs

7. Foreign Language Requirements (0-8 hrs)
   Admission: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
   Graduation: None

8. University Minimum Exit Requirements
   - A 2.000 GPA in all work attempted (Overall, UCF, COB, Major)
   - 60 semester hours earned after any CLEP award
   - 48 semester hours of upper division credit completed
   - 30 semester hours of coursework completed in residency (last 30 hours) at UCF
   - A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Military credit permitted
   - Completion of the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit (if applicable)

9. Electives:
   - As necessary to result in 120 total credit hours

***Total Semester Hours Required 120 hours

To the majors:
- Majors who meet departmental criteria are also eligible to apply for a marketing internship (MAR 4941) and/or the small business consulting class (MAR 5941). Each of these classes is assigned three credit hours; however, neither can be counted as one of the three restricted electives required of marketing majors. For additional information about the department, curriculum, faculty, events, and careers in marketing, students are invited to visit our department home page at: http://www.bus.ucf.edu/mar/.

Community/Junior College Transfer Notes
- Common Program Prerequisites for the State University System
for College of Business Administration programs include Financial Accounting, Managerial Accounting, Macroeconomics, Microeconomics, Calculus, Statistics, and a relevant computer class. At UCF Business, students who have completed the calculus and statistics class will be waived from Business Quantitative Tools I. Students who have completed either the calculus or the statistics, but not both, must take Quantitative Tools I.

- Subject to the general grade and residence requirements, credit will be granted for transferred course work equivalent to that required in the UCF Business program. Grades of "D" do not transfer into the program and students must have a "C" or better in each common program prerequisites class.
- ACG X001 and X011 will substitute for ACG 2021 at UCF.
- Florida Public Community College students are advised to complete the Associate of Arts degree, to include the general education requirements, the common program prerequisites for the SUS system, and college algebra.
- 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 (junior, senior) course areas and cannot be satisfied with freshman, sophomore level courses.
- A minimum of 12 semester hours must be completed at UCF within each individual major.
- Orientation and advising are two of the most valuable tools that a student can make use of when transferring to UCF. Be sure that you take advantage of both.

FOUR YEAR PLAN OF STUDY - MARKETING

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**Must complete 9 hrs in a summer semester**

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* "C" or better grade required in each class

**Must complete CLAST requirement**

**Marketing majors must have "C" or better in each class in the major to include MAR 3023 and a 2.0 GPA in major**

**Transfer students must complete a minimum of twelve (12) hours in Marketing at UCF**

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<tr>
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<td>MAN 3025</td>
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<td>FIN 3403</td>
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**Pass Computer Competency Exam in same term Cornerstone**

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**Summer**

- MAN 3504 3
- MAR 3613 3
- MAR Elective 3

**Senior**

- Fall 12 hrs
  - BUL 3130 3
  - MAR 4803 3
  - MAR 3391 3
  - MAR Elective 3

- Spring 12 hrs
  - MAN 4720 3
  - MAR 4804 3
  - GEB 4361 3
  - MAR Elective 3

***General electives as required to reach 120 semester hours to include at least 60 semester hours outside the College of Business Administration. Economics courses in the Common Program Prerequisites and the Common Body of Knowledge count toward the 60 hours outside Business Administration.***
MATHEMATICS-APPLIED: BACHELOR OF SCIENCE

College of Arts and Sciences
Department of Mathematics, PH 403 (407) 823-6284
E-mail: math@ucf.edu
Dr. P. Rautenstrauch, (407) 823-2493

The Department of Mathematics offers special courses for students in the Honors Program. These are MAC 2311H, MAC 2312H, MAC 2313H, MAC 3930H, and MAP 2302H.

Admission Requirements  None

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- All mathematics courses except MAC 2311, 2312, 2313, and MAP 2302 must either be taken from, or approved by the Department of Mathematics at UCF
- Departmental Residency Requirement: at least 21 semester hours of regularly scheduled 3000-4000 level courses must be taken from the UCF Math Department
- Students should take MAS 3105 (Elementary Linear and Matrix Algebra) before taking MAS 3106 (Linear Algebra). MAS 3105 will then be used as a free elective
- Students must earn at least a "C" in each required course
- Students should consult with a departmental advisor
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

1. UCF General Education Program  (39 hrs)
   A. Communication Foundations  9 hrs
   B. Cultural and Historical Foundations  9 hrs
   C. Mathematical Foundations
      Select MAC 2311 Calculus I  4 hrs
      Select COP 3502C Computer Science I  3 hrs
   D. Social Foundations  6 hrs
   E. Science Foundations
      Select BSC 2010C General Biology  4 hrs
      Select PHY 2048 & L Physics for Sci & Eng I  4 hrs

2. Common Program Prerequisites  (8 hrs)
   COP 3502C* Computer Science I  GEP
   MAC 2311 Calculus I  GEP
   MAC 2312 Calculus II  4 hrs
   MAC 2312 Calculus III  4 hrs
   BSC 2010C* General Biology  GEP
   PHY 2048 & L Physics for Sci & Eng I & Lab  GEP
   *See Transfer Notes for possible substitutes

3. Core requirements  (51 hrs)
   PHY 2049 & L Physics for Sci & Eng II & Lab  4 hrs
   One course selected from
   ENC 3241 Technical Report Writing
   ENC 3310 Magazine Writing
   ENC 3311 Advanced Expository Writing
   STA 2023 Statistical Methods I  3 hrs
   MHF 2300 Logic and Proof  3 hrs
   MAP 2302 Differential Equations  3 hrs
   MAS 3106 Linear Algebra  4 hrs
   Select one course
   MAD 4203 Combinatorics & Graph Theory

4. Restricted Electives  (10 hrs)
   Applied Elective  3 hrs
   Select from COT 4210, COT 4110, COT 5310, COT 5405, COT 5507, COT 5510, EGN 3310, EGN 3321, EGN 3343, EGN 3373
   Upper division restricted  4 hrs
   Upper division or graduate mathematics or statistics courses or from COT 5510 or COT 4210.
   (MAC 2233, 2253, 2254 and MHF 4404 may not be used.)
   Biological or physical sciences restricted  3 hrs
   Select from PCB 3023, PCB 3043, PCB 3063, PCB 4302C, PCB 4303C, PCB 4723, CHM 3410, CHM 3411, CHM 5580, PHY 3101, PHY 3323, PHY 4324, PHY 4424, PHY 4604

5. Departmental Exit Requirements
- Earn a grade of "C" or better in each course required in the degree program (sections 2-4 above)
- Computer Competency met by COP 2200

6. Foreign Language Requirements  (0-8 hrs)
   Admission: Met by graduation requirement
   Graduation: Two semesters or equivalent proficiency exam.

7. Electives  (variable)
   Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

8. University Minimum Exit Requirements
- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted.
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable).

Total Semester Hours Required  120 hours

Related Programs: Applied Math, Computer Science, Engineering, Math Education, Statistics

Related Minors: Applied Computer Science, Computer Science, Engineering, Math, Physics, Statistics

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.
Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:

- COP 3502C*: may use any programming language course with a COP prefix
- BSC 2010C*: may use any laboratory BSC or CHM course which is designed for majors
- PHY 2048*: may use any PHY course with a lab. However PHY 2048 is a prerequisite for PHY 2049 and must be taken
MATHMATICS - PURE:
BACHELOR OF SCIENCE

College of Arts and Sciences
Department of Mathematics, PH 403 (407) 823-6284
E-mail: math@ucf.edu
Dr. P. Rautenstrauch, (407) 823-2493

The Department of Mathematics offers special courses for students in the Honors Program. These are MAC 2311H, MAC 2312H, MAC 2313H, MAC 3930H, and MAP 2302H.

Admission Requirements None

Degree Requirements

- UCF students who change degree programs and select this major must adopt the most current catalog.
- All mathematics courses except MAC 2311, 2312, 2313, and MAP 2302 must either be taken from, or approved by the Department of Mathematics at UCF.
- Departmental Residency Requirement: at least 21 semester hours of regularly scheduled 3000-4000 level courses must be taken from the UCF Math Department.
- Students should take MAS 3105 (Elementary Linear and Matrix Algebra) before taking MAS 3106 (Linear Algebra). MAS 3105 will then be used as a free elective.
- Students must earn at least a "C" in each required course.
- Students should consult with a departmental advisor.
- Courses designated in 1 (General Ed Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

1. UCF General Education Program (39 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural and Historical Foundations 9 hrs
   C. Mathematical Foundations
      Select MAC 2311 Calculus I 4 hrs
      Select COP 3502C Computer Science I 3 hrs
   D. Social Foundations 6 hrs
   E. Science Foundations
      Select BSC 2101C General Biology 4 hrs
      Select PHY 2048 & L Physics for Sci & Eng I (PR: MAC 2311) 4 hrs

2. Common Program Prerequisites (8 hrs)
   COP 3502C* Computer Science I GEP
   MAC 2311 Calculus I GEP
   MAC 2312 Calculus II 4 hrs
   MAC 2313 Calculus III 4 hrs
   BSC 2010C* General Biology GEP
   PHY 2048* & L Physics for Sci & Eng I & Lab GEP
   *See Transfer Notes for possible substitutes

3. Core requirements (52 hrs)
   PHY 2049 & L Physics for Sci & Eng II & Lab 4 hrs
   One course selected from
   ENC 3241 Technical Report Writing
   ENC 3310 Magazine Writing
   ENC 3311 Advanced Expository Writing
   STA 2023 Statistical Methods 3 hrs
   MHF 2300 Logic and Proof 3 hrs
   MAP 2302 Differential Equations 3 hrs
   MAS 3106 Linear Algebra 4 hrs
   MAP 4363 Applied Boundary Value Prob I 3 hrs
   STA 4221 Statistical Theory I 3 hrs
   MAS 4301 Algebraic Structures 3 hrs
   STA 4222 Statistical Theory II 3 hrs
   COP 3503C Computer Science II 3 hrs
   MAA 4226 Advanced Calculus I 4 hrs
   MAA 4227 Advanced Calculus II 3 hrs
   MAD 4203 Combinatorics & Graph Theory 4 hrs
   MTG 4302 Introduction to Topology 3 hrs
   MAP 4307 Appl to Complex Variables 3 hrs

4. Restricted Electives (7 hrs)
   Math or Statistics restricted 4 hrs
   Upper division or graduate mathematics or statistics courses or
   from COT 4500, COT 5510, or COT 4210. (MAC 2233, 2253,
   2254, and MAA 5210 may not be used.)
   Biological or physical sciences restricted 3 hrs
   Select from PCB 3023, PCB 3043, PCB 3063, PCB 4302C, PCB 4303C PCB 4723, CHM 2045C, CHM 2046, PHY 3101, PHY 3323, PHY 4424

5. Departmental Exit Requirements
   - Earn a grade of "C" or better in each course required in the degree
     program (sections 2-4 above)
   - Computer Competency met by COP 3503C

6. Foreign Language Requirements (0-8 hrs)
   Admission: Met by graduation requirement
   Graduation: Two semesters or equivalent proficiency exam.

7. Electives (variable)
   Select primarily from upper level courses, with departmental
   advisor's approval. May be outside of the department.

8. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP,
     Credit by Exam, and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the
     CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Statistics, Applied Math, Computer Science,
Engineering, Math Education

Related Minors: Computer Science, Engineering, Math, Physics,
Statistics

Transfer notes:
   - "D" grades from other institutions do not meet departmental
     requirements.
   - Courses taken at community colleges do not substitute for Upper
     Division courses.
   - Courses transferred from private and out-of-state schools must be
     evaluated for equivalency credit. The student must provide all
     supporting information.

Acceptable Substitutes for common program prerequisites if taken
prior to transferring to UCF:
   - COP 3502C*: may use any programming course with a COP
     prefix.
   - BSC 2010C*: may use any laboratory BSC or CHM course
     which is designed for majors
   - PHY 2048*: may use any PHY course with a lab. However PHY
     2048 is a prerequisite for PHY 2049 and must be taken
MATHEMATICS EDUCATION: BACHELOR OF SCIENCE

College of Education
Instructional Programs Department, ED346, (407) 823-2939
Coordinator: Dr. Doug Brumbaugh, ED107, (407) 823-2045,
E-mail: brumba@pegasus.cc.ucf.edu
Web Address: http://pegasus.cc.ucf.edu/~ucfed/

Admission Requirements
> have on file in the University Admissions Office passing scores on all parts of the College Level Academic Skills Test (CLAST) (No alternatives)
> have on file in the University Admissions Office a score at or above the 40th percentile on the SAT (950) or ACT (20 enhanced)
> present an overall GPA of 2.5
> achieve a “C” or better grade in EDG 4323, Professional Teaching Practices, including successful completion of the tutorial component or equivalent
> complete a formal application for admission to a particular teacher education program
> meet any special departmental requirements

Degree Requirements
> Students should see an advisor
> The courses designated in 1 (General Education) and 2 (Common Program Prerequisites) should usually be completed in the first 60 hours

1. UCF General Education Program (36 hrs)
A. Communication Foundations
   9 hrs
B. Cultural-Historical Foundations
   9 hrs
C. Mathematical Foundations
   6 hrs
  Select *MAC 2311 Calculus with Analytic Geometry I
  Select *STA 2304 Statistical Methods I
D. Social Foundations
   6 hrs
  Select *PSY 2013 General Psychology
E. Science Foundations
   6 hrs
  plus one lab

At least one course taken to meet the natural science requirements in General Education and/or Prerequisites must include a laboratory component.

2. Common Program Prerequisites (16 hrs)
EDF 2005 Intro to Education
   3 hrs
*EDG 2701 Teaching Diverse Populations
   3 hrs
EME 1040 Intro to Technology
   3 hrs
CGS 1060C Intro to Computer Science
   3 hrs
MAC 2312 Calculus with Analytic Geometry II
   4 hrs
*In addition to EDG 2701, students must take 6 additional hours with an international or diversity focus. The eligible courses will be determined by the institution in which the student is enrolled for their lower division course work. (These courses must be identified in the College/University catalog.)

3. Education Core Requirements (9 hrs)
EDG 4323 Professional Teaching Practices
   3 hrs
EDF 4603 Analysis Critical Issues in Education
   3 hrs
EDF 4214 Classroom Learning Principles
   3 hrs

4. Internship I (ESE 3943) (6 hrs)
> A student must have completed the portfolio process for Internship I Satisfactorily before student teaching
> At least 50% of all required mathematics courses and Teaching

5. Specialization Requirements (41 hrs)
MAP 2302 Differential Equations
   3 hrs
MAP 4103 Mathematical Modeling
   3 hrs
MAC 2313 Calculus with Analytic Geometry III
   4 hrs
MAS 4301 Algebra Structure
   3 hrs
MAD 4203 Combinatorics & Graph Theory
   4 hrs
MAE 4360 Mathematics Instructional Analysis
   4 hrs
MAE 4634 Programs in Teaching Mathematics
   3 hrs
MAS 3105 Elementary Linear and Matrix Algebra
   4 hrs
MAS 3203 Number Theory
   3 hrs
MHF 2300 Logic and Proof in Mathematics
   3 hrs
MHF 4404 History of Mathematics
   3 hrs
MTG 4212 Modern Geometry
   4 hrs

6. Internship II (ESE 4943) (12 hrs)
> A student must have completed the portfolio process for Internship II Satisfactorily before student teaching
> At least 80% of all required mathematics courses and all methods courses must be completed before registering for Internship II

7. Foreign Language Requirements (0-6 hrs)
State University System foreign language admission requirement: 2 years in high school or 1 year of college instruction in a single foreign language. (This requirement applies to those students admitted to the University without the required 2 units of foreign language in high school)

8. Departmental Exit Requirements
Achieve a 2.5 GPA in all courses within the major.

9. University Minimum Exit Requirements
> A 2.0 GPA in all work attempted (both UCF and overall)
> 60 semester hours earned after CLEP awarded
> 48 semester hours of upper division credit completed
> 30 semester hours in regular courses completed at UCF
> Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Transfer notes
Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

*Acceptable Substitutes:
While another course may be acceptable, for certification purposes students should take the listed courses.
MECHANICAL ENGINEERING: BACHELOR OF SCIENCE

College of Engineering
Dr. E. R. Hosler, ENGR 311, E-Mail: hosler@mail.ucf.edu

Admission Requirements:
All entering students are required by UCF to attend Orientation before registering for their first semester at UCF. Orientation includes engineering academic advisement and registration for first-semester UCF classes; see also the section, Orientation, found elsewhere in this catalog.

Degree Requirements
- Each engineering student is assigned a qualified engineering academic advisor in the department of his/her major. Each student must seek academic advisement before registering for classes each semester to minimize excess hours and to ensure that satisfactory academic progress is being maintained.

1. UCF General Education Program for Engineering Students (38 hrs)
The UCF General Education Program (GEP) is described in the section, General Education Program, found elsewhere in this catalog. Engineering students should closely study the requirements of the UCF GEP and the allowable substitutions detailed in paragraphs A. through E. below to minimize excess hours. Students transferring to UCF from within the Florida State University/Community College Systems should complete the GEP and the Common Program Prerequisites before transferring.

A. Communication Foundations 9 hrs
1. Take ENC 1101
2. Take ENC 1102
3. SPC 1016 is the preferred substitute for SPC 1600C for engineering students.

See the descriptions of these courses in the section, Alphabetical Listing of Courses, later in this catalog.

B. Cultural and Historical Foundations 9 hrs

C. Mathematical Foundations 7 hrs
1. Take MAC 2281, Calculus for Scientists and Engineers I, (4 hrs). NOTE: College algebra and trigonometry are prerequisites for Calculus I. See the course descriptions.
2. Take STA 3032 (3 hrs). NOTE: Calculus II is the prerequisite for this course.

D. Social Foundations 6 hrs
1. Take ECO 2013 or ECO 2023.

E. Science Foundations 7 hrs
1. Take PHY 2048/48L.
2. Take either GEO 1200 or GEO 2370.

2. Common Program Prerequisites (CPP’s) (19 hrs)
These courses are specifically required for all engineering students of the Florida State University System. CPP courses are also available at other Florida post-secondary schools and may be transferred directly to UCF programs. All engineering students must remain in the Calculus sequence with which they begin. Students who begin with MAC 2281 Calculus for Scientists and Engineers I, must continue with MAC 2282 and MAC 2283. Students who begin with MAC 2311 Calculus with Analytical Geometry I, must continue with MAC 2312 and MAC 2313. The individual courses in these two Calculus sequences are not interchangeable. NOTE: MAC 2281 and PHY 2048/48L also satisfy UCF GEP sub-requirements as do ENC 1101, ENC 1102, the Humanities courses, and the Social Science courses.

CHS 1440 Fundamentals of Chemistry for Eng 4 hrs
(MAC 2281 will substitute)
MAC 2281 Calculus for Scientists & Engineers I GEP
(MAC 2311 will substitute)
MAC 2282 Calculus for Scientists & Engineers II 4 hrs
(MAC 2312 will substitute)
MAC 2283 Calculus for Scientists & Engineers III 4 hrs
(MAC 2313 will substitute)
MAP 2302 Differential Equations 3 hrs
PHY 2048/48L Physics for Engineers & Scientists I GEP
PHY 2049/49L Physics for Engineers & Scientists II 4 hrs
ENC 1101 Composition I GEP
ENC 1102 Composition II GEP

Humanities Courses GEP
Social Science Courses GEP
Humanities or Social Sciences GEP

3. Courses Required for the Major (49 hrs)
The College of Engineering requires all engineering students to achieve a minimum 2.250 GPA in completing these courses, together with the senior design courses listed in 4. below. Independent study courses generally do not satisfy major requirements and normally are awarded grades of I, S, or U.

EGN 1006 Intro to the Engineering Profession 1 hr
ENG 1111C Engineering Computer Graphics 2 hrs
EGN 1930 ST: Engineering Concepts & Methods 1 hr
EGN 3310 Engineering Analysis - Statics 3 hrs
EGN 3321 Engineering Analysis - Dynamics 3 hrs
EGN 3343 Thermodynamics 3 hrs
EGN 3365 Structure & Properties of Materials 3 hrs
EGN 3930 ST: Principles of Electrical Engineering 3 hrs
EGN 4624 Engineering Administration 3 hrs
STA 3032 Probability & Statistics for Engineers GEP
3 hrs
EML 3034 Modeling Methods in MMAE 3 hrs
EML 3303C Mechanical Engng Measurements 3 hrs
EML 3312C Feedback Control 3 hrs
EML 3500 Machine Design & Analysis 3 hrs
EML 3601 Solid Mechanics 3 hrs
EML 3701 Fluid Mechanics I 3 hrs
EML 4142 Heat Transfer 3 hrs
EML 4220 Vibration Analysis 3 hrs
EML 4535C Introduction to CAD/CAM 3 hrs

Select one of the following three options for your senior year to complete your BSME. See your ME advisor for assistance in making this selection. (16 hrs)

a. Energy Systems Option
EML 3101 Thermodynamics of Mechanical Sys 3 hrs
EML 4304C Thermo-fluids Measurements 2 hrs
EMS 4703C Fluid Mechanics II 3 hrs
Approved Electives 8 hrs

b. Mechanical Systems Option
EML 3012C Experimental Techniques in Mechanics & Materials 2 hrs
EML 3262 Kinematics of Mechanisms 3 hrs
EML 3804C Digital Control in Mechatronics 3 hrs
Approved Electives 8 hrs

c. Materials Option
EML 3012C Experimental Techniques in Mechanics & Materials 2 hrs
EML 3124 Structure & Properties of Alloys 3 hrs
EML 4223 Deformation & Fracture of Materials 3 hrs
Approved Electives 8 hrs
4. Departmental Graduation Requirements (6 hrs)
   - EML 4501C Engineering Design I 3 hrs
   - EML 4502C Engineering Design II 3 hrs
   - COE encourages all engineering students to take the Engineering Intern Exam during their Senior year.

5. Foreign Language Requirements (0-8 hrs)
   Admission: 2 years of one foreign language in high school, or 1 year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
   Graduation: None.

6. Approved Technical Electives
   Technical electives are available in the BSME program to address specific student interests in a variety of technical areas. Students should consult with their assigned academic advisor for a list of the approved technical electives and the terms when specific courses of this type are to be offered.

7. University Minimum Graduation Requirements
   - A 2.000 GPA in all work attempted (both UCF and overall).
   - 60 semester hours earned after any CLEP award.
   - 48 semester hours of upper division credit completed.
   - 32 semester hours of regular courses completed at UCF.
   - A maximum of 45 semester hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits are permitted.
   - Complete the General Education Program, the Gordon Rule, the CLAST, and 9 semester hours of Summer credit (if applicable).

Total Semester Hours Required: 128 hrs

Related Programs: Aerospace Engineering, Industrial Engineering.

Related Minors: Space Studies.

Transfer Notes:
- Courses taken from Community Colleges do not substitute for Upper Division Courses.
- Courses transferred must be formally evaluated for equivalency credit. The student must provide all supporting information with his/her petition for this evaluation.
- EGN 1006 and EGN 1930 are required courses for incoming freshmen only. The two credit hours for these courses may be substituted by an approved Mechanical Engineering technical elective for transfer students.

Tentative Course Schedule for Entering Freshmen
The tentative course schedule listed below is a guide for those students who plan on completing their degree in four years. All engineering students should meet with their faculty advisor to develop and maintain an appropriate plan of study.

Mechanical Engineering - 128 semester hours* required

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
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<tbody>
<tr>
<td>Fall</td>
<td>15 hrs</td>
<td>Spring</td>
</tr>
<tr>
<td>EGN 1006 Intro to Eng Prof</td>
<td>1</td>
<td>EGN 1930 ST: Eng Conc &amp; Meth</td>
</tr>
<tr>
<td>*ENC 1101 English Comp I</td>
<td>3</td>
<td>ENC 1102 English Comp II</td>
</tr>
<tr>
<td>*EML 3400 Chm Eng or</td>
<td>4</td>
<td>*EML 2282 Calc Sci &amp; Eng II or 4</td>
</tr>
<tr>
<td>CHM 2045 w/lab</td>
<td>3</td>
<td>MAC 2312 Calc II</td>
</tr>
<tr>
<td>*MAC 2281 Calc Sci &amp; Eng I or 4</td>
<td></td>
<td>*PHY 2048 Phys Eng I w/lab</td>
</tr>
<tr>
<td>MAC 2311 Calc I</td>
<td></td>
<td>*SPE 1016 Oral Comm for Eng or</td>
</tr>
<tr>
<td>*EML 2013 Economics or</td>
<td>3</td>
<td>SPE 1600C Oral Comm</td>
</tr>
<tr>
<td>EML 2023 Prin of Econ I, II</td>
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</tbody>
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Summer 10 hrs\(^{1,4}\)
*MAC 2283 Calc Sci & Eng III or 4
MAC 2313 Calc III
*Social Foundations 3
*Cult & Hist Foundations 3

<table>
<thead>
<tr>
<th>SECOND YEAR</th>
<th></th>
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<tbody>
<tr>
<td>Fall</td>
<td>15 hrs</td>
<td>Spring</td>
</tr>
<tr>
<td>EGN 1111C Eng Comp Graph</td>
<td>2</td>
<td>EGN 3321 Eng Anal-Dynamics</td>
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<tr>
<td>*MAP 2302 Diff Equations</td>
<td>3</td>
<td>(PR: EGN 3310, CR: MAC 2283</td>
</tr>
<tr>
<td>EGN 3310 Eng Anal-Statics</td>
<td>3</td>
<td>or MAC 2313)</td>
</tr>
<tr>
<td>(PR: PHY 2048, CR: MAC 2281</td>
<td>3</td>
<td>EGN 3365 Strct &amp; Prop Matls</td>
</tr>
<tr>
<td>or MAC 2312)</td>
<td></td>
<td>(PR CHS 1440 or CHM 2045 &amp;</td>
</tr>
<tr>
<td>*PHY 2049 Phys Eng II w/lab</td>
<td>4</td>
<td>MAC 2282 or MAC 2312)</td>
</tr>
<tr>
<td>STA 3023 Prob &amp; Stats/Engrs</td>
<td>3</td>
<td>EGN 3343 Thermodynamics</td>
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<td>(PR: MAP 2302, CR: EGN 3321)</td>
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<tr>
<td></td>
<td></td>
<td>EML 3034 Mod Mtdhs/MMAE</td>
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<td></td>
<td>(PR: MAP 2302, High Lev Prog</td>
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<td></td>
<td></td>
<td>Lang.; CR: EGN 3321)</td>
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<td></td>
<td></td>
<td>EGN 3930 ST: Prin of Elec Engr</td>
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<td>(PR: PHY 2049, CR: MAP 2302)</td>
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<thead>
<tr>
<th>THIRD YEAR</th>
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<tbody>
<tr>
<td>Fall</td>
<td>15 hrs</td>
<td>Spring</td>
</tr>
<tr>
<td>EML 3601 Solid Mechanics</td>
<td>3</td>
<td>EML 4220 Vibration Analysis</td>
</tr>
<tr>
<td>(PR: EGN 3310, CR: MAP 2302)</td>
<td></td>
<td>(PR: EML 3301)</td>
</tr>
<tr>
<td>EML 3701 Fluid Mechanics I</td>
<td>3</td>
<td>EML 3500 Mach Dsgn/Anal</td>
</tr>
<tr>
<td>(PR: MAP 2302, EGN 3343)</td>
<td></td>
<td>(PR: EML 3601)</td>
</tr>
<tr>
<td>EML 3312C Feedback Cont</td>
<td>3</td>
<td>EML 4142 Heat Transfer</td>
</tr>
<tr>
<td>(PR: EGN 3321, 3373, or 3930,</td>
<td></td>
<td>(PR: EML 3701)</td>
</tr>
<tr>
<td>MAP 2302)</td>
<td></td>
<td>EGN 4624 Engineering Admin</td>
</tr>
<tr>
<td>EML 3303C Mech Engr Meas</td>
<td>3</td>
<td>EML 4535C CAD/CAM</td>
</tr>
<tr>
<td>(PR: EML 3601, EGN 3343)</td>
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<td>(PR: EGN 1111C, 3601, EML 3034</td>
</tr>
<tr>
<td>*Science Foundations 2</td>
<td>3</td>
<td>CR: EAS 4200 or EML 3500)</td>
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<thead>
<tr>
<th>FOURTH YEAR</th>
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<tbody>
<tr>
<td>I. ENERGY SYSTEMS OPTION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>14 hrs(^{1,3})</td>
<td>14 hrs(^{1,3})</td>
</tr>
<tr>
<td>EML 3101 Thermo Mech Sys</td>
<td>3</td>
<td>EML 4502C Eng Design II</td>
</tr>
<tr>
<td>(PR: EGN 3343)</td>
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<td>(PR: EML 4501C)</td>
</tr>
<tr>
<td>EML 4703 Fluid Mechanics II</td>
<td>3</td>
<td>EML 4304C Meas Therm Sys</td>
</tr>
<tr>
<td>(PR: EML 3701)</td>
<td></td>
<td>(PR: EML 3303C, 4142)</td>
</tr>
<tr>
<td>EML 4501C Eng Design I</td>
<td>3</td>
<td>Approved Elective</td>
</tr>
<tr>
<td>(PR: EML 3304C, 3500, 3701)</td>
<td></td>
<td>Approved Elective</td>
</tr>
<tr>
<td>Approved Elective</td>
<td>2</td>
<td>*Cult &amp; Hist Foundations 2</td>
</tr>
</tbody>
</table>

| II. MECHANICAL SYSTEMS OPTION | |          |
| Fall        | 14 hrs\(^{1,3}\) | 14 hrs\(^{1,3}\) |
| EML 3262C Kinem Mechnms | 3 | EML 4502C Eng Design II | 3 |
| (PR: EGN 3321) | | (PR: EML 4501C) |
| EML 4501C Eng Design I | 3 | EML 3804C Mechatronics | 3 |
| (PR: EML 3304C, 3500, 3701) | | (PR: EML 4535C, CR: EML 3312C) |
| Approved Elective | 2 | 3012C ExpTech Mech/Mats | 2 |
| Approved Elective | 3 | (PR: EML 3365, EML 3601) |
| *Cult & Hist Foundations 3 | 3 | Approved Elective |
| *Cultural & Hist Foundations 3 | 3 |

| III. MATERIALS OPTION | |          |
| Fall        | 14 hrs\(^{1,3}\) | 14 hrs\(^{1,3}\) |
| EML 3101 Thermo Mech Sys | 3 | EML 4502C Eng Design II | 3 |
| (PR: EGN 3343) | | (PR: EML 4501C) |
| EML 4501C Eng Design I | 3 | EMA 4223 Dfrmatn Fret Matls | 3 |
| (PR: EML 3304C, 3500, 3701) | | (PR: EGN 3365) |
| EMA 3124 Struct/Props Alloys | 3 | EMA 3012C ExpTech | 2 |
| (PR: EGN 3365) | | (PR: EGN 3365, EML 3601) |
| *Cult & Hist Foundations 2 | 3 | Approved Elective |
| *Cult & Hist Foundations 3 | 3 |

Notes:
1. Courses marked with an asterisk (*) are also available from most Community Colleges and are often part of their Pre-Engineering AA programs. Most of these courses are part of the UCF General
1. Courses marked with an asterisk (*) are also available from most Community Colleges and are often part of their Pre-Engineering AA programs. Most of these courses are part of the UCF General Education Program; see the section on the GEP elsewhere in this catalog for further information.

2. All students must remain in the Calculus sequence with which they begin. Students who begin with MAC 2281 Calculus for Scientists and Engineers I, must continue with MAC 2282 and MAC 2283. Students who begin with MAC 2311 Calculus with Analytical Geometry I, must continue with MAC 2312 and MAC 2313. The individual courses in these two Calculus sequences are not interchangeable.

3. Students should consult with the MMAE Department in ENGR 381 for a list of approved technical electives and for the terms when specific courses of this type are to be offered. Students should check with their faculty advisor frequently to ensure they are making satisfactory progress toward their degree.

4. The State University System requires most students to complete a minimum of nine semester hours during summer terms prior to graduation. See the section on Summer Attendance Requirement elsewhere in this catalog.

5. Mechanical engineering students must earn at least 32 hours in residence at UCF.

**IMPORTANT NOTICE**

- **Bolded** course should be taken in the term noted or in a previous term if your schedule permits and as long as all prerequisites for that course have been met.
- A number of **bolded** courses are given only during the term noted in this program of study, therefore it is imperative that you take them in the suggested sequence. Failure to do so may result in a considerable delay in the date of your graduation.
- Non-bolded course may be taken at any time as long as all prerequisites for that course have been met. Caution must be taken to ensure that you take courses in a proper sequence regarding prerequisites.
- Please meet with your advisor if you have any questions regarding your schedule. Do not drop any course before discussing this action with your advisor - there may be alternative actions which will benefit you.
- If you do not have a higher level programming language background you must take a course in this area prior to taking EML 3034 ("C" or FORTRAN recommended).
- If you are not ready to begin the Calculus sequence upon entry to the Mechanical Engineering curriculum it is imperative that you meet with your advisor to plan a personalized program of study. Mathematics and physics are cornerstones of a quality engineering program and it is important for your academic career that you proceed accordingly.
MEDICAL LABORATORY SCIENCES: BACHELOR OF SCIENCE

College of Health and Public Affairs
BIO 103, (407) 823-2968
Undergraduate Program Director: Dorilyn Hitchcock
E-mail: hitchcod@pegasus.cc.ucf.edu
Web Address: http://www.cohpa.ucf.edu/molec.bio/

Admission Requirements - LIMITED ACCESS
Acceptance to the university does not necessarily constitute admission to the upper division medical laboratory science program.

- SEPARATE APPLICATION to the limited access program should be made directly to the program prior to March 1 of the year admission is sought. Preference will be given to those who apply prior to March 1. Applications will be accepted until the class is filled.
- UCF application must also be submitted by the program deadline
- Student must complete all general education, foreign language admissions, and program prerequisites prior to the start of the program
- All applicants must have a minimum overall GPA of 2.5, and complete all program prerequisite courses with at least a grade of "C" (No CLEP, TSD, or AP credit may be used for prerequisite courses)

Degree Requirements
- Students should complete the General Education Program, Foreign Language Admissions and the Common Program Prerequisite Requirements before transferring within the Florida Public University/Community College System
- Students should consult with a departmental advisor
- The courses designated in sections 1 and 2 below may be taken at a Florida Community College, and should usually be completed in the first 60 hours
- A minimum overall GPA of 2.5 and a minimum grade of "C" in prerequisite and major courses is required for admission to, continuation in, and graduation from the Medical Laboratory Sciences Program
- UCF Residency Requirement: 32 hours
- The courses designated in sections 1 (General Education) and 2 (Common Program Prerequisites) should usually be completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations
      9 hrs
   B. Cultural Historical Foundations
      9 hrs
   C. Mathematical Foundations
      6 hrs
   Select MAC 1105
   Select CGS 2100C and STA 2023
   D. Social Foundations
      6 hrs
   E. Science Foundations
      6 hrs
   Select BSC 2010C
   Select CHM 2045C

2. Common Program Prerequisites (25 hrs)
   BSC 2010C General Biology and lab
   CHM 2045C, 2046 Chemistry Fund'als I&II w/labs
   STA 2023 Statistical Methods I
   ZOO 3733C Human Anatomy and Lab*
   CHM 2210, 2211 Organic Chemistry I&II w/labs
   MCB 3020C General Microbiology
   PCB 3703C Human Physiology and Lab*
   * see Transfer Notes

3. Core Requirements (63 hrs)
   MLS 3220C Clinical Microscopy with lab 2 hrs
   MLS 4625C, 4630C Advanced Clinical Chemistry I&II 8 hrs
   PCB 3233 Immunology 3 hrs
   PCB 3233L Immunology Lab 1 hr
   MLS 4430C Clinical Parasitology 2 hrs
   MLS 3305 Hematology 4 hrs
   MLS 4506C Immunodiagnostics 2 hrs
   HSA 4700 Intro to Research in Health Prof 3 hrs
   MLS 4550 Clinical Immunohematology 4 hrs
   MLS 4460 Clinical Pathogenic Microbiology 4 hrs
   MLS 4420C Clinical Mycology 1 hr
   MLS 4334C Hemostasis 2 hrs
   MLS 4932 Medical Technology Seminars 1 hr
   MLS 3705 Concepts in Education/Management 3 hrs
   MLS 4830C, 4831C, Clinical Practice I, II, 4832C, 4833C, & 4834C III, IV, & V 20 hrs
   CGS 2100C Computer Fundamentals for Business 3 hrs

4. Upper Division Restricted Electives
   None

5. Departmental Exit Requirements (126 hrs)
   - A minimum 2.5 overall GPA is required for clinical assignment.
   - The Degree in Medical Laboratory Sciences will be awarded upon satisfactory completion of the University's didactic component and the clinical component in an affiliated hospital laboratory
   - 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
   - Students must earn a grade of "C" or higher in required courses with a minimum 2.5 overall GPA for graduation

6. Electives None

7. Foreign Language Requirements (0-8 hrs)
   Admissions: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
   Graduation: None

8. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 31 semester hours in regular courses completed at UCF
   - A maximum of 45 hrs of extension, correspondence, CLEP, Credit by Exam and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hrs of Summer credit (if applicable)

Total Semester Hours Required 126 hrs

Related Programs: Molecular Biology and Microbiology, Biology, Chemistry

Related Minors: Biology, Chemistry

Transfer Notes:
Community College Equivalencies
Human Anatomy and Physiology I & II
(BSC 2093C and 2094C) 8
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MOLECULAR BIOLOGY AND MICROBIOLOGY: BACHELOR OF SCIENCE

College of Health and Public Affairs
BIO 306, (407) 823-5932
Chair: Robert Gennaro
E-mail: gennaro@pegasus.cc.ucf.edu
Web Address: http://www.cohpa.ucf.edu/molec.bio/

Admission Requirements None

Degree Requirements
- Students should complete the General Education Program before transferring within the Florida Public University/Community College System
- Students should consult with a departmental advisor
- The courses designated in section 1 below may be taken at a Florida Community College, and should usually be completed in the first 60 hours
- No CLEP, TSD, or AP credit may be used for major requirements
- No “D” grades in life science courses from other institutions will be accepted
- The courses designated in sections 1 (General Education) and 2 (Common Program Prerequisites) should usually be completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations
      9 hrs
   B. Cultural Historical Foundations
      9 hrs
   C. Mathematical Foundations
      6 hrs
      Select MAC 1105
      Select CGS 1060C and STA 2023
   D. Social Foundations
      6 hrs
   E. Science Foundations
      6 hrs
      Select BSC 2010C
      Select CHM 2045

2. Common Program Prerequisites (22 hrs)
   BSC 2010C General Biology I GEP
   BSC 2011C General Biology II
   CHM 2045, 2046, General Chemistry I, II, + Lab GEP, 4 hrs
   CHM 2210, 2211, Organic Chemistry I, II, + Lab 2046L
      10 hrs
   MAC 2211L Calculus with Analytical Geometry I 4 hrs

3. Core Requirements (40 hrs)
   Life Sciences
   MCB 2020C General Microbiology 5 hrs
   PCB 3063, 3063L Genetics + Genetics Lab 4 hrs
   PCB 3233, 3233L Immunology + Immunology Lab 4 hrs
   PCB 3523, 4524 Molecular Biology I, II 6 hrs
   BSC 3404 Quantitative Biological Methods 4 hrs
   Chemistry
   BCH 4053 Biochemistry I 3 hrs
   Math* and Stat
   MAC 1105, College Algebra, College and
   MAC 1114 Trigonometry and
   MAC 2253 or 2311 Applied Calculus I or Calculus I
   STA 2023 Statistical Methods I 3 hrs
   Physics*
   PHY 2048C, 2049C College Physics I, II 8 hrs
   or 2048C, 2049C

4. Upper Division Restricted Electives (18 hrs)
   (Six Courses)
   MCB 5654 Applied Microbiology 3 hrs
   BCH 4054 Biochemistry II 3 hrs
   BCH 4103L Biochemical Methods 2 hrs
   PCB 3203, 3203L Pathogenic Microbiology + Lab 4 hrs
   MCB 4114C Microbial Systematics and Diagnostics 4 hrs
   MCB 4414 Microbial Metabolism 3 hrs
   MCB 4603 Environmental Microbiology 3 hrs
   MCB 5205 Infectious Process 3 hrs
   MCB 5505 Virology 3 hrs
   PCB 3703C Human Physiology 4 hrs
   PCB 5235 Immunopathology 4 hrs
   PCB 5806 Endocrinology 3 hrs
   ZOO 3733C Human Anatomy 4 hrs
   ZOO 4503C Vertebrate Embryology 5 hrs
   ZOO 4753C Vertebrate Histology 5 hrs
   ZOO 4XXX Fundamentals of Neurology 3 hrs
   ZOO 5745C Essentials of Neuroanatomy 4 hrs
   ZOO 3701C Dissection Techniques 2 hrs
   MCB 5487 Current Topics in Molecular Biology 3 hrs
   PCB 5026 Signal Transduction 3 hrs
   PCB 5239 Tumor Biology 3 hrs
   MCB 5225 Molecular Biology of Disease 3 hrs

5. Departmental Exit Requirements (81-91 hrs)
   To be eligible for a major in Molecular Biology and Microbiology:
   - A student must complete all coursework in the baccalaureate curriculum as shown, and, earn a GPA of at least 2.0 for all coursework in the Core and Restricted Electives
   - Independent study, directed research, or similar credit may not be used as a Restricted Elective
   - A minimum of 20 hours must be taken at UCF in the department of the major
   - Students will be required to take a comprehensive test during their last semester

6. Electives (variable)
   Suggested Elective: SLS 2311 - Overview of Selected Medical Careers, recommended for students pursuing any of the following fields: chiropractic, dental, medical, optometry, pharmacy podiatry, or veterinary.

7. Foreign Language Requirements (0-8 hrs)
   Admissions: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.

Graduation: None

8. University Minimum Exit Requirements
   - A “C” GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hrs of extension, correspondence, CLEP, Credit by Exam and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hrs of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Biology, Chemistry

Related Minors: Biology, Chemistry
Transfer Notes:
Students who begin a two semester sequence course (e.g. General Chemistry) at a community college are strongly encouraged to complete the sequence before transferring. If it will not be possible to complete the sequence at the community college, the student should postpone beginning the course until enrolling at UCF.

Students may elect to take Human Anatomy (ZOO 3733) and Human Physiology (PCB 3703) at UCF in order to meet the University's requirement that students complete 48 semester hours of upper division (3000/4000 level) credit. Students meeting the Human Anatomy and Human Physiology I & II requirement at the community college (lower division) level must take an additional 8 hours of upper division coursework at UCF.

Honors in the Major
- Application and admission through the department and The Honors College
- Fulfill University requirements for Honors in the Major and maintain a 3.2 UCF GPA; 3.5 in the major
- Complete BSC 3404H "Quantitative Biological Methods" with a grade of B or better (4 credits)
- Complete MCB 4970H "Honors Thesis" with a grade of B or better and successfully complete the oral defense of the Honors Thesis (3 credits)

University Honors
- Application and admission through The Honors College
- Fulfill University lower division requirements for University Honors
- Fulfill University upper division requirements for University Honors in Microbiology
- Complete BSC 3404H "Quantitative Biological Methods" with a grade of B or better (4 credits)
- Complete PCB 4524H "Molecular Biology II Honors" with a grade of B or better (3 credits)
- Complete One Interdisciplinary Honors Seminar (3 credits)

*NOTE: Those students interested in pursuing graduate or professional education are strongly advised to select the following courses. Physics for Scientists and Engineers I & II (PHY 2048, 2049, 2048L, 2049L); Applied Calculus I & II (MAC 2253, 2254) or Calculus with Analytic Geometry I & II (MAC 2311, 2312). Directed Research MCB 4912 is offered on an S/U basis.

Tentative Course Schedule for Entering Freshmen

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*Recommended for preprofessional students.

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Plan your required 9 summer hours into your course of study.
MUSIC: BACHELOR OF ARTS

College of Arts and Sciences
Department of Music, FA 205A, E-mail: music@mail.ucf.edu
Dr. L. Eubank, (407) 823-2869, fax (407) 823-3378

Admission Requirements
- Each student must audition and demonstrate advanced proficiency by performing compositions representing a variety of musical periods
- Memorization is required for pianists and vocalists
- Accompanists are provided by special request only
- Each candidate must bring his/her own audition music
- The department will only provide large instruments such as a tuba, a string bass, or timpani for these auditions
- The audition will serve as a placement examination for accepted candidates

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Departmental Residency Requirement; at least 25 hours must be taken from the UCF Music department
- Each student must perform a faculty-approved public recital
- Students should consult with a departmental advisor
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations
      Communication 9 hrs
   B. Cultural and Historical Foundations
      Select one two-semester sequence
      History and Literature II 3 hrs
      Mathematical Foundations
      Select MGF 1203 Finite Mathematics 3 hrs
      (may substitute a higher level math)
      Intro to Computer Science 3 hrs
   D. Social Foundations
      6 hrs
   E. Science Foundations
      6 hrs

2. Common Program Prerequisites (20 hrs)
   MUT 1111* Music Theory IA 2 hrs
   MUT 1112* Music Theory IB 2 hrs
   MUT 1241* Ear Training & Sight Singing IA 1 hr
   MUT 1242* Ear Training & Sight Singing IB 1 hr
   MUT 2116* Music Theory II 2 hrs
   MUT 2117* Music Theory IIIB 2 hrs
   MUT 2246* Ear Training & Sight Singing IIA 1 hr
   MUT 2247* Ear Training & Sight Singing IIIB 1 hr
   MUN XXXX Ensembles (4 semesters)
   (See Specialty requirements for specific requirements
   and for the credits required)
   MVW/MV/MVMVW Performance (4 semesters) 8 hrs
   MVK 1111-2121* Class Piano I-II 0-2 hrs
   *See Transfer Notes for possible substitutes

3. Comprehensive Exam - Music Theory
   - Completion, with at least an 80% score on each of the following components; ear-training, sight-singing, part-writing, visual analysis, counterpoint, instrumentation, and form.
   - Test is to be taken after completing MUT 2117 and before enrolling in MUT 3571.

4. Core requirements (14 hrs)
   Piano proficiency 0 hrs
   (repeat MVK 3131-4141 Class Piano III-IV until passed)
   MUS 1010 Music Forum (6 semesters) 0 hrs
   MUT 3571 20th Century Musical Analysis 3 hrs
   MVV/ MVK/MVP/ MVS/ MV/MVV Performance (2 semesters of Level III) 4 hrs
   MUN XXXX Ensembles 2 hrs
   MUG 3104 Basic Conducting 2 hrs
   MUH 4211 History & Literature I 3 hrs
   MUH 4212 History & Literature II GEP

5. Comprehensive Exam - Music History
   Satisfactory completion of a comprehensive examination in music history, to be taken after completing MUH 4212 and before enrolling in MUT 3571.

6. Specialty Requirements: (21 hrs)
   Piano
   MUL 3400 Piano Literature I 2 hrs
   MUL 3401 Piano Literature II 2 hrs
   Ensemble
   MUN 3453 Piano 2 hrs
   Restricted Electives 15 hrs
   Voice
   FRE 1005 French Diction 1 hr
   GER 1005 German Diction 1 hr
   ITA 1005 Italian Diction 1 hr
   MUL 3603 American/English Song Lit 1 hr
   MUL 3604 German Song Literature 1 hr
   MUL 3605 French Song Literature 1 hr
   Ensemble
   MUN 3313 University Choir 2 hrs
   Restricted Electives 13 hrs
   All other instruments
   Ensemble
   MUN XXXX 2 hrs
   Restricted Electives 19 hrs

7. Restricted Electives (See above)
   Any MUC, MUE, MUG, MUH, MUL, MUN, MUS, MUT courses numbered 3000 or higher.

8. Special Non-Course Requirements
   MUS 1010 - Music Forum
   - Native UCF students are required to take 6 semesters of MUS 1010
   - Transfer students must take MUS 1010 each term they are enrolled at UCF
   Comprehensive Exams
   - Students are required to take piano until they pass the Piano Proficiency exam
   - A comprehensive examination in music theory and music history is required
   Major Ensemble Participation
   - Comprised of chorus, symphony orchestra, concert band, marching band, and wind ensemble. 4 hours of Jazz Lab may be used as Major Ensemble credit.
   - Ensemble assignment is by the ensemble directors
   - Transfer students must take any remaining major ensemble credits during separate semesters
   - Native UCF students must take each of 4 major ensemble credits in a separate semester

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Minor Ensemble participation
- If minor ensemble is taken at UCF, the 2 semester hours of credit must be spread over 2 separate semesters
- If minor ensemble credits are transferred to UCF, each remaining hour must be taken in a separate semester
- Minor ensembles include: Brass, Percussion, Piano, String, Vocal (except Opera Workshop), Woodwind, and Jazz Lab

Recitals
- BA students must complete four of their comprehensive examinations, including piano, before auditioning for their senior recital
- Each BA student must perform one faculty-approved, 30 minute public recital at UCF

9. Departmental Exit Requirements
- Earn a grade of "C" or better in each Music course
- Computer Competency met by CGS 1060C, or departmental examination

10. Foreign Language Requirements
(0-11 hrs)
Admission: Met by graduation requirement
Graduation: 3 semesters or equivalent proficiency exam

11. Electives (variable)
Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

12. University Minimum Exit Requirements
- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Music Education, Music (BM), Theatre

Related Minors: Music, Theatre

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements
- Courses taken at community colleges do not substitute for Upper Division courses
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
- MUT 1111*, MUT 1112*: May use MUT 1121, 1122. Note: Since these courses are 3 credits at some schools, the extra credit transfers as a free elective.
- MUT 1241*, MUT 1242*: May use MUT 1221, 1222, or MUT 1261, 1262 or MUT 1271, 1272.
- MUT 2116*, MUT 2117*: May use MUT 2126, 2127. Note: Since these courses are 3 credits at some schools, the extra credit transfers as a free elective.
- MUT 2246*, MUT 2247*: May use MUT 2226, 2227, or MUT 2266, 2267, or MUT 2276, 2277.
- MVK 1111, 2121*: May use 1112, 2122 or MVK 1211, 2221
MUSIC EDUCATION: BACHELOR OF MUSIC EDUCATION

College of Arts and Sciences
Department of Music, FA 205A, E-mail: music@mail.ucf.edu
Dr. L. Eubank, (407) 823-2869, fax (407) 823-3378

Admission Requirements

Education:
- Each student must score at or above the 40th percentile of all college-bound persons tested on the American College Testing Program (ACT, score 20) or the Scholastic Aptitude Test (SAT, score 950) and have this score reported as part of their official academic record.
- Have an overall G.P.A. of 2.5.
- Satisfactorily complete EDG 4323 (Professional Teaching Practices).
- Pass the College Level Academic Skills Test (CLAST).
- Submit a formal junior student teaching application to the College of Education Student Internships Office. Must meet the College of Education's requirements for admission to Junior and Senior Year Student Teaching.

Music:
- Audition and demonstrate advanced proficiency by performing compositions representing a variety of musical periods.
- Memorization is required for pianists and vocalists.
- Accompanists are provided by special request only.
- Each candidate must bring his/her own audition music.
- Accompanists are provided by special request only.
- The audition will serve as a placement examination for accepted candidates.

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- All applicants for a teaching certificate in Florida must pass a written competency examination administered by the Florida State Department of Education.
- All applicants for their First Regular Florida Teaching Certificate must satisfy requirements of the Florida Beginning Teacher Program.
- Departmental Residency Requirement; at least 25 hours must be taken from the UCF Music Department. In addition, music education students must complete their last two semesters of required performance, their recital, and their senior year student teaching while attending UCF.
- A GPA of 2.5 is required in all courses attempted.
- Each student must perform a faculty-approved public recital (optional for students in the Elementary School Music Specialization).
- Students should consult with a departmental advisor.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural and Historical Foundations
      Select one two-semester sequence 6 hrs
      Select MUH 4212 History and Literature II 3 hrs
   C. Mathematical Foundations 6 hrs
      Select MAC 1105 College Algebra (may substitute a higher level math) 3 hrs
      Select CGS 1060C Intro to Computer Sci 3 hrs

D. Social Foundations
   E. Science Foundations 6 hrs
   Select a Natural Science class with the lab

2. Common Program Prerequisites (30 hrs)
   EDF 2005 Introduction to Education 3 hrs
   EME 1040 Met by CGS1060C or proficiency 3 hrs
   EDG 2701 Teaching Diverse Populations 3 hrs
   MUT 1111* Music Theory IA 2 hrs
   MUT 1112* Music Theory IB 2 hrs
   MUT 1241* Ear Training & Sight Singing IA 1 hr
   MUT 1242* Ear Training & Sight Singing IB 1 hr
   MUT 2116* Music Theory IIA 2 hrs
   MUT 2117* Music Theory IIB 2 hrs
   MUT 2246* Ear Training & Sight Singing IIA 1 hr
   MUT 2247* Ear Training & Sight Singing IIB 1 hr
   MUN XXXX Ensembles-4 semesters 4 hrs
   MVB/MVK/MVP/ MVS/MVV/MVW Performance 4 semesters 8 hrs
   MVK 1111-2121* Class Piano I-II (or proficiency) 0-2 hrs
   *See Transfer Notes for possible substitutes

3. Comprehensive Exam - Music Theory
   - Completion, with at least an 80% score on each of the following components: ear-training, sight-singing, part-writing, visual analysis, counterpoint, instrumentation, and form.
   - Test is to be taken after completing MUT 2117, and before enrolling in MUT 3571.

4. Core requirements (46 hrs)
   Piano proficiency 0 hrs
   (repeat MVK 3131-4141 Class Piano III-IV until passed)
   MUE 2040* Intro to Music Education 2 hrs
   MUS 1010 Music Forum (6 semesters) 0 hrs
   MUT 3571 20th Century Musical Analysis 3 hrs
   MVB/MVK/MVP/ MVS/MVV/MVW Performance 4 hrs
   (2 semesters of Level III)
   MUN XXXX Major Ensembles 2 hrs
   MUN XXXX Minor Ensembles 2 hrs
   MUG 3104 Basic Conducting 2 hrs
   MUH 4211 History & Literature I 3 hrs
   MUH 4212 History & Literature II 3 hrs
   MUE 2040 Intro to Music Education 2 hrs
   MUE 3440 String Techniques 1 hr
   MUE 3450 Wind Techniques 1 hr
   MUE 2460 Percussion Techniques 1 hr
   MUE 2470 Percussion Techniques 1 hr
   EDF 4214 Classroom Learning Principles 3 hrs
   EDF 4603 Anal. of Critical Issues in Educ. 3 hrs
   EDF 4323 Professional Teaching Practices 3 hrs
   EDE 3943 Junior Year Student Teaching 6 hrs
   MUE 4311 Elem School Music Methods 2 hrs
   MUE 4330 Sec School Music Methods 2 hrs

5. Comprehensive Exam - Music History
   Satisfactory completion of a comprehensive examination in music history, to be taken after completing MUH 4212 and before enrolling in MUT 3571.

6. Specialty Requirements (23 hrs)
   Program A - Instrumental
      MVB 1111 Class Voice 1 hr
      MVV 4212 Performance IV 2 hrs
      MUN XXXX Ensemble 1 hr
254

Interview

Recitals

Student Ensemble

8. Comprehensive Exams

Any MUC, MUE, MUG, MUH, MUL, MUN, MUS, MUT courses numbered 3000 or higher.

9. Departmental Exit Requirements

A GPA of 2.5 is required in all courses attempted

Earn a grade of "C" or better in each Music course

Computer Competency met by CGS 1060C, or departmental examination

10. Foreign Language Requirements (0-11 hrs)

Admission: 2 years high school, or 1 year college language (or equivalent proficiency exam) prior to graduation.

Graduation: None

11. Electives (variable)

Select primarily from upper level courses, with departmental advisor’s approval. May be outside of the department.

12. University Minimum Exit Requirements

A "C" GPA (2.0) in all work attempted (both UCF and overall)

60 semester hours earned after CLEP awarded

48 semester hours of upper division credit completed

32 semester hours in regular courses completed at UCF

A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted

Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 128 hours

Related Programs: Music Education, Music (BFA), Theatre

Related Minors: Music, Theatre

Transfer notes:

-D grades from other institutions do not meet departmental requirements

Courses taken at community colleges do not substitute for Upper Division courses

Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:

MUE 2040*: May use equivalent course or proficiency.

MUT 1111*, MUT 1112*: May use MUT 1121, 1122. Note: Since these courses are 3 credits at some schools, the extra credit transfer as a free elective.

MUT 1241*, MUT 1242*: May use MUT 1221, 1222, or MUT 1261, 1262 or MUT 1271, 1272.

MUT 2116*, MUT 2117*: May use MUT 2126, 2127. Note: Since these courses are 3 credits at some schools, the extra credit transfers as a free elective.

MUT 2246*, MUT 2247*: May use MUT 2226, 2227, or MUT 2266, 2267, or MUT 2276, 2277.

MVK 1111, 2121*: May use 1112, 2122 or MVK 1211, 2221

Note: Education majors are required to take 6 hours (in addition to EDG 2701) which have an international or diversity focus. While native UCF students complete this requirement as part of the GEP, transfer students must take appropriate courses which have been so designated by their previous institution.

Note: Students must take a Natural Science class with the lab.
MUSIC PERFORMANCE:  
BACHELOR OF MUSIC

College of Arts and Sciences  
Department of Music, FA 205
E-Mail: music@mail.ucf.edu  
Dr. L. Eubank, (407) 823-2869, fax (407) 823-3378

Admission Requirements

- Each student must audition and demonstrate advanced  
  proficiency by performing compositions representing a variety of  
  musical periods
- Memorization is required for pianists and vocalists
- Accompanists are provided by special request only
- Each candidate must bring her own audition music
- The department will only provide large instruments such as a  
  tuba, string bass, or timpani for these auditions
- The audition will serve as a placement examination for accepted candidates

Degree Requirements

- UCF students who change degree programs and select this major  
  must adopt the most current catalog.
- At least 78 hours of credit must be earned in music courses
- Departmental Residency Requirement: at least 30 hours must be  
  taken from the UCF Music department
- Each student must perform two faculty-approved public recitals
- Students should consult with a departmental advisor
- Courses designated in 1 (General Education Program) and 2  
  (Common Program Prerequisites) are usually completed in the first  
  60 hours

1. UCF General Education Program  
   (36 hrs)
   A. Communication Foundations  
      9 hrs
   B. Cultural and Historical Foundations
      Select one two-semester sequence  
      6 hrs
      Select MUH 4212 History and Literature II  
      3 hrs
   C. Mathematical Foundations  
      6 hrs
      Select MGF 1203 Finite Mathematics  
      (may substitute a higher level math)  
      3 hrs
      Prefer CGS 1060 Intro to Computer Sci  
      3 hrs
   D. Social Foundations  
      6 hrs
   E. Science Foundations  
      6 hrs

2. Common Program Prerequisites  
   (20 hrs)
   MUT 1111*  
   Music Theory IA  
   2 hrs
   MUT 1112*  
   Music Theory IB  
   2 hrs
   MUT 1241*  
   Ear Training & Sight Singing IA  
   1 hr
   MUT 1242*  
   Ear Training & Sight Singing IB  
   1 hr
   MUT 2116*  
   Music Theory IIA  
   2 hrs
   MUT 2117*  
   Music Theory IB  
   2 hrs
   MUT 2246*  
   Ear Training & Sight Singing IIA  
   1 hr
   MUT 2247*  
   Ear Training & Sight Singing IIB  
   1 hr
   MUN XXXX  
   Ensemble (4 semesters)
   (See Specialty requirements for specific requirements and for the  
   credits required)
   MVK 3131-4141 Class Piano III-IV until passed
   MUS 1010 Music Forum (8 semesters)  
   0 hrs
   MUT 3571  
   20th Century Musical Analysis  
   3 hrs
   MVS/MVV/MVW  
   Performance (4 semesters including  
   2 semesters of Level IV)  
   8 hrs
   MUN XXXX  
   Ensembles  
   4 hrs
   MUG 3104  
   Basic Conducting  
   2 hrs
   MUH 4211  
   History & Literature I  
   3 hrs
   MUH 4212  
   History & Literature II  
   GEP


- Completion, with at least an 80% score on each of the following  
  components: ear-training, sight-singing, part-writing, visual  
  analysis, counterpoint, instrumentation, and form.
- Test is to be taken after completing MUT 2117, and before  
  enrolling in MUT 3571

4. Core requirements  
   (20 hrs)
   Piano proficiency  
   0 hrs
   MUS 1010 Music Forum (8 semesters)  
   0 hrs
   MUT 3571  
   3 hrs
   MVB/MVK/MVP/  
   MVS/MVV/MVW  
   Performance (4 semesters including  
   2 semesters of Level IV)  
   8 hrs
   MUN XXXX  
   Ensembles  
   4 hrs
   MUG 3104  
   Basic Conducting  
   2 hrs
   MUH 4211  
   History & Literature I  
   3 hrs
   MUH 4212  
   History & Literature II  
   GEP

5. Comprehensive Exam - Music History

Satisfactory completion of a comprehensive examination in music  
history, to be taken after completing MUH 4212

6. Specialty Requirements:  
   (39 hrs)
   Piano
   MUL 3400 Piano Literature I  
   2 hrs
   MUL 3401 Piano Literature II  
   2 hrs
   Ensembles
   Major Not required  
   Minor-MUN 3453 Piano  
   0 hrs
   4 hrs
   Restricted Electives
   31 hrs
   Piano Pedagogy
   MUL 3400 Piano Literature I  
   2 hrs
   MUL 3401 Piano Literature II  
   2 hrs
   MVK 4640 Piano Pedagogy I  
   1 hr
   MVK 4641 Piano Pedagogy II  
   1 hr
   MUS 4401 Studio Teaching  
   2 hrs
   Ensembles
   Major Not required  
   Minor-MUN 3453 Piano  
   0 hrs
   4 hrs
   Restricted Electives
   27 hrs
   Guitar
   Ensembles
   Major Not required  
   Minor-MUN 3483 String  
   0 hrs
   4 hrs
   Restricted Electives
   35 hrs
   Voice
   FRE 1005 French Diction  
   1 hr
   GER 1005 German Diction  
   1 hr
   ITA 1005 Italian Diction  
   1 hr
   MVV 4640 Voice Pedagogy I  
   1 hr
   MVV 4641 Voice Pedagogy II  
   1 hr
   MUL 3603 Amer/English Song Literature  
   1 hr
   MUL 3604 German Song Literature  
   1 hr
   MUL 3605 French Song Literature  
   1 hr
   Ensembles
   Major-MUN 3313 University Choir  
   Minor-MUN XXXX  
   8 hrs
   4 hrs
   Restricted Electives
   19 hrs
   All other instruments
   Ensembles
   Major-MUN XXXX  
   Minor-MUN XXXX  
   4 hrs
   4 hrs
   Restricted Electives
   31 hrs

7. Restricted Electives  
   (See above)

- Any secondary performance course not in area of major  
  instrument or
- Any MUC, MUE, MUG, MUH, MUL, MUN, MUS, MUT
8. Special Non-Course Requirements
MUS 1010 Music Forum
- Native UCF students are required to take 8 semesters of MUS 1010
- Transfer students must take MUS 1010 each term they are enrolled at UCF

Comprehensive Exams
- Students are required to take piano until they pass the Piano Proficiency exam
- A comprehensive examination in music theory, and one in music history, are required

Major Ensemble Participation
- Comprised of chorus, symphony orchestra, concert band, marching band, and wind ensemble. 4 hours of Jazz Lab may be used as Major Ensemble credit.
- Ensemble assignment is by the Ensemble directors.
- Transfer students must take Major Ensemble during each of their remaining semesters
- Native UCF students must take each of 8 Major Ensemble credits in a separate semester
- Students taking a course in Performance must concurrently take a major ensemble appropriate to their principal instrument

Minor Ensemble participation
- If Minor Ensemble is taken at UCF, the 4 semester hours of credit must be spread over at least 3 separate semesters
- If Minor Ensemble credits are transferred to UCF, each remaining credit must be taken in a separate semester
- Minor Ensembles include: Brass, Percussion, Piano, String, Vocal (except Opera Workshop), Woodwind, and Jazz Lab

Recitals
- Bachelors of Music students must complete their piano proficiency and all but one comprehensive examination before auditioning for their senior recital
- Each student must perform two faculty-approved public recitals: a junior recital of 30 minutes length and a senior recital of 45 minutes length (30 minutes for Piano Pedagogy students)

9. Departmental Exit Requirements
- Earn a grade of "C" or better in each Music course
- Computer Competency met by CGS 1060C, or departmental examination

10. Foreign Language Requirements (0-8 hrs)
Admission: Met by graduation requirement
Graduation: Two semesters or equivalent proficiency exam.

11. Electives (variable)
Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

12. University Minimum Exit Requirements
- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Music Education, Music (BA), Theatre

Related Minors: Music, Theatre

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
- MUT 1111*, MUT 1112*: May use MUT 1121, 1122. Note: Since these courses are 3 credits at some schools, the extra credit transfers as a free elective.
- MUT 1241*, MUT 1242*: May use MUT 1221, 1222, or MUT 1261, 1262 or MUT 1271, 1272.
- MUT 2116*, MUT 2117*: May use MUT 2126, 2127. Note: Since these courses are 3 credits at some schools, the extra credit transfers as a free elective.
- MUT 2246*, MUT 2247*: May use MUT 2226, 2227, or MUT 2266, 2267, or MUT 2276, 2277.
- MVK 1111, 2121*: May use 1112, 2122 or MVK 1211, 2221
**NURSING: BACHELOR OF SCIENCE**

**A: BASIC PROGRAM**  
(For individuals who are not Registered Nurses)

**College of Health and Public Affairs**  
HPA 220, (407) 823-2744  
Director: Elizabeth Stullenbarger  
Undergraduate Coordinator: Patricia Leli  
E-mail: pleli@pegasus.cc.ucf.edu  
Web Address: http://www.cohpa.ucf.edu/nursing/  

**Admission Requirements - LIMITED ACCESS**  
Acceptance to the university does not constitute admission to the upper-division nursing program.  
- SEPARATE APPLICATION to the limited access program must be made directly to the School of Nursing prior to February 1 of the year admission is sought.  
- UCF application must also be submitted by the program deadline.  
- Student must complete all general education, foreign language, admissions, and program prerequisites prior to the start of the program.  
- All applicants must have a minimum overall GPA of 2.5, and complete all program prerequisite courses with a grade of "C" or better.  

Graduates are eligible to take the licensing examination for registered nurses (NCLEX). The program is accredited by the National League for Nursing and approved by the Florida State Board of Nursing.

**Degree Requirements**  
- Students should consult with a college advisor or community college A.A. transfer advisor regarding completion of General Education requirements and the Common Program Prerequisites.  
- Students should consult with a School of Nursing advisor for clarification of questions regarding prerequisite requirements which cannot be answered by college advisors.  
- The courses designated in sections 1 and 2 below may be taken at a Florida Community College or other universities, and should be completed in the first 60 hours.  
- A minimum overall GPA of 2.5 and a minimum grade of "C" in the nursing major courses are required for continuation and graduation from the Nursing Program.  
- UCF Residency Requirement: 31 hours.  
- Any variation from the stated prerequisites must be approved in writing by the School of Nursing. Waiver forms are available in the School of Nursing office.

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### 1. UCF General Education Program (36 hrs)

<table>
<thead>
<tr>
<th>Area</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Communication Foundations</td>
<td>9 hrs</td>
<td></td>
</tr>
<tr>
<td>B. Cultural Historical Foundations</td>
<td>9 hrs</td>
<td></td>
</tr>
<tr>
<td>C. Mathematical Foundations</td>
<td>6 hrs</td>
<td></td>
</tr>
<tr>
<td>Select <strong>MGF 1203 or MAC 1105</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select STA 2014</td>
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<tr>
<td>D. Social Foundations</td>
<td>6 hrs</td>
<td></td>
</tr>
<tr>
<td>Select both <strong>SYG 2000 and PSY 2013</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select ECO 2013 or ECO 2023 or POS 2041</td>
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<td></td>
</tr>
<tr>
<td>E. Science Foundations: **</td>
<td>6 hrs</td>
<td></td>
</tr>
<tr>
<td>Select <strong>BSC 2010C</strong></td>
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<td></td>
</tr>
<tr>
<td>Select CHM 1032 (and lab)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* One of these courses is required to meet General Education requirements, but both are required program prerequisites.  
** Science Foundation is 6 credit hours for General Education

Program. However the nursing program prerequisite requires 4 CHM credits. To earn this, you must take the CHM 1032 lab. This BSC course is needed as a course prerequisite for Anatomy and Physiology and Health Microbiology.

### 2. Program Prerequisites (22 hrs)

<table>
<thead>
<tr>
<th>Course</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 2013</td>
<td>General Psychology **</td>
</tr>
<tr>
<td>SYG 2000</td>
<td>Sociology **</td>
</tr>
<tr>
<td>MCB 2005C</td>
<td>Health Microbiology</td>
</tr>
<tr>
<td>CHM 1032/L</td>
<td>General Chemistry and lab **</td>
</tr>
<tr>
<td>ZOO 3733C</td>
<td>Human Anatomy</td>
</tr>
<tr>
<td>PCB 3703C</td>
<td>Human Physiology</td>
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<tr>
<td>STA 2014 or 2023</td>
<td>Principles of Statistics **</td>
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<tr>
<td>SOW 3104</td>
<td>Assessing Human Development or</td>
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<tr>
<td>DEP 2004</td>
<td>Developmental Psychology</td>
</tr>
<tr>
<td>HUN 3011</td>
<td>Human Nutrition</td>
</tr>
</tbody>
</table>

* May take Anatomy and Physiology sequence of 6-8 total credits.  
** Also meets General Education Requirements. The first semester of a two semester general chemistry course does not meet requirement.

### 3. Core Requirements (62 hrs)

<table>
<thead>
<tr>
<th>Course</th>
<th>Prerequisite</th>
</tr>
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<tbody>
<tr>
<td>NUR 3026</td>
<td>Therapeutic Interv. for Health Prof.</td>
</tr>
<tr>
<td>NUR 3065</td>
<td>Health Assessment</td>
</tr>
<tr>
<td>NUR 3165</td>
<td>Nursing Research</td>
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<tr>
<td>NUR 3235</td>
<td>Promoting Physical &amp; Mental Health</td>
</tr>
<tr>
<td>NUR 3235L</td>
<td>Clin Pract in Prom Phys/Mental Health</td>
</tr>
<tr>
<td>NUR 3616</td>
<td>Promoting Healthy Families</td>
</tr>
<tr>
<td>NUR 3616L</td>
<td>Clinical Pract in Promot Healthy Fam</td>
</tr>
<tr>
<td>NUR 3617</td>
<td>Promoting Healthy Communities</td>
</tr>
<tr>
<td>NUR 3930</td>
<td>Role of the Professional Nurse</td>
</tr>
<tr>
<td>NUR 3XXX</td>
<td>Pathophysiology &amp; Pharmacolgy</td>
</tr>
<tr>
<td>NUR 4525</td>
<td>Nursing Intervention in Mental Illness</td>
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<tr>
<td>NUR 4525L</td>
<td>Clinical Practice w/ Mentally Ill Client</td>
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<tr>
<td>NUR 4636</td>
<td>Community as the Continuum of Care</td>
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<tr>
<td>NUR 4636L</td>
<td>Clinical Pract in Comm.-Orient Nrsg</td>
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<tr>
<td>NUR 4745</td>
<td>Nursing Care of Clients w/ Acute Ill.</td>
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<tr>
<td>NUR 4745L</td>
<td>Clinical Practice in Acute Illness</td>
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<tr>
<td>NUR 4827</td>
<td>Leadership &amp; Management Principles</td>
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<tr>
<td>NUR 4945L</td>
<td>Directed Nursing Practice</td>
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<td>NUR 4835</td>
<td>Role Transition</td>
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<tr>
<td>NUR 4837</td>
<td>Health Care Issues, Policy, &amp; Econ</td>
</tr>
<tr>
<td>NUR 4XXX</td>
<td>Nursing Elective</td>
</tr>
</tbody>
</table>

*Any variation from the above must be approved by the School of Nursing.*

### 4. Upper Division Restricted Electives (3 hrs)

Nursing Elective: Any School of Nursing Elective

### 5. Departmental Continuation and Exit Requirements

Completion of all courses in major with a grade of "C" or better  
- UCF overall GPA of 2.5 or above  
- School of Nursing GPA of 2.5 or above  
**Total of 120 hrs**

### 6. Electives

None

### 7. Foreign Language Requirements (0-8 hrs)

Admissions: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.  
**Graduation: None**

### 8. University Minimum Exit Requirements

- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hrs of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Health Services Administration, Social Work, all health minors

Related Minors: Gerontology Certificate, Psychology, Health Sciences, Health Services Administration,

Transfer Notes:
Examples of Community College Equivalent Courses - Prerequisites
General Psychology (PSY X012) or any General Psychology course 3
General Sociology (SYG 2000) or any Intro to Sociology course 3
Statistics (STA 2014 or 2023) or any Statistics course 3
General Chemistry (CHM 1032 or any other comprehensive chemistry course w/lab)* 4
Human Anatomy and Physiology I & II w/lab (BSC 2093/2094) or (BSC X085/X086) 6-8
General Microbiology (MCM 2013C) (MCM X010C) w/lab or any Microbiology course w/lab 4
Developmental Psychology (DEP 2004) or any Human Growth & Development Across Life Span course 3
Human Nutrition (HUN 1201) or any Human Nutrition course 3

*The first semester of a two semester general chemistry course does not meet requirement.

NOTE: A grade of "C" or better is required in all prerequisite courses.

Honors
Honors Option Requires:
- Completion of a 3 credit directed readings course
- Completion of a 3 credit thesis course
- Open to students with a 3.5 GPA in Nursing
- Cumulative UCF 3.2 GPA
- Completion of 60 semester hours of college credit, including 12 graded upper division hours at UCF

Tentative Course Schedule for Entering Freshmen

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Fall</th>
<th>13 hrs</th>
<th>Spring</th>
<th>14 hrs</th>
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<tr>
<td>SYG 2000</td>
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<td>CHM 1032/L</td>
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<td>ENC 1101</td>
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<tr>
<td>BSC 2010C</td>
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<td>ZOO 3733C</td>
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<table>
<thead>
<tr>
<th>Summer</th>
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<tbody>
<tr>
<td>HUN 3011</td>
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<tr>
<td>PSY 2013</td>
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<th>Sophomore Year</th>
<th>Fall</th>
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<th>Spring</th>
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<td>EUH 2001 or HUM 2230</td>
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<td>EUH 2000 or HUM 2211</td>
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<td>or AMH 2020</td>
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<tr>
<td>or AMH 2010</td>
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<td>MCB 2005C</td>
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<td>PCB 3703C</td>
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<td>NUR 3235L</td>
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<td>NUR 3617</td>
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<td>NUR 3616L</td>
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</tr>
<tr>
<td>NUR 4745L</td>
<td>4</td>
<td>NUR 4636</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>NUR 4525</td>
<td>2</td>
<td>NUR 4636L</td>
<td>2</td>
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<tr>
<td>NUR 4525L</td>
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<td>NUR 4827</td>
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</tr>
</tbody>
</table>

| Other | | |
|-------| | |
|       | | |
|       | | |
|       | | |
|       | | |

Information about tuition, fees, and length of nursing program can be obtained from the National League for Nursing Accrediting Commission, 61 Broadway, New York, NY 10006. (800) 669-9656, ext. 153.
NURSING: BACHELOR OF SCIENCE

B. RN TO BSN PROGRAM
(Completion program for individuals who are RNs licensed in the State of Florida)

College of Health and Public Affairs
HPA 220, (407) 823-2744
RN to BSN Coordinator: Linda Hennig
E-mail: lindah@pegasus.cc.ucf.edu
Web Address: http://www.cohpa.ucf.edu/nursing/

Admission Requirements - LIMITED ACCESS
Acceptance to the university does not constitute admission to the upper-division nursing program. SEPARATE APPLICATION to the limited access program must be made directly to the School of Nursing. All applicants must have:
- a minimum overall GPA of 2.5
- completion of all program prerequisite courses with at least a grade of "C" or better
- current RN License in state of Florida
- Statistics course with grade of "C" or better prior to NUR 3165

Degree Requirements
- Students should consult with a college advisor or community college A.A. transfer advisor regarding completion of General Education Program requirements
- Students should consult with a School of Nursing advisor for clarification of questions regarding prerequisite requirements which cannot be answered by college advisors
- The courses designated in sections 1 and 2 below may be taken at a Florida Community College or other universities and should usually be completed in the first 60 hours
- A minimum overall GPA of 2.5 and a minimum grade of "C" in prerequisite and major courses are required for admission to continuation in and graduation from the Nursing Program
- UCF Residency Requirement: 30 hours
- The courses designated in sections 1 (General Education) and 2 (Common Program Prerequisites) should usually be completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural Historical Foundations 9 hrs
   C. Mathematical Foundations 6 hrs
      Select MGF 1203 or MAC 1105
      Select STA 2014 or STA 2023
   D. Social Foundations 6 hrs
      Select SYG 2000 or PSY 2013
      Select one: ECO 2013 or ECO 2023 or POS 2041
   E. Science Foundations: 6 hrs

   Student must complete all general education and foreign language admissions requirements prior to NUR 4084. If completing an A.A. to fulfill General Education requirements, it must be awarded prior to the last semester at UCF.

2. Program Prerequisites
   Statistics course, 3 hours, with > C required prior to NUR 3165

3. Core Requirements (55 hrs)
   NUR 3809 Transitional Concepts in Nursing I 3 hrs
   NUR 3065 Health Assessment 3 hrs
   NUR 3165 Nursing Research 3 hrs
   NUR 4084 Transitional Concepts in Nursing II 3 hrs
   NUR 4636 Community as Continuum of Care 3 hrs
   NUR 4636L Clin Prac in Comm-Oriented Nursing 2 hrs
   NUR 4827 Leadership and Management Principles 3 hrs
   NUR 4837 Health Care Issues, Policy, & Econ 3 hrs
   NUR 4945L Directed Nursing Practice 4 hrs
   *Validation Credit 28 hrs

4. Upper Division Restricted Elective (3 hrs)
   NUR XXXX Any Nursing Elective 3 hrs

5. Departmental Exit Requirements
   Completion of all courses in major with a grade of "C" or better
   - UCF overall GPA of 2.5 or above
   - School of Nursing GPA of 2.5 or above

6. Electives None

7. Foreign Language Requirements (0-8 hrs)

Admissions: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.

Graduation: None

8. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hrs of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Health Services Administration, Social Work, All health programs

Related Minors: Gerontology Certificate, Health Sciences, Health Services Administration, Psychology

Sample Plan of Study

<table>
<thead>
<tr>
<th>Semester I</th>
<th>Semester II</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR3809 3</td>
<td>NUR 3165 3</td>
</tr>
<tr>
<td>NUR 3065 3</td>
<td>NUR 4827 3</td>
</tr>
</tbody>
</table>

Semester III

<table>
<thead>
<tr>
<th>NUR 4084 3</th>
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<tbody>
<tr>
<td>NUR XXXX (elective) 3</td>
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Semester IV

<table>
<thead>
<tr>
<th>NUR 4636 3</th>
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<tbody>
<tr>
<td>NUR 4837 3</td>
</tr>
<tr>
<td>NUR 4636L 2</td>
</tr>
<tr>
<td>NUR 4945L 4</td>
</tr>
</tbody>
</table>

*Elective may be taken at any point.

The following courses cannot be taken out of sequence.
Progression requirements:
- Prior to NUR 3809
  - RN status or eligible to take NCLEX.
- Prior to NUR 3165
  - Complete NUR 3809 and Statistics course with grade of "C" or better.
Prior to NUR 4084:
- Be admitted to the nursing program
- Complete general education requirements on A.A. from a Florida state community college or university (SUS)
- Complete CLAST
- Complete Foreign language admission requirement
- Validation exams or current professional work as RN or pass the NCLEX within the last two years

Prior to NUR 4636 and NUR 4636L
- Complete NUR 4084:
  - Submit health form, documentation of current CPR certification, health insurance, and current RN license

Prior to NUR 4837, and NUR 4945L:
- Complete NUR 4636 and NUR 4636L

Other
Information about tuition, fees, and length of nursing program can be obtained from the National League for Nursing Accrediting Commission, 61 Broadway, New York, NY 10006. (800)669-9656, ext. 153.

Program offered in Orlando and at branch campuses of Daytona and Brevard and at ORMC and Leesburg (Lake Sumter).

The RN-BSN coursework is also offered via the internet. Some off-campus travel and clinical practica are required. For further information access http://www.cohpa.ucf.edu/nursing
NURSING: BACHELOR OF SCIENCE

C. RN TO MSN OPTION
Accelerated program for students who are licensed as an RN in the State of Florida and meet general education requirements and prerequisites.
Available for selected tracks in the graduate program. 10 to 15 credit hours will be applied towards meeting requirements of both BSN and MSN programs.
May be offered on Orlando or Daytona Campuses.
(Both program may not be offered every year. Check with the School of Nursing.)

College of Health and Public Affairs
HPA 220, (407) 823-2744
Director: Dr. Elizabeth Stullenbarger
Graduate Program Coordinator: Dr. Mary Lou Sole
E-mail: msole@pegasus.cc.ucf.edu
Web Address: http://www.cohpa.ucf.edu/nursing/

Admission Requirements - LIMITED ACCESS
Acceptance to the university does not constitute admission to the accelerated RN-MSN program. SEPARATE APPLICATION to this limited access program must be made. Contact the School of Nursing for application materials. All applicants must meet the following criteria:
- Graduate of a state-approved or accredited associate degree or diploma nursing program
- Licensure as an RN in the State of Florida
- Completion of UCF general education requirements or an AA degree from a state of Florida school, including CLAST
- Completion of prerequisites for the RN-BSN nursing program (undergraduate statistics course)
- Minimum cumulative GPA of 3.0

Interim Requirements:
Completion of the GRE by the end of the second semester in the program.

Admission Requirements for Graduate Nursing Phase: (To be met by the end of the third semester of enrollment)
- Accepted as a student into the upper division/professional phase at the UCF School of Nursing
- Completion of all UCF School of Nursing coursework to date with a minimum GPA of 3.0
- A minimum combined GRE score of 1000 on the verbal/quantitative exams
- An updated resume
- Three references

Degree Requirements
- Students should consult with a college advisor or community college A.A. transfer advisor regarding completion of General Education requirements and the Common Program Prerequisites
- Students should consult with a School of Nursing advisor for clarification of questions regarding prerequisite requirements which cannot be answered by college advisors
- The courses designated in sections 1 and 2 below may be taken at a Florida Community College or other universities and should usually be completed in the first 60 hours
- A minimum overall GPA of 3.0 and a minimum grade of "C" in prerequisite and upper division courses are required for admission in the major. Graduate school policies apply to graduate course work and degree requirement.

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural Historical Foundations 9 hrs
   C. Mathematical Foundations 6 hrs
   Select MAC 1105
   Select STA 2014
   D. Social Foundations 6 hrs
   Select SYG 2000 or PSY 2013
   Select one: ECO 2023 or ECO 2024 or POS 2041
   E. Science Foundations: 6 hrs
      Select BSC 2010C
      Select CHM 1032

2. Program Prerequisites
   Statistics course (STA 2014 (3 hours) with grade of "C" or better required prior to NUR 3165:
   STA 2014 or STA 2023 Principles of Statistics
   (GEP

3. Core Requirements (Sample for Track in Family Nurse Practitioner)
Courses BSN
NUR 3065 Health Assessment 3 hrs
NUR 3809 Trans. Concepts in Nursing I 3 hrs
NUR 4636C Community as the Continuum of Care 3 hrs
NUR 4636L Clinical Practice in the Community 2 hrs
NUR 4827 Leadership/Management Principles 3 hrs
NUR 4836 Professional Development Seminar 3 hrs
NUR 4837 Health Care Issues, Policy, & Econ. 3 hrs
Validated credit for previous nursing courses 28 hrs

Courses Shared BSN/MSN
NUR XXXX Theory/Research I 4 hrs
NUR XXXX Advanced Practice Nursing: Primary Care for Adults and Communities 6 hrs
NUR XXXX Advanced Practice Nursing: Children, Adolescents, and Families 6 hrs
NUR XXXX Advanced Practice Practicum 6 hrs
NUR XXXX Roles & Issues in Advanced Practice Nursing I 1 hr
NUR XXXX Roles & Issues in Advanced Practice Nursing II 1 hr
NUR XXXX Roles & Issues in Advanced Practice Nursing III 1 hr
NUR 6971 Thesis (or Research Scholarly Work) 3-6 hrs

4. Upper Division Restricted Elective
   None

5. Departmental Exit Requirements
   Completion of all courses in major with a grade of "C" or better
   - UCF overall GPA of 2.5 or above
   - School of Nursing GPA of 2.5 or above
6. Electives

7. Foreign Language Requirements (0-8 hrs)
Admissions: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
Graduation: None

8. University Minimum Exit Requirements
(For students exiting after earning BSN.)
- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hrs of extension, correspondence, CLEP, Credit by Exam and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hrs of Summer credit (if applicable)

Total Semester Hours Required BSN 120 hrs

Related Programs: Health Services Administration, MSN

Related Minors:

Other
Information about tuition, fees, and length of nursing program can be obtained from the National League for Nursing Accrediting Commission, 61 Broadway, New York, NY 10006. (800) 669-9656, ext. 153.
ORGANIZATIONAL COMMUNICATION: BACHELOR OF ARTS

College of Arts and Sciences
Nicholson School of Communication, COM 258, (407) 823-2852, E-mail: communication@ucf.edu
Dr. K. Phillip Taylor

Admission Requirements
Application to the School of Communication needed. Only general University admission policies must be met.

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students need to apply to the School office to enter this major. Only general University admission policies must be met.
- Students should consult with a departmental advisor.
- School Residency Requirement consists of at least 24 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF Nicholson School of Communication.
- Students electing both a major and minor in the School must take the minor courses in excess of the 120 hours required for graduation.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

1. UCF General Education Program (36 hrs)
   - Communication Foundations
     Select ENC 1101 & 1102 Composition 6 hrs
     Select SPC 1600C Fund Oral Communication 3 hrs
   - Cultural and Historical Foundations
     9 hrs
   - Mathematical Foundations
     Select MGF 1203 Finite Mathematics 3 hrs
     (may substitute a higher level math)
     Prefer CGS 1060C Intro to Computer Sci 3 hrs
   - Social Foundations
     6 hrs
   - Science Foundations
     6 hrs

2. Common Program Prerequisites
   SPC 1600C Fund Oral Communication GE

3. Specific Program Requirements (2 hrs)
   CGS 2580C Word Processor Concepts 1 hr
   CGS 2581C Document Presentation Concepts 1 hr

4. Core requirements (30 hrs)
   COM 3011 Comm and Human Relations 3 hrs
   COM 3110 Business and Prof Comm 3 hrs
   COM 3120 Organizational Communication 3 hrs
   COM 3311 Comm Research Methods 3 hrs
   COM 4461 Intercultural Communication 3 hrs
   COM 4906 Comm Research Project
   or
   COM 4941 Internship
   ENC 3210 Business Report Writing 3 hrs
   SPC 3425 Group Interaction and Decision 3 hrs
   SPC 3445 Leadership 3 hrs
   COM 4462 Conflict Management 3 hrs

5. Upper Division Restricted Electives (6 hrs)
   A minimum of six (6) upper division credit hours selected from courses in Business Law, Management, Marketing, or Hospitality Management.

6. School Exit Requirements
   - Achieve an overall "C" GPA (2.0) in required UCF Communication courses.
   - To avoid delaying graduation, you must request a review of requirements before registering for your last term.
   - Computer Competency met by a Computer Science course or by departmental assessment.

7. Foreign Language Requirements (0-8 hrs)
   Admission: Met by graduation requirement.
   Graduation: One year or equivalent proficiency exam.

8. Electives (variable)
   Select primarily from upper level courses, with school advisors approval. May be taken outside the School of Communication.

9. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall).
   - 60 semester hours earned after CLEP awarded.
   - 48 semester hours of upper division credit completed.
   - 30 semester hours in regular courses completed at UCF.
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted.
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable).

Total Semester Hours Required 120 hours

Related Programs: Interpersonal Communication
Related Minors: Interpersonal Communication

Transfer notes:
- "D" grades from other institutions do not meet School requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.
PHILOSOPHY: BACHELOR OF ARTS

College of Arts and Sciences
Philosophy Department, FA 411, E-mail: philosophy@ucf.edu
Dr. J. Riser, (407) 823-2273

Admission Requirements None

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students must earn at least a "C" in each required course
- Students should consult with a departmental advisor
- Departmental Residency Requirement consists of at least 15 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF Philosophy Department
- At least 21 of the 27 Core hours must be upper division
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

Honors in Philosophy Degree: Additional Requirements (6 hrs)
- Application and admission through the Philosophy Honors Coordinator
- Fulfill University requirements for Honors in the Major
- Earn a "B+" or better in Honors Directed Readings (3 hours), and Metaphilosophy (3 hours) which serves as the Honors Thesis course
- Maintain an overall GPA of at least 3.2 and a Philosophy GPA of at least 3.5
- Successful completion and oral defense of Honors Thesis
- Approval of the Departmental Honors Committee

1. UCF General Education Program (36 hrs)
   A. Communication Foundations
      9 hrs
   B. Cultural and Historical Foundations
      Select a 2 course sequence from listing
      6 hrs
      Select PHI 2010 Intro to Philosophy
      3 hrs
   C. Mathematical Foundations
      Select MGF 1203 Finite Mathematics
      (may substitute a higher level math)
      3 hrs
      Prefer CGS 1060C Intro to Computer Sci
      3 hrs
   D. Social Foundations
      6 hrs
   E. Science Foundations
      6 hrs

2. Common Program Prerequisites None

3. Core requirements* (27 hrs)
   History of Philosophy: Select from the following:
      9 hrs
      PHH 3041 Russian Philosophy
      PHH 3100 Ancient Philosophy
      PHH 3200 Medieval Philosophy
      PHH 3400 Modern Continental Philosophy
      PHH 3402 Modern British Philosophy
      PHH 3601 Contemp Continental Philosophy
      PHH 3620 Contemp Analytic Philosophy
   Analytical Reasoning: Select from the following:
      9 hrs
      PHI 2011 Philosophical Reasoning
      PHI 2101 Critical Thinking
      PHI 3130 Formal Logic I
      PHI 3131 Formal Logic II
      PHI 3320 Philosophy of Mind
      PHI 4360 Theories of Knowledge

   PHI 4400 Philosophy of Science
   PHI 4420 Philosophy of Social Science

Society, Culture & Values: Select from the following: 9 hrs
   PHI 2600 Ethics
   PHI 3400 Philosophy of Law
   PHI 3601 Practical Wisdom
   PHI 3640 Environmental Ethics
   PHI 3670 Ethical Theory
   PHI 3700 Philosophy of Religion
   PHI 3800 Aesthetics
   PHI 3803 Philosophy & Creativity
   PHI 4804 Critical Theory
   PHM 3100 Freedom and Justice
   PHM 3123 Feminist Theory
   PHP 3786 Existentialism
*Appropriate Special Topics in Philosophy may be substituted for some core courses with prior departmental advisor approval.

4. Upper Division Restricted Electives (6 hrs)
   Select six hours of approved courses in Philosophy or related areas, subject to departmental advisor approval.

5. Departmental Exit Requirements (3 hrs)
   PHI 4933 Metaphilosophy
      3 hrs
   - Maintain a minimum GPA of 2.0 in upper division required courses
   - Computer Competency met by PHI 4933

6. Foreign Language Requirements (0-8 hrs)
   Admission: Met by graduation requirement.
   Graduation: Two semesters or equivalent proficiency exam. Majors who are contemplating graduate school should complete two years of a foreign language, preferably one functional in their area of historical interest.

7. Electives (variable)
   Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

8. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Humanities

Related Minors: Environmental Studies, Humanities, Philosophy, Religious Studies

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements
- Courses taken at community colleges do not substitute for Upper Division courses
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.
4. Internship I Block

A student must have completed the portfolio process for Internship I Satisfactorily and completed 2/3 of Specialization Requirements before student teaching.

5. Specialization Core Requirements (24 hrs)

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<tr>
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<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PET 3720C</td>
<td>Teaching PE K-8</td>
<td>2 hrs</td>
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<tr>
<td>PET 3740C</td>
<td>Teaching PE 6-12</td>
<td>2 hrs</td>
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<tr>
<td>EDE 3942.03</td>
<td>Internship I (Elem)</td>
<td>6 hrs</td>
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</table>

6. Internship II (ESE 4943.07) (12 hrs)

A student must have completed the portfolio process for Internship II Satisfactorily before student teaching.

7. Courses for 6-12 Certification (6 hrs)

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<th>Course Code</th>
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<tbody>
<tr>
<td>PET 3765</td>
<td>Coaching Theory &amp; Officiating</td>
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<tr>
<td>PET 4382</td>
<td>Fitness Assessment</td>
</tr>
</tbody>
</table>

8. Additional Courses for Coaching Endorsement (6 hrs)

<table>
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<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
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<td>Coaching Theory &amp; Officiating</td>
</tr>
<tr>
<td></td>
<td>and one of the following</td>
</tr>
<tr>
<td>PET 3624</td>
<td>Coaching Football or</td>
</tr>
<tr>
<td>PET 3644</td>
<td>Coaching Basketball or</td>
</tr>
<tr>
<td>PET 3324</td>
<td>Coaching Volleyball or</td>
</tr>
<tr>
<td>PET 3930</td>
<td>Coaching Soccer</td>
</tr>
</tbody>
</table>

9. Foreign Language Requirements (0-6 hrs)

State University System foreign language admission requirement: 2 years in high school or 1 year of college instruction in a single foreign language. (This requirement applies to those students admitted to the University without the required 2 units of foreign language in high school)

10. Electives (to meet 120 hour requirement) Variable

11. Departmental Exit Requirements

Achieve a 2.5 GPA in all courses within the major

12. University Minimum Exit Requirements

- A 2.0 GPA in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Transfer notes

- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.
PHYSICAL EDUCATION PROGRAM SEQUENCE

Human Anatomy with a lab is a pre-professional requirement that should be taken before entering UCF. If this requirement is not completed satisfactorily, the student may take it at UCF. ZOO 3637 is offered every Spring semester and is designed for Physical Educators only. It is also a prerequisite for PET 4312 and 4351. In addition to the anatomy course, it is recommended that students take several skill development courses in physical activities, conditioning, fitness, and wellness. Actual sequence of courses may differ from the following schedule.

JUNIOR YEAR

Fall - 15 hours
EDF 4214 Classroom Learning Principles 3 hrs
EDG 4323 Professional Teaching Practices 3 hrs
DAE 3370 Dance & Rhythms 3 hrs
PET 3041 Games Elem Prog 3 hrs
PEO 2011 Team Sports 3 hrs
Spring - 15 hours
PEO 2031 Ind Sports 3 hrs
PET 2622 Human Injuries 3 hrs
PEP 3205 Gymnastics 3 hrs
PET 4312 Biomechanics 3 hrs
PET 4401 Adm Eval PE 3 hrs
Summer - 6 hours
EDF 4603 Analysis of Critical Issues 3 hrs
PET 4640 Adapted PE 3 hrs

SENIOR YEAR

Fall - 16 hours
PET 3720C Tch PE K-8 2 hrs
PET 3240C Tch PE 6-12 2 hrs
EDE 3942 Internship I 6 hrs
PET 4035 Motor Dev/Lin 3 hrs
PET 4351 Apl Exer Hum Phys 3 hrs
Spring - 12 hours
ESE 4943 Internship II 12 hrs

For K-12 certification and coaching endorsement, the following courses are needed:
PET 3765 Coaching Theory 3 hrs
PET 4382 Fitness Assessment 3 hrs
PET 3XXX Sports Specific Course 3 hrs
Admission Requirements - LIMITED ACCESS
Acceptance to the university does not necessarily constitute admission to the upper division physical therapy program.
- SEPARATE APPLICATION to the limited access program must be made directly to the program prior to February 1, 1999. (Application to the university must be made by February 1, 1999.)
- All prerequisite courses must be completed by the end of the fall 1998 term.
- All general education and foreign language admission requirements must be completed prior to the start of the program.
- All applicants must have a minimum overall GPA of 3.0, a minimum prerequisite GPA of 3.0, and complete all program prerequisite courses with at least a grade of "C". (No CLEP, TSD, or AP credit may be used for prerequisite courses.)
- A minimum of 10 documented clock hours experience working, volunteering or shadowing in physical therapy facilities with a licensed physical therapist by the application deadline.
- Personal qualifications include intelligence, initiative, interpersonal abilities and leadership potential.
- An interview is conducted with selected applicants as a final process.

NOTE: The current program is a limited access, three year (nine semester) professional curriculum leading to a Bachelor of Science degree in Health Sciences and a Master of Science degree in Physical Therapy. The professional curriculum is a full-time program with no opportunity to take courses other than those prescribed by the curriculum. The professional program includes clinical practicums and internships ranging from six weeks to eight weeks in length. Applicants need to note that one or more of the clinical practicums may be assigned in a site sufficiently removed from the Orlando area that the student may be required to provide their own transportation and housing. A new entering class begins the program in the fall of each year. Students who successfully complete the course of study will be granted the M.S. degree enabling the graduate to seek membership in the American Physical Therapy Association and to qualify for Physical Therapy licensure. UCF's Physical Therapy Program received interim accreditation of its Masters of Science in Physical Therapy from the Commission on Accreditation of Physical Therapy Education. Twenty-eight students are admitted to the major each year.

Degree Requirements
- Students should complete the General Education Program, Foreign Language Admissions, and the Common Program Prerequisite Requirements before transferring within the Florida Public University/Community College System.
- Students should consult with a departmental advisor.
- The courses designated in sections 1 (General Education) and 2 (Common Program Prerequisites) below may be taken at a Florida Community College, and should usually be completed in the first 60 hours.
- A minimum overall GPA of 3.0 and a minimum grade of "C" in prerequisite and major courses is required for admission to, continuation in, and graduation from the Physical Therapy Program.
- UCF Residency Requirement: 31 hours.

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural Historical Foundations 9 hrs
   C. Mathematical Foundations 6 hrs
   Select MAC 1105
   Select STA 2023
   D. Social Foundations 6 hrs
   Select PSY 2013
   E. Science Foundations 6 hrs
   Select BSC 2010C
   Select CHM 2045

2. Common Program Prerequisites (23 hrs)
   PSY 2013 General Psychology GEP
   DEP 2004 Developmental Psychology 3 hrs
   BSC 2010C General Biology I GEP
   BSC 2011C General Biology II 4 hrs
   CHM 2045 Chemistry Fundamentals I GEP
   CHM 2046 Chemistry Fundamentals II 4 hrs
   PCB 3703C Human Physiology* 4 hrs
   STA 2023 Statistical Methods I GEP
   PHY 2053C College Physics I 4 hrs
   PHY 2054C College Physics II 4 hrs
   *See Transfer Notes.

3. Core Requirements* (35 hrs)
   This program of study is effective only for those students who have been interviewed and formally accepted by the Physical Therapy program for the Fall 1999 term.
   First Professional Year (3 semesters) (23 hrs)
   See department for details.
   Second Professional Year (2 semesters) (25 hrs)
   See department for details.
   *The third professional year (4 semesters) leads to the Master of Science in Physical Therapy (51 hours).

4. Upper Division Restricted Electives
   None.

5. Departmental Exit Requirements
   To be eligible for a master's degree in physical therapy, a student must complete all academic and clinical education courses prescribed in the three year professional curriculum, as shown in Section 3 above, with no grade less than "C", and be recommended for the degree by the academic and clinical faculty. Students must have a 3.0 GPA to graduate. Graduates may not take the state licensing exam without obtaining the Master of Science in Physical Therapy degree.

6. Electives
   None.

7. Foreign Language Requirements (0-8 hrs)
   Admissions: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
   Graduation: None.

8. University Minimum Exit Requirements
- A “C” GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 34 semester hours in regular courses completed at UCF
- A maximum of 45 hrs of extension, correspondence, CLEP, Credit by Exam and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required for
- Bachelor of Science in Health Services 120 hrs
- Master of Science in Physical Therapy 51 hrs

Related Programs: Cardiopulmonary Sciences, Radiologic Sciences, Nursing, Communicative Disorders, Health Service Administration.

Related Minors: Health Services Administration, Business

Transfer Notes:
Behavioral Sciences:
  a. General Psychology (PSY X012 or X013)
  b. Developmental Psychology (DEP X004)

Natural Sciences and Mathematics:
  a. Biology - General Biology I & II (BSC X010C and X011C or ZOO X010C) with labs
  b. Human Physiology or Anatomy & Physiology I & II with labs (BSC X085C and X086C or X093C and X094C)
  c. Chemistry I & II - for science majors with labs (CHM X045 and X046)
  d. Statistics for science majors (STA X023)
  e. Physics - College Physics I & II (algebra based), or University Physics (calculus based), with labs (PHY X053C and X054C; or 2004C and 2005C)

It is recommended that students have basic computer literacy.

Note:
This curriculum model, courses, and program are being reviewed and are subject to change. A post-baccalaureate, entry-level Master's program is being designed for the class being admitted in the year 2000. Please check with the physical therapy program office for the current curriculum model.
PHYSICS: BACHELOR OF SCIENCE

College of Arts and Sciences
Physics Department, HPB 310, (407) 823-2325,
E-mail: physics@ucf.edu
Dr. Brian Tanner, (407) 823-2325

Physics majors can select from five distinct tracks to earn their physics degree, as described below in Section 4, Specialization. While the various tracks share a common core of courses, they also enable students to prepare specifically for certain career paths. Students should consult their faculty advisors when deciding between these tracks.

Admission Requirements
None

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- "D" grades in any required physics or mathematics courses are not acceptable; they must be repeated with a higher grade.
- Departmental Residency Requirement consists of at least 15 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF Department of Physics.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

1. UCF General Education Program (38 hrs)

A. Communication Foundations
   - Select ENC 1101 English Composition I 3 hrs
   - Select ENC 1102 English Composition II 3 hrs
   - Select SPC 1016 Oral Comm for Tech Prof 3 hrs

B. Cultural and Historical Foundations
   - 9 hrs

C. Mathematical Foundations
   - Select MAC 2281 Calculus for Sci & Eng I or MAC 2311 Calculus 4 hrs
   - Select COP 2200 Computer Programming 3 hrs

D. Social Foundations
   - 6 hrs

E. Science Foundations
   - Select PHY 2048 & L Physics for Sci & Eng I
     (PR: MAC 2311 or MAC 2281) 4 hrs
   - Select a GEP course from Science Section 2 3 hrs

2. Common Program Prerequisites (20 hrs)

CHM 2045C* Chem Fund I 4 hrs
CHM 2046 & L Chem Fund II with lab 4 hrs
MAC 2281 Calculus for Sci & Eng I GEP
MAC 2282 Calculus for Sci & Eng II 4 hrs
MAC 2283 Calculus for Sci & Eng III 4 hrs
PHY 2048 & L Physics Engr & Sci I & Lab GEP
PHY 2049 & L Physics Engr & Sci II & Lab 4 hrs
*See Transfer Notes for possible substitutes

3. Core requirements (all tracks) (43 hrs)

MAP 2302 Differential Equations 3 hrs
PHY 3101 Physics Engr & Sci III 3 hrs
PHZ 3113 Intro to Theoretical Methods of Physics 3 hrs
PHY 3221 Mechanics I 3 hrs
PHY 3503 Thermal and Statistical Physics 3 hrs
PHY 3323 Electricity and Magnetism I 3 hrs
PHY 4324 Electricity and Magnetism II 3 hrs
PHY 3752C Physics of Sci Instruments 3 hrs
PHY 4604 Wave Mechanics I 3 hrs
PHY 4605 Wave Mechanics II 3 hrs

PHYSICS: BACHELOR OF SCIENCE

PHY 4912 Directed Independent Research 3 hrs
   (should be done in the area of specialization)

Laboratory requirements
PHY 3752C Physics of Sci Instruments or 3 hrs
PHY 3722C Physics Laboratory: Electronics and
PHY 3802L Intermediate Physics Lab

4. Specialization: select one area

4.1 General Physics Specialization (18 hrs)
   PHY 4803L Advanced Physics Lab 3 hrs
   Upper Division Restricted Electives 6 hrs
   PHY, PHZ, or AST courses 9 hrs

4.2 Physics Devices Specialization (18 hrs)
   Choose one lab from:
   PHY 4803L Advanced Physics Lab 3 hrs
   EEL 5355 Fabrication of Solid-State Devices 4 hrs
   Choose nine hours from:
   EEL 3306 Semiconductor Devices 3 hrs
   EGN 3365 Structure and Properties of Materials 3 hrs
   EMA 4413 Electronic Properties of Materials 3 hrs
   CHM 3411L Physical Chemistry Laboratory 2 hrs
   PHZ 5405 Condensed Matter Physics 3 hrs
   EEL 5352 Semiconductor Mat & Device Char 3 hrs
   Directed Electives 6 hrs
   Courses at a 3000 level or higher, approved by the
   Physics Department. Courses must be chosen in
   Physics, Mathematics, Computer Science, or
   Engineering.

4.3 Optics and Lasers Specialization (18 hrs)
   PHY 4424L Optical Physics Laboratory 3 hrs
   PHY 4424 Physical Optics 3 hrs
   Choose six hours from:
   EEL 4440 Optical Engineering 3 hrs
   PHY 5446 Laser Principles 3 hrs
   EEL 5448 Fund. of Optoelectronic Devices 3 hrs
   Directed Electives 6 hrs
   Courses at a 3000 level or higher, approved by the
   Physics Department. Courses must be chosen in
   Physics, Mathematics, Computer Science, or
   Engineering.

4.4 Computational Physics Specialization (18 hrs)
   PHZ 3151 Computer Methods in Physics 3 hrs
   COP 3502C Computer Science I 3 hrs
   COP 3503C Computer Science II 3 hrs
   COT 4500 Numerical Calculus 3 hrs
   Directed Electives 6 hrs
   Courses at a 3000 level or higher, approved by the
   Physics Department. Courses must be chosen in
   Physics, Mathematics, Computer Science, or
   Engineering.

4.5 Astronomy Specialization (18 hrs)
   AST 2002 Introduction to Astronomy 3 hrs
   AST 3XXX Observational Techniques 3 hrs
   Choose two of the following:
   - AST 3110 Solar System Astronomy 3 hrs
   - AST 3211 Stellar Astrophysics 3 hrs
   - AST 3221 Galaxies and Cosmology 3 hrs
   Directed Electives 6 hrs
   Courses at a 3000 level or higher, approved by the
   Physics Department. Courses must be chosen in
   Physics, Mathematics, Computer Science, or

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5. Departmental Exit Requirements
- Students must have at least a 2.0 GPA in all courses counted toward the major
- Computer Competency met by COP 2200 or a departmental exam

6. Foreign Language Requirements (0-8 hrs)
Admission: Met by graduation requirement
Graduation: Two semesters or equivalent proficiency exam.

7. Electives (variable)
Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

8. University Minimum Exit Requirements
- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Engineering, Mathematics

Related Minors: Mathematics, Physics

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements
- Courses taken at community colleges do not substitute for Upper Division courses
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
- CHM 2045C*: may use CHM 1040 plus CHM 1041
- MAC 2281*, 2282*, 2283*: MAC 2311, 2312, and 2313 will substitute
POLITICAL SCIENCE: BACHELOR OF ARTS

College of Arts and Sciences
Political Science Department, FA 415, (407) 823-2608
E-mail: politics@ucf.edu
Dr. R. Bledsoe, (407) 823-2608

Admission Requirements None

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Departmental Residency Requirement consists of at least 15 semester hours of regularly scheduled courses taken from the UCF Department of Political Science.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

1. UCF General Education Program (36 hrs)
   - A. Communication Foundations
     Prefer AMH 2010 US History: 1492-1877
     Prefer AMH 2020 US History: 1877-Present
     Select from GEP list
   - B. Cultural and Historical Foundations
     Prefer AMH 2010 Chapter 1
     Prefer AMH 2020 Chapter 3
     Select from GEP list
   - C. Mathematical Foundations
     Select MGF 1203 Finite Mathematics
     Select CGS 1060 Intro to Computer Sci or STA 2014 Principles of Statistics
   - D. Social Foundations
     Select POS 2041 American National Gvt
     Select one of the three choices
   - E. Science Foundations

2. Common Program Prerequisites (3 hrs)
   - POS 2041 American National Gvt
   - POS 3703 Scope & Methods of Pol Sci
   - *See Transfer Notes for possible substitutes

3. Upper Division Restricted Electives (30 hrs)
   - Choose one of the following emphases:
     Emphasis 1: American Politics and Policy
     Five courses from area A
     Two courses from area B
     Two courses from area C
     One additional course from any area
     15 hrs
     Emphasis 2: International Relations-Comparative Politics
     Two courses from area A
     Two courses from area B
     Two courses from area C
     One additional course from any area
     *No more than two of the following courses may be considered part of area B credit: INR 4401, INR 4402, INR 4404
     15 hrs
     Emphasis 3: Prelaw
     Please see Political Science - Prelaw for the emphasis requirements.

AREAS OF SPECIALIZATION

A. American Politics and Policy
   - POS 3122 State Government
   - POS 3173 Southern Politics
   - POS 3233 Political Opinion
   - POS 3235 Mass Media and Politics

B. International Relations and Comparative Government
   - CPO 3034 Politics of Developing Areas
   - CPO 3103 Comparative Politics
   - CPO 3104 Politics of Western Europe
   - CPO 3132 Canadian Studies
   - CPO 3403 Politics of the Middle East
   - CPO 3614 Politics of Eastern Europe
   - CPO 4062 Comparative Judicial Processes
   - CPO 4123 Government and Politics of Great Britain
   - CPO 4133 Government and Politics of Canada
   - CPO 4303 Comparative Latin American Politics
   - CPO 4643 Government and Politics of Russia
   - GEO 3470 World Political Geography
   - INR 2002 International Relations
   - INR 3253 International Politics of Africa
   - INR 4025 International Political Economy
   - INR 4102 American Foreign Policy
   - INR 4114 American Security Policy
   - INR 4115 Strategic Weapons and Arms Controls
   - INR 4224 Contemp International Politics of Asia
   - INR 4225 Vietnam War
   - INR 4243 International Politics of Latin America
   - INR 4335 Coercion in International Politics
   - INR 4401 International Law I
   - INR 4402 International Law II
   - INR 4404 Space Law
   - INR 4502 International Organizations
   - POS 3253 Contem Revolution & Political Violence
   - POS 3508 Space Studies
   - POS 4510 Space Policy

C. Political Theory
   - POS 4206 Political Psychology
   - POT 3204 American Political Thought
   - POT 3302 Modern Political Ideologies
   - POT 4003 Political Theory
   - POT 4025 Ancient, Medieval and Early Modern Political Philosophy
   - POT 4054 Modern Political Philosophy
   - POT 4066 Contemporary Political Theory
   - POT 4314 Contemporary Democratic Theory
   - POT 4414 Marxist Political Theory
   - POT 4632 Religion and Politics

5. Departmental Exit Requirements
   - Maintain a minimum GPA of 2.0 in the major
6. Foreign Language Requirements (0-8 hrs)
Admission: Met by graduation requirement
Graduation: Two semesters or equivalent proficiency exam.

7. Electives (variable)
Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

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.

8. University Minimum Exit Requirements
- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Economics, History

Related Minors: Economics, History, Psychology, Sociology, Philosophy

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
- POS 2041* and POS 3703*: State mandated Common Program Prerequisite allow a student to enter the major with any 6 hours of introductory Political Science classes with a POS, INR, or CPO prefix. However, both POS 2041 and POS 3703 are course prerequisites for subsequent courses in the major, and other classes will not substitute.
POLITICAL SCIENCE - PRELAW: BACHELOR OF ARTS

College of Arts and Sciences
Political Science Department, FA 415, (407) 823-2608
E-mail: politics@ucf.edu
Dr. R. Bledsoe, (407) 823-2608

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, students build a firm foundation for law school entry and acquire a broad training which can result in career options upon graduation. For further information, consult one of the Department’s prelaw advisors or the College of Arts and Sciences Prelaw Advisor.

The following represent a suggested curriculum which both meets the requirements for a Political Science Degree while preparing you for professional school.

Admission Requirements  None

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Departmental Residency Requirement consists of at least 15 semester hours of regularly scheduled courses taken from the UCF Department of Political Science
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations  9 hrs
   B. Cultural and Historical Foundations  
      Prefer AMH 2010 US History: 1492-1877  3 hrs
      Prefer AMH 2020 US History: 1877-Present  3 hrs
      Select from GEP list  3 hrs
   C. Mathematical Foundations  6 hrs
      Select MGF 1203 Finite Mathematics  3 hrs
      (may substitute a higher level math)
      Select CGS 1060C Intro to Computer Sci or STA 2014 Principles of Statistics  3 hrs
   D. Social Foundations  
      Select POS 2041 American National Gvt  3 hrs
      Select one of the three choices  3 hrs
   E. Science Foundations  6 hrs

2. Common Program Prerequisites (3 hrs)
   POS 2041* American National Gvt  GEP
   POS 3703* Scope & Methods of Pol Sci  3 hrs
*See Transfer Notes for possible substitutes

3. Upper Division Restricted Electives (30 hrs)
   POS 4284 Judicial Process and Politics  3 hrs
   One of the following:  3 hrs
   POS 4603 American Constitutional Law I
   POS 4604 American Constitutional Law II
   INR 4401 International Law I
   INR 4402 International Law II
   Select one (See listing under Political Science)  15 hrs
   Five courses from area A and  6 hrs
   Two courses from area B
   or
   Two courses from area A and  6 hrs
   Five courses from area B  15 hrs
   One course from area C  3 hrs

5. Departmental Exit Requirements
   - Maintain a minimum GPA of 2.0 in the major
   - Computer Competency met by POS 3703

6. Foreign Language Requirements (0-8 hrs)
   Admission: Met by graduation requirement
   Graduation: Two semesters or equivalent proficiency exam.

7. Electives (variable)
   Select primarily from upper level courses, with departmental advisor’s approval. May be outside of the department.
   Some suggested electives Include:
   ACG 2021 Principles of Financial Accounting
   ACG 2071 Principles of Managerial Accounting
   BUL 3320,3321 Business Law I & II
   PLA 3105 Legal Research
   PLA 3155 Legal Writing
   PHI 2101 Critical Thinking
   PHI 3130 Formal Logic I
   PHI 3131 Formal Logic II
   MGF 2300 Logic and Proof in Mathematics
   ENC 3311 Expository Writing
   LIN 4100 History of the English Language
   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.

8. University Minimum Exit Requirements
   - A “C” GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required  120 hours

Related Programs: Economics, History, Philosophy

Related Minors: Economics, History, English, Philosophy

Transfer notes:
- “D” grades from other institutions do not meet departmental requirements
- Courses taken at community colleges do not substitute for Upper Division courses
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
- POS 2041* and POS 3703*. State mandated Common Program Prerequisite allow a student to enter the major with any 6 hours of introductory Political Science classes with a POS, INR, or CPO prefix. However, both POS 2041 and POS 3703 are course prerequisites for subsequent courses in the major, and other classes will not substitute.
PSYCHOLOGY: BACHELOR OF ARTS

College of Arts and Sciences
Psychology Department, PH 302B, (407) 823-2216
E-mail: psychology@ucf.edu
Dr. J. McGuire, (407) 823-2216

Students majoring in Psychology as the foundation of a Liberal Arts degree will probably find the BA option an appropriate degree.

Admission Requirements
None

Degree Requirements
- UC Students who change degree programs and select this major must adopt the most current catalog.
- Departmental Residency Requirement: at least 15 semester hours of regularly scheduled 3000-4000 level courses must be taken from the UCF Psychology Department
- Students must earn at least a "C" in each Psychology course counted toward the major requirements.
- Students should consult with the Department Director of Undergraduate Advising, Dr. K. Mattarella, 823-2466
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

Honors in Psychology:

Additional Requirements (6 hrs)
- The Honors in Psychology is available to majors who show outstanding scholarship and promise in psychology
- Application and admission through the department
- Fulfill University requirements for Honors in the Major
- Have a Psychology GPA above 3.5, based on at least 11 credits, including PSY 3214C. No grades can be below a "B"
- Have an overall UCF GPA above 3.2
- PSY 3970H Directed Honors Readings 3 hrs
- PSY 4903H Undergraduate Honors Thesis 3 hrs

1. UCF General Education Program (36 hrs)
A. Communication Foundations 9 hrs
B. Cultural and Historical Foundations 9 hrs
C. Mathematical Foundations
   Select MAC 1105 College Algebra (or higher) 3 hrs
   Select STA 2023 Statistical Methods I* 3 hrs
D. Social Foundations
   Select one of the listed choices 3 hrs
   Select PSY 2013 General Psychology 3 hrs
E. Science Foundations
   Select BSC 1020 Biological Principles 3 hrs
   Select one of the listed choices 3 hrs

*See Transfer Notes for possible substitutions

2. Common Program Prerequisites (4 hrs)
BSC 1020* Biological Principles GEP
PSY 2013* General Psychology GEP
PSY 3214C* Research Methods 4 hrs
STA 2023* Statistical Methods I GEP

*See Transfer Notes for possible substitutes

3. Core requirements (6 hrs)
EXP 3404 Basic Learning Processes 3 hrs
PSB 3002 Physiological Psychology 3 hrs

4. Restricted Electives (12 hrs)
Select two of the following three courses 6 hrs
DEP 2004 Developmental Psychology
PPE 3003 Personality Theory
SOP 3004 Social Psychology
Select any additional 6 hrs in Psychology 6 hrs

5. Diversity (9 hrs)
Take three (3) diversity courses: one from A, one from B, and one from either A or B (see following lists).
A. Psychology Diversity courses
   DEP 3464 Psychology of Aging
   SOP 3724 Psychology of Racial Prejudice
   SOP 3742 Psychology of Women
   SOP 2772 Sexual Behavior
   SOP 3784 Psychology of Diversity
B. General Diversity courses
   Select from courses outside the Psychology department that focus on gender, class, or minority issues:
   AMH 3561, 3562, 3571, 3586; AML 3614, 4261; ANT 2410,
   2511, 3302, 3311, 3312, 3313, 3332, 3363, 3412, 3541, 3640;
   ARH 3520, 4458; ASH 4404, 4442; CCJ 4670; CLA 3851;
   COM 4461; CPO 3403; EUH 4576; GEO 3470; HSC 4564;
   HUM 3401, 3418; JST 3401; LAH 3130, 3200, 3400, 5713;
   LIT 3354, 3383; PHI 3022; PDM 2123; PSY 3314,
   4323; SPA 3480, 4381; SYD 3700, 3800; SYG 2010; SNP 4730;
   WST 3010.

6. Departmental Exit Requirements
   - Earn a grade of "C" or better in each psychology course used for major
   - Maintain a minimum psychology GPA of 2.0
   - Computer Competency met by PSY 3214C

7. Foreign Language Requirements (0-8 hrs)
Admission: Met by graduation requirement
Graduation: Two semesters or equivalent proficiency exam.

8. Electives (variable)
Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

9. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP credit completed
   - 48 semester hours in upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Sociology, Anthropology, Statistics, Criminal Justice

Related Minors: Psychology, Sociology, Anthropology, Math, Statistics

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements
- Courses taken at community colleges do not substitute for Upper Division courses
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
- BSC 1020*: any lower level BSC course or ZOO X010.
- PSY 2013*: any PSY course. However PSY 2013 is a prerequisite for all subsequent Psychology courses and will need to be taken for the major.
- STA 2023*: STA 2013 or any lower level STA course. However STA 2023 or STA 2014 is a prerequisite for subsequent Psychology courses and will need to be taken for the major.
- PSY 3214*: any lower level psychology course. However, this course is a prerequisite for all subsequent psychology courses and must be taken for the major.
PSYCHOLOGY: BACHELOR OF SCIENCE

College of Arts and Sciences
Psychology Department, PH 302B, (407) 823-2216
E-mail: psychology@ucf.edu
Dr. J. McGuire, (407) 823-2216

Students who desire a quantitative background in statistics, math, and science are encouraged to complete the program of study leading to the BS degree.

Admission Requirements
None

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Departmental Residency Requirement: at least 15 semester hours of regularly scheduled 3000-4000 level courses must be taken from the UCF Psychology Department
- Students must earn at least a "C" in each Psychology course counted toward the major requirements
- Students should consult with the Department Director of Undergraduate Advising, Dr. K. Mattarella, 823-2466
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

Honors in Psychology:
Additional Requirements (6 hrs)
- The Honors in Psychology is available to majors who show outstanding scholarship and promise in psychology
- Application and admission through the department
- Fulfill University requirements for Honors in the Major
- Have a Psychology GPA above 3.5, based on at least 11 credits, including PSY 3214C. No grades can be below a "B"
- Have an overall UCF GPA above 3.2
- PSY 3970H Directed Honors Readings 3 hrs
- PSY 4903H Undergraduate Honors Thesis 3 hrs

1. UCF General Education Program (37 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural and Historical Foundations 9 hrs
   C. Mathematical Foundations
      Select MAC 1105 College Algebra (or higher) 3 hrs
      Select STA 2023 Statistical Methods I* 3 hrs
   D. Social Foundations
      Select one of the listed choices 3 hrs
      Select PSY 2013 General Psychology 3 hrs
   E. Science Foundations
      Select BSC 2010C General Biology 4 hrs
      Select one of the listed choices 3 hrs
*See Transfer Notes for possible substitutions

2. Common Program Prerequisites (4 hrs)
   BSC 2010C* General Biology GEP
   PSY 2013* General Psychology GEP
   PSY 3214C* Research Methods 4 hrs
   STA 2023* Statistical Methods I GEP
*See Transfer Notes for possible substitutes

3. Core requirements (10 hrs)
   EXP 3404 Basic Learning Processes 3 hrs
   PSB 3002 Physiological Psychology 3 hrs
   PSY 4215C Advanced Research Methods 4 hrs

4. Restricted Electives (14 hrs)
   A. Select two of the following courses 6 hrs
      DEP 2004 Developmental Psychology
      PPE 3003 Personality Theory
      SOP 3004 Social Psychology
   B. Select one Psychology upper level lab course - consult with advisor 2 hrs
   C. Psychology electives; select any additional six hours in psychology 6 hrs

5. Diversity courses (6 hrs)
   Take two diversity courses - one from A & one from B
   A. Psychology Diversity courses 3 hrs
      DEP 3464 Psych of Aging
      SOP 3724 Psych of Racial Prejudice
      SOP 3742 Psych of Women
      SOP 2772 Sexual Behavior
      SOP 3784 Psychology of Diversity
   B. General Diversity courses 3 hrs
      Select from courses outside the Psychology department that focus on gender, class or minority issues.
      AMH 3561, 3562, 3571, 3586; AML 3614, 4261; ANT 2410, 2511, 3302, 3311, 3312, 3313, 3332, 3363, 3412, 3541, 3640;
      ARH 3520, 4458; ASH 4404, 4442; CCJ 4670; CLA 3851; CLA
      3851; COM 4461; CPO 3403; EUH 4576; GEO 3470; HSC
      4564; HUM 3401, 3418; JST 3401; LAH 3130, 3200, 3400,
      5713; LIT 3354, 3383; PHI 3022; POM 3246, 4622;
      PUB 3314, 4323; SPA 4380, 4381; SYD 3700, 3800; SYG 2010;
      SYP 4730; WST 3010.

6. Science Electives (9-12 hrs)
   Three courses: two from outside Psychology (see list A)
      one from Psychology (see list B)
   (See course listing for prerequisites)
   A. COP 3502C Computer Science I
      COP 3503C Computer Science II
      CGS 2100C Computer Fundamentals of Business
      MAC 2233 Concepts of Calculus
      MAC 2253 Applied Calculus I
      PCB 3063 & L Genetics with lab
      PCB 3703C Human Physiology
      STA 4102 Computer Process of Stat Data
      ZOO 3733C Human Anatomy
   B. EXP 3204C Perception
      EXP 3513 Cognitive Psychology
      PSY 3302 Psychological Measurement
      PSB 4013C Introduction to Neuropsychology

7. Departmental Exit Requirements
   - Earn a grade of "C" or better in each psychology course
   - Maintain a minimum psychology GPA of 2.0
   - Computer Competency met by PSY 3214C

8. Foreign Language Requirements (0-8 hrs)
   Admission: Met by graduation requirement.
   Graduation: Two semesters or equivalent proficiency exam

9. Electives (variable)
   Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

10. University Minimum Exit Requirements
    - A "C" GPA (2.0) in all work attempted (both UCF and overall)
    - 60 semester hours earned after CLEP awarded
    - 48 semester hours of upper division credit completed
> 30 semester hours in regular courses completed at UCF
> A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
> Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

**Total Semester Hours Required** 120 hours

**Related Programs:** Sociology, Anthropology, Statistics, Criminal Justice

**Related Minors:** Psychology, Sociology, Anthropology, Math, Statistics

**Transfer notes:**
> "D" grades from other institutions do not meet departmental requirements
> Courses taken at community colleges do not substitute for Upper Division courses
> Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
> BSC 2010C*: any lower level BSC course or ZOO X010. However, BSC 2010 is a prerequisite for all subsequent Biology courses and thus may need to be taken in order to qualify for other Biology courses used as science electives for the BS degree in psychology.
> PSY 2013*: any PSY course. However PSY 2013 is a prerequisite for all subsequent Psychology courses and must to be taken for the major.
> STA 2023*: STA 2014 or any lower level STA course. However STA 2023 or STA 2014 is a prerequisite for subsequent Psychology courses and will need to be taken for the major.
> PSY 3214*: any lower level psychology course. However, this course is a prerequisite for all subsequent psychology courses and must be taken for the major.
PUBLICATION ADMINISTRATION: BACHELOR OF ARTS or BACHELOR OF SCIENCE

College of Health and Public Affairs
HPA 343, (407) 823-2604
Chair: K. Tom Liou
Web Address: http://www.cohpa.ucf.edu/pubadm/

Admission Requirements None

Degree Requirements

- Students should complete the General Education Program and the
  Common Program Prerequisites before transferring within the
  Florida Public University/Community College System
- Students should consult with a departmental advisor
- The courses designated in sections 1 and 2 below may be taken at
  a Florida Community College and should usually be completed in
  the first 60 hours
- Students must earn at least a “C” in each course accepted as a
  Common Program Prerequisite and Core Requirement (see
  sections 2 and 3 below)
- No transfer course will be accepted with a grade lower than a “C”
- The courses designated in sections 1 (General Education) and 2
  (Common Program Prerequisites) should usually be completed in
  the first 60 hours

1. UCF General Education Program (36 hrs)
   - A. Communication Foundations 9 hrs
   - B. Cultural Historical Foundations 9 hrs
   - C. Mathematical Foundations 6 hrs
     Select CGS 1060C
   - D. Social Foundations (9 hrs required for major) 6 hrs
     Select ECO 2013 and POS 2041, and PSY or SIG
   - E. Science Foundations 6 hrs

2. Common Program Prerequisites (3 hrs)
   - CGS 1060C Intro to Computer Science
   - POS 2041 American National Government
   - ECO 2013 Principles of Economics I

3. Core Requirements (21 hrs)
   - ENC 3210 Business Report Writing 3 hrs
   - PAD 3003 Public Administration in American Society 3 hrs
   - PAD 4034 Administration of Public Policy 3 hrs
   - PAD 4104 Administrative Management 3 hrs
   - PAD 4204 Fiscal Management 3 hrs
   - PAD 4414 Human Resource Management 3 hrs
   - PAD 4720 Survey Research in Public Administration 3 hrs

4. Upper Division Restricted Electives (36 hrs)
   Public Administration electives, (including internship minimum 2.5
   GPA) are required as follows:
   - Double Majors: those who complete a PAD major, and those of
     another UCF major, must take a minimum of 15 hrs PAD
     prefixed electives
   - Those who complete a recognized UCF minor in a discipline
     outside Public Administration must take a minimum of 18 hrs
     PAD prefixed electives
   - All other PAD majors must complete at least 21 hrs of PAD
     prefixed electives within the restricted elective area
   - Additional electives can be taken from other allied supporting
     fields such as accounting, legal studies, communications,
     computer science, criminal justice, economics, political science,
     social work, sociology and statistics. Courses should be selected
     with the assistance of an advisor, and must be upper division (3-4000 level).

5. Departmental Exit Requirements
   The students must attain a minimum grade of “C” in all Common
   Program Prerequisite courses and in all Core Requirements (see
   sections 2 and 3 above). An overall 2.0 GPA must be attained for all
   coursework (see sections 1, 2, 3 and 4).

6. Electives (variable)

7. Foreign Language Requirements (0-8 hrs)
   Admissions: Two (2) years of one foreign language in high school,
   or one (1) year of one foreign language in college (or equivalent
   proficiency exam) prior to graduation.
   Graduation: Students pursuing the B.A. degree must demonstrate
   proficiency in a foreign language equivalent to one year. Students
   pursuing the B.S. degree must satisfy six (6) hours from the
   approved list of courses.

8. University Minimum Exit Requirements
   - A “C” GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP,
     Credit by Exam and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the
     CLAST and 9 hrs of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Accounting, Communications, Economics, Legal Studies, Computer Science, Social Work, Political Science, Criminal Justice, Health Services Administration, Management

Related Minors: Computer Science, Communications, Business, Economics

Transfer Notes:
- Intro. to Computer Science (CGS 1060) or any Computer
  Science course 3 hrs
- Economics I (ECO 2013) or any Macroeconomics course 3 hrs
- American National Government (POS 2041) or any course in
  American National Government 3 hrs

Honors

Honors Option Requires:
- Completion of a 3 credit directed readings course
- Completion of a 3 credit thesis course
- Open to students with a 3.5 GPA in Public Administration
- Cumulative UCF 3.2 GPA
- Completion of 60 semester hours of college credit, including 12
  graded upper division hours at UCF

Tentative Course Schedule for Entering Freshmen

Freshman Year*

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<thead>
<tr>
<th>Fall</th>
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<tr>
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<td>PSY 2013 or SYG 2000</td>
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<tr>
<td>PAD 2930</td>
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Freshman Year*
**Summer** 6/8 hrs
(Foreign Lang I) or B.S. option 3/4
(Foreign Lang II) or B.S. option 3/4

*Plan your required 9 summer hours into your course of study*

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<td>or AMH 2010</td>
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<td>ECO 2013</td>
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<tr>
<td>or GLY 1030 or GEO 1200</td>
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<tr>
<td>or BOT 1000 or ANT 3511</td>
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<td>PAD 4414</td>
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<tr>
<td>Elective</td>
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**Minor**
The six PAD required core courses for the major will be required of the PAD minor. These are PAD 3003, PAD 4414, PAD 4104, PAD 4204, PAD 4034, and PAD 4270.
RADIO-TELEVISION: BACHELOR OF ARTS

College of Arts and Sciences
Nicholson School of Communication, COM 246, (407) 823-2681, E-mail: radiotv@ucf.edu
Dr. J. Maunez
Limited Access program.

Admission Requirements

- Students should apply to become Radio-Television majors only after completing all requirements for admission. Deadlines are:
  - October 8, 1999 for Spring 2000
  - March 3, 1999 for Summer 2000
  - July 7, 2000 for Fall 2000

- Attain an overall minimum 2.25/4.00 GPA based on a minimum of 30 credit hours of college work. Note: meeting the minimum GPA does not guarantee admission since students are admitted on a space available basis. THE GPA CUT OFF FOR THE 1998-1999 YEAR WAS 2.75.

- Pass a grammar examination involving basic proficiency in grammar, punctuation, and word usage. Testing is conducted prior to and throughout each semester, and remedial options are provided.

- Pass a computer and Keyboard Proficiency Test (20 wpm). The test may be taken ONLY three times. Completion of a basic college keyboard or typing course with a grade of "C" will satisfy the requirement.

Degree Requirements

- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students may complete an internship off campus in a professional broadcast, production, or corporate operation
- Students should consult with a School advisor
- School Residency Requirement consists of at least 24 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF Nicholson School of Communication
- Students electing both a major and minor in the School must take the minor courses in excess of the 120 hours required for graduation
- 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. Summer internships are available during "C" term only.
- Courses designated in 1 (General Ed Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations
      - Select ENC 1101 & 1102 Composition 6 hrs
      - Select SPC 1600C Fund Oral Communication 3 hrs
   B. Cultural and Historical Foundations 9 hrs
   C. Mathematical Foundations
      - Select MGF 1203 Finite Mathematics 3 hrs
      - (may substitute a higher level math)
      - Select CGS 1060C Intro. to Computer Science 3 hrs
   D. Social Foundations 6 hrs
   E. Science Foundations 6 hrs

2. Common Program Prerequisites
   SPC 1600C Fund Oral Communication GEP

3. Core requirements (all tracks) (21 hrs)
   CGS 2582C Desktop Publishing Concepts 1 hr

CGS 3170C Internet Applications I 1 hr
CGS 3171C Internet Applications II 1 hr
RTV 2100 Writing for the Electronic Media 3 hrs
RTV 3200 Broadcast Techniques 3 hrs
RTV 3000 Foundations of Broadcasting 3 hrs
MMC 4200 Mass Communication Law 3 hr
RTV 4403 Elec Media, Tech, and Society 3 hrs
MMC 3311 Mass Media Comm Research Meth 3 hrs

4. Specialization: select one area
   Production Track: Select 18 hrs
   - RTV 3210 Audio Production I 4 hrs
   - RTV 3XXX Audio Production II 3 hrs
   - RTV 3220 Studio Television Production 4 hrs
   - RTV 3232C Lighting for Video 3 hrs
   - RTV 3260C Single-Camera Video Production 4 hrs
   - RTV 3263C Advanced Video Post-Production 3 hrs
   - RTV 3XXX Production of Int. Multimedia 3 hrs
   - RTV 3XXX Webcasting I 3 hrs
   - RTV 3XXX Webcasting II 3 hrs
   - RTV 3942 Practicum 1-3 hrs
   - RTV 4206 Television Directing 4 hrs
   - RTV 4270 Radio Production & Programming 3 hrs
   - RTV 4941 Internship 1-3 hrs
   Broadcast Journalism Track (19 hrs)
   - RTV 3260C Single-Camera Video Production 4 hrs
   - RTV 3301 Electronic Journalism I 3 hrs
   - RTV 3304 Electronic Journalism II 3 hrs
   - RTV 4304 Television News 3 hrs
   - MMC 4602 Contemporary Media Issues 3 hrs
   - JOU 3004 History of American Journalism 3 hrs
   Broadcast Generalist Track (18 hrs)
   Select 12 hours from Group A:
   - RTV 3231C Broadcast Announcing & Perfor. 4 hrs
   - RTV 3810 Broadcast Promotion 3 hrs
   - RTV 4270 Radio Production & Programming 3 hrs
   - RTV 4700 Broadcast Regulations 3 hrs
   - RTV 4800 Broadcast Management 3 hrs
   - ADV 4103 Radio-TV Advertising 3 hrs
   - CMC 4240 Corporate/Institutional Video 3 hrs
   - COM 3XXX Computer-Mediated Comm. 3 hrs
   - MMC 3XXX New Media Technologies 3 hrs
   Select 6 hours from Group B:
   - ADV 3000 Principles of Advertising 3 hrs
   - PUR 4000 Public Relations 3 hrs
   - COM 3110 Business & Prof. Comm. 3 hrs
   - VIC 3001 Visual Communication 3 hrs
   - ENC 3210 Business Report Writing 3 hrs

5. Required Minor
   Radio-Television majors must complete a minor in an academic area outside the School of Communication.

6. School Exit Requirements

- To avoid delaying graduation, you must request a review of requirements before registering for your last term
- Achieve an overall "C" GPA (2.0) in required UCF Radio/TV courses. This GPA does not include Restricted Electives in the major or other electives.
- Computer Competency met by program admission test

7. Foreign Language Requirements (0-8 hrs)
   Admission: Met by graduation requirement
   Graduation: One year or equivalent proficiency exam.
8. Electives
Variable
Select primarily from upper level courses, with School advisor's approval. May be outside of the School.

9. University Minimum Exit Requirements
- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: Advertising/Public Relations, Journalism, Film, Theatre

Related Minors: Film, Theatre

Transfer notes:
- "D" grades from other institutions do not meet School requirements
- Courses taken at community colleges do not substitute for Upper Division courses
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.
## RADIOLLOGIC SCIENCES: BACHELOR OF SCIENCE

**College of Health and Public Affairs**  
TR 544, (407) 823-2747  
Undergraduate Program Director: Thomas Edwards  
E-mail: tedwards@pegasus.ucf.edu  
Web Address: http://www.cohpa.ucf.edu/health.pro/

### Admission Requirements - LIMITED ACCESS
Acceptance to the university does not necessarily constitute admission to the upper division Radiologic Sciences Program. SEPARATE APPLICATION to the limited access program must be made directly to the program prior to February 1 of the year admission is sought. A personal interview is also required. Student must complete all general education, foreign language admissions, and program prerequisites prior to the start of the program. All applicants must have a minimum overall GPA of 2.5, and complete all program prerequisite courses with at least a grade of “C”. (No CLEP, TSD, or AP credit may be used for prerequisite courses.)

### Degree Requirements
- Students should complete the General Education Program, Foreign Language Admissions, and the Common Program Prerequisites Requirements before transferring within the Florida Public University/Community College System
- Students should consult with a departmental advisor
- The courses designated in sections 1 and 2 below may be taken at a Florida Community College, and should usually be completed in the first 60 hours
- A minimum overall GPA of 2.5 and a minimum grade of “C” in prerequisite and major courses is required for admission to, continuation in, and graduation from the Radiologic Sciences Program
- UCF Residency Requirement for Radiation Therapy: 34 hours
- UCF Residency Requirement for Radiography: 33 hours

### 1. UCF General Education Program (36 hrs)
- **A. Communication Foundations** 9 hrs
- **B. Cultural Historical Foundations** 9 hrs
- **C. Mathematical Foundations** 6 hrs
  - Select *MAC 1105*  
  - Select *CGS 100C*  
- **D. Social Foundations** 6 hrs
- **E. Science Foundations** 6 hrs
  - Select *BSC 2010C*  
  - Select *PHY 2053 and lab*

### 2. Common Program Prerequisites (12 hrs)
- **CGS 1060C** Introduction to Computer Science  
  - GEP
- **PCB 3703C** Human Physiology* 4 hrs  
- **PHY 2053C** College Physics I  
  - GEP
- **PHY 2054C** College Physics II 4 hrs  
- **ZOO 3733C** Human Anatomy* 4 hrs  
- **MAC 1105** College Algebra  
  - GEP
  
  * See Transfer Notes

### 3. Core Requirements (76/79 hrs)
The baccalaureate Radiologic Sciences program is designed with two areas of specialization: Radiography and Radiation Therapy.  

#### JUNIOR LEVEL - Radiography
- **RTE 3000** Introduction to Radiologic Sciences 3 hrs  
- **RTE 3111C** Introduction to Patient Care 2 hrs  
- **RTE 3503C** Radiographic Procedures I 3 hrs  
- **RTE 3116** Advanced Patient Care 3 hrs  
- **RTE 3418C** Principles of Radiographic Exposure I 3 hrs  
- **RTE 3804** Clinical Education I 4 hrs  
- **RTE 3513C** Radiographic Procedures II 3 hrs  
- **RTE 3457C** Principles of Radiographic Exposure II 3 hrs  
- **RTE 3684C** Physics of Image Production 2 hrs  
- **HSC 3640** Health Law 3 hrs  
- **RTE 3367** Medical Physics 3 hrs  
- **STA 2023** Statistical Methods I 3 hrs  
- **HSC 4550** Pathophysiologic Mechanisms 3 hrs

#### JUNIOR LEVEL - Radiation Therapy
- **RTE 4563** Special Radiographic Procedures 2 hrs  
- **RTE 4782** Pathophysiology 2 hrs  
- **RTE 4814** Clinical Education II 5 hrs  
- **RTE 4824** Clinical Education III 6 hrs  
- **RTE 4573** Advanced Imaging Modalities 3 hrs  
- **RTE 4834** Clinical Education IV 4 hrs  
- **RTE 4385** Radiobiology 1 hr  
- **RTE 4844** Clinical Education V 4 hrs  
- **RTE 4473** Quality Improvement 3 hrs  
- **RTE 4763** Anatomy for the Medical Imag 3 hrs  
- **RTE 4206** Leadership in Radiologic Sciences 3 hrs  
- **RTE 4854** Advanced Clinical Practicum 2 hrs

#### SENIOR LEVEL - Radiation Therapy
- **RAT 3616** Radiographic Procedures II 3 hrs  
- **RAT 3503C** Radiographic Procedures I 3 hrs  
- **RAT 3418C** Principles of Radiographic Exposure I 3 hrs  
- **RAT 3804** Clinical Education I 4 hrs  
- **RAT 3457C** Principles of Radiographic Exposure II 3 hrs  
- **RAT 3684C** Physics of Image Production 2 hrs  
- **HSC 4550** Pathophysiologic Mechanisms 3 hrs  
- **RTE 3116** Advanced Patient Care 3 hrs  
- **HSC 3640** Health Law 3 hrs

#### SENIOR LEVEL - Radiation Therapy
- **RAT 3000** Introduction to Radiologic Sciences 3 hrs  
- **RTE 3111C** Introduction to Patient Care 2 hrs  
- **RTE 3503C** Radiographic Procedures I 3 hrs  
- **RTE 3116** Advanced Patient Care 3 hrs  
- **RTE 3418C** Principles of Radiographic Exposure I 3 hrs  
- **RTE 3804** Clinical Education I 4 hrs  
- **RTE 3513C** Radiographic Procedures II 3 hrs  
- **RTE 3457C** Principles of Radiographic Exposure II 3 hrs  
- **RTE 3684C** Physics of Image Production 2 hrs  
- **HSC 4550** Pathophysiologic Mechanisms 3 hrs  
- **RTE 3116** Advanced Patient Care 3 hrs  
- **HSC 3640** Health Law 3 hrs

### 4. Upper Division Restricted Electives:
- **RTE 4209** Radiological Adm. Practice 2 hrs
- **RTE 4903** Directed Study in Radiologic Educ’n 2 hrs

### 5. Departmental Exit Requirements (124/127 hrs)
A minimum overall GPA of 2.50 and a minimum grade of “C” in prerequisite and major courses is required for admission to, continuation in, and graduation from the Radiologic Sciences Program.

The programs in Radiography and Radiation Therapy Technology are accredited by 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.
6. Electives (None)

7. Foreign Language Requirements (0-8 hrs)
Admissions: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
Graduation: None

8. University Minimum Exit Requirements
- An overall GPA of 2.50 in all work attempted
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 32 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, credit by exam and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of summer credit (if applicable)

Total Semester Hours Required:
Radiation Therapy 127 hrs
Radiography 124 hrs

Related Programs: Cardiopulmonary Sciences, Nursing, Health Services Administration

Related Minors: Health Services Administration

Transfer Notes:
Credit by Examination
Credit by Exam for clinical education courses will be awarded to Registered Technologists who demonstrate advanced knowledge and competencies beyond the level required for entry into the profession. The knowledge required to perform advanced competencies may be demonstrated by registration in multiple disciplines, registration in an advanced level of certification or completion of the Advanced Clinical Practicum course. Students who successfully complete the requirements for credit by exam will be awarded a grade of "S" for the clinical education courses required in their program of study. Credit by exam for didactic courses will be awarded according to the process described in the UCF catalog.

Community College Equivalents:
Human Anatomy and Physiology I and II (BSC X085C and BSC X086C or BSC 2093C and BSC 2094C) 8
College Algebra (MAC 1105) 3
OR (MAC 1102) 3
College Physics I (PHY 2053C) 4
College Physics II (PHY 2054C) 4
Introduction to Computer Science (CGS 1060C) or any other Computer Science course 3

Tentative Course Schedule for Entering Freshmen

RADIOLOGIC SCIENCES

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<th>Freshman Year*</th>
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<td>ENC 1101</td>
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<td>CGS 1060C</td>
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<td>if not satisfied in high school</td>
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RADIOGRAPHY

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<td>RTE 4854**</td>
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RADIATION THERAPY

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SCIENCE EDUCATION - BIOLOGY: BACHELOR OF SCIENCE

College of Education
Instructional Programs Department, ED346, (407) 823-2939
Coordinator: Dr. Judy Johnson, ED146, (407) 823-2950,
E-mail: jjohnson@pegasus.cc.ucf.edu
Web Address: http://pegasus.cc.ucf.edu/~ucfed/

Admission Requirements
- have on file in the University Admissions Office passing scores on all parts of the College Level Academic Skills Test (CLAST) (No alternative)
- have on file in the University Admissions Office a score at or above the 40th percentile on the SAT (950) or ACT (20 enhanced)
- present an overall GPA of 2.5
- achieve a "C" or better grade in EDF 4323, Professional Teaching Practices, including successful completion of the tutorial component or equivalent
- complete a formal application for admission to a particular teacher education program
- meet any special departmental requirements

Degree Requirements
- Students should see an advisor
- The courses designated in 1 (General Education) and 2 (Common Program Prerequisites) should usually be completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations
      9 hrs
   B. Cultural-Historical Foundations
      9 hrs
   C. Mathematical Foundations
      6 hrs
      Select MAC 1105 College Algebra
      Select CGS 1006C Intro to Computer Science
   D. Social Foundations
      6 hrs
   E. Science Foundations
      6 hrs
      Select PSC 1121 Physical Science
      Select BSC 2010C Biological Principles plus lab
   * College Preprofessional Requirements.
   **The courses listed in Section 1 should be taken as prerequisites to the Education courses which are listed below.

2. Common Program Prerequisites (CPP) (27 hrs)
   EDF 2005 Intro to Education
   *EDG 2701 Teaching Diverse Populations
   EME 1040 Intro to Technology
   BSC 2010C General Biology with lab
   BSC 2011C with Lab Biological Diversity
   CHM 2045, 2046 with Lab Chem Fundamentals I & II
   or
   PHY 2053, 2054 with Lab College Physics I & II
   Students must take 6 additional hours of electives in Science
   6 hrs
   *In addition to EDG 2701, students must take 6 additional hours with an international or diversity focus. The eligible courses will be determined by the institution in which the student is enrolled for their lower division course work. (These courses must be identified in the College/University catalog.)

3. Education Core Requirements (9 hrs)
   EDF 4323 Professional Teaching Practices
   EDF 4603 Analysis of Critical Issues in Ed
   EDF 4214 Classroom Learning Principles

4. Internship I Block (10 hrs)
   A student must have completed the portfolio process for Internship I Satisfactorily before student teaching.
   SCE 4360 Science Instructional Analysis
   ESE 3940 Internship I
   At least 50% of all required biology courses and biology methods courses must be completed before doing Internship I.

5. Specialization Requirements (22 hrs)
   *PSC 1121 Physical Science
   *BSC 2010C General Biology
   BSC 2011C Biological Div
   CHM 2045 Chemistry Fund I
   CHM 2046 Chemistry Fund II
   CHM 2046L Chemistry Fund Lab
   CHM 2205 Intro Organ & Bio
   PCB 3063 Genetics
   PCB 3063L Genetics Lab
   PCB 3043 Ecology
   PCB 3043L Ecology Lab
   MCB 3020C Microbiology
   PCB 3703C Human Physiology or
   ZOO 3733C Human Anatomy

6. Restricted Electives (with advisor's approval) (variable)

7. Internship II (ESE 4943) (12 hrs)
   A student must have completed the portfolio process for Internship II Satisfactorily before student teaching
   At least 80% of all required biology courses and all methods classes must be completed before registering for Internship II

8. Foreign Language Requirements (0-6 hrs)
   State University System foreign language admission requirement: 2 years in high school or 1 year of college instruction in a single foreign language. (This requirement applies to those students admitted to the University without the required 2 units of foreign language in high school)

9. Departmental Exit Requirements:
   Achieve a 2.5 GPA in all courses within the major

10. University Minimum Exit Requirements
    - A 2.0 GPA in all work attempted (both UCF and overall)
    - 60 semester hours earned after CLEP awarded
    - 48 semester hours of upper division credit completed
    - 30 semester hours in regular courses completed at UCF
    - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Transfer notes:
Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.
*Acceptable substitutes:
While another course may be acceptable, for certification purposes students should take the listed courses.

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SCIENCE EDUCATION - CHEMISTRY: BACHELOR OF SCIENCE

College of Education
Instructional Programs Department, ED346, (407) 823-2939
Coordinator: Dr. Judy Johnson, ED146, (407) 823-2950
E-mail: jjohnson@pegasus.cc.ucf.edu
Web Address: http://pegasus.cc.ucf.edu/~ucfed/

Admission Requirements
- have on file in the University Admissions Office passing scores on all parts of the College Level Academic Skills Test (CLAST) (No alternatives)
- have on file in the University Admissions Office a score at or above the 40th percentile on the SAT (950) or ACT (20 enhanced)
- present an overall GPA of 2.5
- achieve a “C” or better grade in EDG 4323, Professional Teaching Practices, including successful completion of the tutorial component or equivalent
- complete a formal application for admission to a particular teacher education program
- meet any special departmental requirements

Degree Requirements
- Students should see an advisor
- The courses designated in 1 (General Education) and 2 (Common Program Prerequisites) should usually be completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural-Historical Foundations 9 hrs
   C. Mathematical Foundations 6 hrs
      Select MAC 1105 College Algebra
      Select STA 2014 or *2023
   D. Social Foundations 6 hrs
   E. Science Foundations 6 hrs
      Select CHM 2045C Chemistry Fund I w/lab
      Select BSC 2010C w/lab

2. Common Program Prerequisites (23 hrs)
   EDF 2005 Intro to Education 3 hrs
   *EDG 2701 Teaching Diverse Populations 3 hrs
   EME 1040 Intro to Technology 3 hrs
   BSC 2011C with Lab Biological Diversity 4 hrs
   CHM 2046 with Lab Chem Fundamentals I 4 hrs
   Electives in Science 6 hrs
   *In addition to EDG 2701, students must take 6 additional hours with an international or diversity focus. The eligible courses will be determined by the institution in which the student is enrolled for their lower division course work. (These courses must be identified in the college/university catalog.)

3. Education Core Requirements (9 hrs)
   EDG 4323 Professional Teaching Practices 3 hrs
   EDF 4603 Analysis of Critical Issues in Ed 3 hrs
   EDF 4214 Classroom Learning Principles 3 hrs

4. Internship I Block (10 hrs)
   A student must have completed the portfolio process for Internship I Satisfactorily before student teaching.
   SCE 4360 Science Instructional Analysis 4 hrs
   ESE 3940 Internship I 6 hrs

At least 50% of all required chemistry courses must be completed before doing Internship I.

5. Specialization Requirements (30 hrs)
   MAC 1114 College Trig 3 hrs
   BSC 2010C General Biology GEP
   CHM 2045C Chemistry Fund I GEP
   PHY 2053C College Physics I 4 hrs
   PHY 2054C College Physics II 4 hrs
   CHM 3120C Analytical Chemistry 5 hrs
   CHM 2210 Organic Chem I 3 hrs
   CHM 2211 Organic Chem II 3 hrs
   CHM 2211L Organic Lab Tech I 2 hrs
   CHS 3501 Intro For Science 3 hrs
   BSC 4053 Biochm I 3 hrs

6. Restricted Electives Variable (w/advisor’s approval to meet 120 hour requirement)

7. Internship II (ESE 4943) (12 hrs)
   A student must have completed the portfolio process for Internship II Satisfactorily before student teaching
   At least 80% of all required chemistry courses and all methods classes must be completed before registering for Internship II.

8. Foreign Language Requirements (0-6 hrs)
   State University System foreign language admission requirement: 2 years in high school or 1 year of college instruction in a single foreign language. (This requirement applies to those students admitted to the University without the required 2 units of foreign language in high school)

9. Departmental Exit Requirements
   Achieve a 2.5 GPA in all courses within the major

10. University Minimum Exit Requirements
    - A 2.0 GPA in all work attempted (both UCF and overall)
    - 60 semester hours earned after CLEP awarded
    - 48 semester hours of upper division credit completed
    - 30 semester hours in regular courses completed at UCF
    - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Transfer notes:
Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

*Acceptable Substitutes:
While another course may be acceptable, for certification purposes the student should take the listed courses.

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SCIENCE EDUCATION - PHYSICS:
BACHELOR OF SCIENCE

College of Education
Instructional Programs Department, ED346, (407) 823-2939
Coordinator: Dr. Judy Johnson, ED 146, (407) 823-2950
e-mail: jjohnson@pegasus.cc.ucf.edu

Admission Requirements
› have on file in the University Admissions Office passing scores on all parts of the College Level Academic Skills Test (CLAST) (No Alternatives)
› have on file in the University Admissions Office a score at or above the 40th percentile on the SAT (950) or ACT (20 enhanced)
› present an overall GPA of 2.5
› achieve a “C” or better grade in EDG 4323, Professional Teaching Practices, including successful completion of the tutorial component or equivalent
› complete a formal application for admission to a particular teacher education program
› meet any special departmental requirements

Degree Requirements
› Students should see an advisor
› The courses designated in 1 (General Education) and 2 (Common Program Prerequisites) should usually be completed in the first 60 hours

1. UCF General Education Program (36 hrs)
A. Communication Foundations
   9 hrs
B. Cultural-Historical Foundations
   9 hrs
C. Mathematical Foundations
   6 hrs
   Select MAC 2311 Calculus with Analytic Geometry I
   Select CSE 1000C Intro to Computer Science
D. Social Foundations
   6 hrs
E. Science Foundations
   6 hrs
   Select CHM 2045C Chemistry Fund I w/lab
   Select BSC 2010C w/lab

2. Common Program Prerequisites (27 hrs)
EDF 2005 Teaching Diverse Populations
EDF 2005 Intro to Education
EME 1040 Intro to Technology
BSC 2010C General Biology
BSC 2010C with Lab Biological Diversity
PHY 2045/2046 with Lab College Physics I & II
Electives in Science
*In addition to EDG 2701, students must take 6 additional hours with an international or diversity focus. The eligible courses will be determined by the institution in which the student is enrolled for their lower division course work. (These courses must be identified in the college/university catalog.)

3. Education Core Requirements (9 hrs)
EDG 4323 Professional Teaching Practices
EDG 4603 Analysis of Critical Issues in Ed
EDF 4214 Classroom Learning Principles

4. Internship I Block (10 hrs)
SCE 4360 Science Instructional Analysis
ESE 3940 Internship I
A student must have completed the portfolio process for Internship I Satisfactorily before student teaching.
At least 50% of all required chemistry courses must be completed before doing Internship I.

5. Specialization Requirements (26 hrs)
BSC 2010C General Biology
CHM 2045C Chemistry Fund I
CHM 2046C Chemistry Fund II
CHM 2046L Chemistry Fund Lab
MAC 2311 Calculus w/Analy Geo I
MAC 2312 Calculus w/Analy Geo II
MAC 2313 Calculus w/Analy Geo III
PHY 2048 Phys Eng & Sci I
PHY 2048L Phys Lab Eng & Sci I
PHY 2049 Phys Eng & Sci II
PHY 2049L Phys Eng & Sci II
PHY 3101 Phys for Eng & Sci III
PHY 3752C Phys of Sci Inst

6. Internship II (ESE 4943) (12 hrs)
› A student must have completed the portfolio process for Internship II Satisfactorily before student teaching
› At least 80% of all required physics courses and all methods classes must be completed before registering for Internship II.

7. Foreign Language Requirements (0-6 hrs)
State University System foreign language admission requirement: 2 years in high school or 1 year of college instruction in a single foreign language. (This requirement applies to those students admitted to the University without the required 2 units of foreign language in high school)

8. Departmental Exit Requirements
Achieve a 2.5 GPA in all courses within the major

9. University Minimum Exit Requirements
› A 2.0 GPA in all work attempted (both UCF and overall)
› 60 semester hours earned after CLEP awarded
› 48 semester hours of upper division credit completed
› 30 semester hours in regular courses completed at UCF
› Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Transfer Notes:
Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

*Acceptable Substitutes:
While another course may be acceptable, for certification purposes the student should take the listed courses.
SPECIAL SCIENCES: BACHELOR OF SCIENCE

College of Arts and Sciences
Interdisciplinary program
Ms. J. Boyte, FA 208(407) 823-2492

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.

Admission Requirements
None

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students should consult with a departmental advisor
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural and Historical Foundations 9 hrs
   C. Mathematical Foundations
      Select MAC 1105 College Algebra (or higher) 3 hrs
      Select STA 2023 Statistical Methods I 3 hrs
   D. Social Foundations
      Select ECO 2013 or POS 2041, depending on concentration to be followed 3 hrs
      Select SYG 2000 or SYG 2000, depending on concentration to be followed 3 hrs
   E. Science Foundations 6 hrs

2. Common Program Prerequisites (6 hrs)
   Select two lower level Social Science courses depending on disciplines selected. *Asterisk indicates appropriate courses.

3. Core requirements (3 hrs)
   Select one course
   POS 3703 Scope and Meth of Political Sci 3 hrs
   PSY 3214 Research Methods in Psychology 3 hrs
   SYA 3300 Research Methods (Sociology) 3 hrs

4. Restricted Electives (60 hrs)
   Select a minimum of 15 semester hours in each of four Social Science disciplines.
   Communication
      COM 3311 Comm as a Behavioral Science 3 hrs
      Select one course 3 hrs
      RTV 4403 Radio, Television and Society 3 hrs
      JOU 3004 History of American Journalism 3 hrs
      Select three more Communication courses 9 hrs
   Economics
      *ECO 2013 Principles of Economics I 3 hrs
      *ECO 2023 Principles of Economics II 3 hrs
      Select three more Economics courses 9 hrs
   Political Science
      *POS 2041 American National Government 3 hrs
      Select four more Political Science courses 12 hrs
   Psychology
      *PSY 2013 General Psychology 3 hrs
      PPE 3003 Personality Theory 3 hrs

   Select three more Psychology courses 9 hrs
   Public Service Administration
      Select one course
      *CCJ 3024 Criminal Justice System 4 hrs
      PLA 3013 Law and the Legal System 4 hrs
      PAD 3003 Intro to Public Administration 4 hrs
      Additional 7 hours of Public Service Admin courses 7 hrs
   Sociology/Anthropology
      *SYG 2000 General Sociology 3 hrs
      *ANT 2000 General Anthropology 3 hrs
      Select three additional Soc/ Anthro courses 9 hrs

5. Departmental Exit Requirements
   - Maintain a minimum GPA in each area of 2.0
   - Computer Competency met by CGS 1060C

6. Foreign Language Requirements (0-8 hrs)
   Admission: 2 years high school, or 1 year college language (or equivalent proficiency exam) prior to graduation.
   Graduation: None.

7. Electives (variable)
   Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

8. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

   Total Semester Hours Required 120 hours

   Related Programs: Liberal Studies, Liberal Arts

   Related Minors: Anthropology, Communication, Economics, Political Science, Psychology, Public Service Administration, Sociology

   Transfer notes:
   - "D" grades from other institutions do not meet departmental requirements
   - Courses taken at community colleges do not substitute for Upper Division courses
   - Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

   Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
   - Any two introductory Social Sciences courses could meet admission requirements. However, the indicated courses are prerequisites for subsequent courses and must be taken.

   

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### Social Science Education: Bachelor of Science

**College of Education**
**Instructional Programs Department, ED346, (407) 823-2939**
Coordinator: TBA
Web Address: http://pegasus.cc.ucf.edu/~ucfed/

#### Admission Requirements
- have on file in the University Admissions Office passing scores on all parts of the College Level Academic Skills Test (CLAST) (No alternatives)
- have on file in the University Admissions Office a score at or above the 40th percentile on the SAT (950) or ACT (20 enhanced)
- present an overall GPA of 2.5
- achieve a “C” or better grade in EDG 4323, Professional Teaching Practices, including successful completion of the tutorial component or equivalent
- complete a formal application for admission to a particular teacher education program
- meet any special departmental requirements

#### Degree Requirements
- Students should see an advisor
- The courses designated in 1 (General Education) and 2 (Common Program Prerequisites) should usually be completed in the first 60 hours

<table>
<thead>
<tr>
<th>Program/Prerequisites</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. UCF General Education Program</td>
<td>(36 hrs)</td>
</tr>
<tr>
<td>A. Communication Foundations</td>
<td>9 hrs</td>
</tr>
<tr>
<td>B. Cultural-Historical Foundations</td>
<td>9 hrs</td>
</tr>
<tr>
<td>C. Mathematical Foundations</td>
<td>6 hrs</td>
</tr>
<tr>
<td>Select CGS 1060C Intro to Computer Science</td>
<td>6 hrs</td>
</tr>
<tr>
<td>D. Social Foundations</td>
<td>6 hrs</td>
</tr>
<tr>
<td>Select PSY 2013 Gen Psych</td>
<td>6 hrs</td>
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<tr>
<td>Select ECO 2013 Principles of Economics</td>
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<tr>
<td>E. Science Foundations</td>
<td>6 hrs</td>
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</table>

At least one course taken to meet the natural science requirements in General Education and/or Prerequisites must include a laboratory component.

<table>
<thead>
<tr>
<th>Program/Prerequisites</th>
<th>Hours</th>
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<td>2. Common Program Prerequisites</td>
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<tr>
<td>EDF 2005 Intro to Education</td>
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<tr>
<td>*EDG 2701 Teaching Diverse Populations</td>
<td>3 hrs</td>
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<tr>
<td>EME 1040 Intro to Technology</td>
<td>3 hrs</td>
</tr>
<tr>
<td>SYG 2000 General Sociology</td>
<td>3 hrs</td>
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<tr>
<td>POS 2041 American Government</td>
<td>3 hrs</td>
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<td>AMH 2010 US History 1492-1877</td>
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<td>AMH 2020 US History 1877-Present</td>
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<tr>
<td>ECO 2013 Principles of Econ I</td>
<td>GEP</td>
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</tbody>
</table>

*In addition to EDG 2701, students must take 6 additional hours with an international or diversity focus. The eligible courses will be determined by the institution in which the student is enrolled for their lower division course work. (These courses must be identified in the college/university catalog.)*

<table>
<thead>
<tr>
<th>Program/Prerequisites</th>
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<tr>
<td>3. Education Core Requirements</td>
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<tr>
<td>EDG 4323 Professional Teaching Practices</td>
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<tr>
<td>EDF 4603 Analysis of Critical Issues in Ed</td>
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<tr>
<td>EDF 4214 Classroom Learning Principles</td>
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<td>4. Internship I Block</td>
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<td>SSE 4361 Science Instructional Analysis</td>
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<table>
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<tbody>
<tr>
<td>ESE 3940 Internship I</td>
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</table>

A student must have completed the portfolio process for Internship I Satisfactorily before student teaching.
At least 50% of all required social science courses must be completed before doing Internship I. SSE 4361 must be completed at the same time as Internship I.

<table>
<thead>
<tr>
<th>Program/Prerequisites</th>
<th>Hours</th>
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<tbody>
<tr>
<td>5. Specialization Requirements</td>
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</tr>
<tr>
<td>EHU 2000 Western Civ I</td>
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<tr>
<td>EHU 2001 Western Civ II</td>
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<tr>
<td>AMH 2010 US History 1492-1877</td>
<td>GEP</td>
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<tr>
<td>AMH 2020 US History 1877-Present</td>
<td>GEP</td>
</tr>
<tr>
<td>ECO 2013 Principles of Economics I</td>
<td>GEP</td>
</tr>
<tr>
<td>ECO 2023 Principles of Econ II</td>
<td>3 hrs</td>
</tr>
<tr>
<td>GEO 2370 Resources Geography</td>
<td>3 hrs</td>
</tr>
<tr>
<td>GEO 3470 World Political Geography</td>
<td>3 hrs</td>
</tr>
<tr>
<td>PSY 2013 General Psychology</td>
<td>GEP</td>
</tr>
<tr>
<td>Upper Division Non-American History Electives</td>
<td>3 hrs</td>
</tr>
<tr>
<td>Upper Division Political Science Electives</td>
<td>6 hrs</td>
</tr>
<tr>
<td>Upper Division American History Electives</td>
<td>9 hrs</td>
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<table>
<thead>
<tr>
<th>Program/Prerequisites</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Electives (w/advisor’s approval to meet 120 hour requirement)</td>
<td>Variable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program/Prerequisites</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Internship II (ESE 4943)</td>
<td>(12 hrs)</td>
</tr>
<tr>
<td>*A student must have completed the portfolio process for Internship II Satisfactorily before student teaching</td>
<td></td>
</tr>
<tr>
<td>*At least 80% of all social science courses and the methods class must be completed before registering for Internship II.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program/Prerequisites</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Foreign Language Requirements</td>
<td>(0-6 hrs)</td>
</tr>
</tbody>
</table>

State University System foreign language admission requirement: 2 years in high school or 1 year of college instruction in a single foreign language. (This requirement applies to those students admitted to the University without the required 2 units of foreign language in high school)

<table>
<thead>
<tr>
<th>Program/Prerequisites</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Departmental Exit Requirements</td>
<td></td>
</tr>
</tbody>
</table>

Achieve a 2.5 GPA in all courses within the major

<table>
<thead>
<tr>
<th>Program/Prerequisites</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. University Minimum Exit Requirements</td>
<td></td>
</tr>
</tbody>
</table>

- A 2.0 GPA in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 30 semester hours in regular courses completed at UCF
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

### Total Semester Hours Required: 120 hours

#### Transfer notes:
Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

* Acceptable Substitutes:
While another course may be acceptable, for certification purposes the student should take the listed courses.
Admission Requirements - LIMITED ACCESS
Acceptance to the University does not necessarily constitute admission to the upper division social work program. SEPARATE APPLICATION to the limited access program must be made to the School of Social Work. Students are admitted to the undergraduate program only in the summer or fall term. To be considered for admission to the program, students must have:
> a 2.0 overall GPA
> an AA (from a Florida State Community College) or UCF General Education Program
> 15 semester hours common program prerequisites (see Section 2 below for list of courses)
> passed all sections of CLAST
Personal qualifications, reviewed for acceptance, include intelligence, initiative, social concern, appreciation for human diversity, dependability, humanitarian interests in helping people and in improving human services as well as college-level reading and writing skills.

Degree Requirements
> Residency Requirement consists of at least 30 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF School of Social Work
> Students should complete the General Education Program, UCF Foreign Language Admission and the Common Program Prerequisite Requirements before transferring to UCF
> Students should consult with a school advisor
> The courses designated in sections 1 (general education) and 2 (common program prerequisites) below may be taken at a college or university other than UCF, and should usually be completed in the first 60 hours
> Students must earn a minimum grade of "C" in major courses
> Students must have a minimum overall GPA of 2.5 for entry into field education (SOW 4510) and graduation in the major Social Work Program
> Students must complete all the requirements listed in 1-11 below

1. UCF General Education Program (36 hrs)
   A. Communication Foundations
      9 hrs
   B. Cultural Historical Foundations
      9 hrs
   C. Mathematical Foundations
      6 hrs
      Select CGS 1060C
   D. Social Foundations
      6 hrs
      Select ECO 2013, PSY 2013, SYG 2000 and POS 2041
   E. Science Foundations
      6 hrs
      Select BSC 1020

2. Common Program Prerequisites* (6 hrs)
   POS 2041 American Government
   BSC 1020 Biology
   ECO 2013 Economics
   PSY 2013 Psychology
   SYG 2000 Sociology

*See transfer notes

3. CLAST (45 hrs)
   SOW 3104 Assessing I: Human Development
   SOW 3203 Social Welfare and Community Resources
   SOW 3300 Practice I: Generalist Practice: Social Work
   SOW 3111 Assessing II: Human Systems
   SOW 3352 Practice II: Interpersonal Skills in Social Work Practice
   SOW 3401 Social Work Research
   SOW 3420 Social Work with Minornities
   SOW 4431 Evidencing Social Work Practice and Service Programs
   SOW 4232 Social Welfare Policies and Issues
   SOW 4341 Micro-level Roles and Interventions in Social Work
   SOW 4343 Macro-level Roles and Interventions in Social Work
   SOW 4510 Field Education
   SOW 4522 Field Education Seminar

4. Core Requirements
   SOW 3104 Assessing I: Human Development
   SOW 3203 Social Welfare and Community Resources
   SOW 3300 Practice I: Generalist Practice: Social Work
   SOW 3111 Assessing II: Human Systems
   SOW 3352 Practice II: Interpersonal Skills in Social Work Practice
   SOW 3401 Social Work Research
   SOW 3420 Social Work with Minority
   SOW 4431 Evidencing Social Work Practice and Service Programs
   SOW 4232 Social Welfare Policies and Issues
   SOW 4341 Micro-level Roles and Interventions in Social Work
   SOW 4343 Macro-level Roles and Interventions in Social Work
   SOW 4510 Field Education
   SOW 4522 Field Education Seminar

5. Required Social Work Elective (3 hrs)
6. Required Computer Science Elective (variable)
7. Electives (0-8 hrs)
8. Foreign Language Requirements (0-8 hrs)
9. Foreign Culture or Cultural Diversity Requirement (120 hrs)
10. Departmental Exit Requirements (0-8 hrs)
11. University Minimum Exit Requirements (120 hrs)
Related Programs: Criminal Justice, Psychology, Public Administration, Sociology.
Gerontology Certificate: 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 may be completed with the undergraduate major of the student and is administered within the
School of Social Work. The program may be of particular interest to students who are majoring in health sciences, psychology, social work, nursing, or sociology. Other students, such as those majoring in music, music education, physical education, or art education may also find the program valuable. See Certificate and Minor in Gerontology as listed on page 312.

Related Minors: Psychology, Sociology

Honors

Honors Option Requires:
- Completion of a 3 credit directed readings course
- Completion of a 3 credit thesis course
- Open to students with a 3.5 GPA in Social Work
- Cumulative UCF 3.2 GPA
- Completion of 60 semester hours of college credit, including 12 graded upper division hours at UCF

Transfer Notes:
Community College Equivalent courses for prerequisites: any course in the following areas (3 hrs each)
- American Government or American National Government
- Biology (Human Biology or Anatomy and Physiology)
- Economics (Microeconomics or Macroeconomics)
- Introductory Psychology
- Introductory Sociology/Social Problems
- Computer Science

Tentative Course Schedule for Entering Freshmen

<table>
<thead>
<tr>
<th>Freshman Year*</th>
<th>Fall</th>
<th>14 hrs</th>
<th>Spring</th>
<th>15 hrs</th>
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<tbody>
<tr>
<td></td>
<td>ENC 1101</td>
<td>3</td>
<td>ENC 1102</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BSC 1020</td>
<td>3</td>
<td>MGF 1203</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SYG 2000</td>
<td>3</td>
<td>PSY 2013</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CGS 1060C</td>
<td>3</td>
<td>MUL 2010 or THE 1020</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PAD 2930</td>
<td>2</td>
<td>or REL 2302 or PHI 2010</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>POS 2041</td>
<td>3</td>
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</table>

*Plan your required 9 summer hours into your course of study

<table>
<thead>
<tr>
<th>Sophomore Year</th>
<th>Fall</th>
<th>15/16 hrs</th>
<th>Spring</th>
<th>12/13 hrs</th>
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<tbody>
<tr>
<td></td>
<td>ECO 2013 or ECO 2023</td>
<td>3</td>
<td>Foreign Lang II or</td>
<td>3/4</td>
</tr>
<tr>
<td></td>
<td>EUH 2000 or</td>
<td>3</td>
<td>Cult Diversity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HUM 2211 or AMH 2010</td>
<td>3</td>
<td>CHM 1020 or PSC 1121</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SPC 1600C</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
<td>EHU 2001 or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foreign Lang I or Cult Diversity</td>
<td>3/4</td>
<td>HUM 2230 or AMH 2020</td>
<td></td>
</tr>
<tr>
<td>Summer</td>
<td>6 hrs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior Year</th>
<th>Fall</th>
<th>15 hrs</th>
<th>Spring</th>
<th>15 hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SOW 3104</td>
<td>3</td>
<td>SOW 3111</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SOW 3203</td>
<td>3</td>
<td>SOW 3352</td>
<td>3</td>
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<tr>
<td></td>
<td>SOW 3300</td>
<td>3</td>
<td>SOW 3401</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SOW Elective</td>
<td>3</td>
<td>SOW 3420</td>
<td>3</td>
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<tr>
<td></td>
<td>Elective</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
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</table>

<table>
<thead>
<tr>
<th>Senior Year</th>
<th>Fall</th>
<th>15/18 hrs</th>
<th>Spring</th>
<th>15 hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SOW 4232</td>
<td>3</td>
<td>SOW 4510</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>SOW 4341</td>
<td>3</td>
<td>SOW 4522</td>
<td>3</td>
</tr>
</tbody>
</table>

| Elective | 3 |
| Elective | 3 |
| Elective | 3 |

| Elective (if necessary) | 3 |
The Sociology curriculum emphasizes critical examination of various components of society. The purpose of the curriculum is to increase students' social awareness and their ability to employ a sociological perspective to interpret social institutions and behavior.

**Admission Requirements** None

**Degree Requirements**

- UCF students who change degree programs and select this major must adopt the most current catalog.
- Departmental Residency Requirement: at least 30 semester hours of regularly scheduled 3000-4000 level courses must be taken from the UCF Sociology and Anthropology Department.
- Students must maintain an overall GPA of at least 2.0 in all courses used for the major.
- Students should consult with a departmental advisor.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>SYA 3300</td>
<td>Research Methods</td>
</tr>
<tr>
<td>SYA 3400</td>
<td>Research Methods and Stat</td>
</tr>
<tr>
<td>SYA 4450</td>
<td>Data Analysis</td>
</tr>
<tr>
<td>SYG 2000</td>
<td>General Sociology</td>
</tr>
<tr>
<td>SYG 3110</td>
<td>Development of Social Thought</td>
</tr>
<tr>
<td>SYG 3120</td>
<td>Modern Sociological Thought</td>
</tr>
<tr>
<td>SYO 3530</td>
<td>Social Stratification</td>
</tr>
<tr>
<td>SYO 3551</td>
<td>Sociology of Law</td>
</tr>
<tr>
<td>SYO 4000</td>
<td>Sociological Social Psychology</td>
</tr>
<tr>
<td>SYO 4200</td>
<td>Sociology of Religion</td>
</tr>
<tr>
<td>SYO 4250</td>
<td>Sociology of Education</td>
</tr>
<tr>
<td>SYO 4300</td>
<td>Political Sociology</td>
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<tr>
<td>SYO 4400</td>
<td>Medical Sociology</td>
</tr>
<tr>
<td>SYP 3300</td>
<td>Collective Behavior</td>
</tr>
<tr>
<td>SYP 3400</td>
<td>Social Change</td>
</tr>
<tr>
<td>SYP 3510</td>
<td>Sociology of Deviant Behavior</td>
</tr>
<tr>
<td>SYP 3511</td>
<td>Sociology of Murder</td>
</tr>
<tr>
<td>SYP 3520</td>
<td>Criminology</td>
</tr>
<tr>
<td>SYP 3530</td>
<td>Juvenile Delinquency</td>
</tr>
<tr>
<td>SYP 3540</td>
<td>Sociology of Law</td>
</tr>
<tr>
<td>SYP 3602</td>
<td>Sociology of Popular Music</td>
</tr>
<tr>
<td>SYP 3650</td>
<td>Sociology of Popular Culture</td>
</tr>
<tr>
<td>SYP 3680</td>
<td>Sociology of Psychology</td>
</tr>
<tr>
<td>SYP 4000</td>
<td>Sociological Social Psychology</td>
</tr>
<tr>
<td>SYP 4230</td>
<td>Social Systems and Diversity</td>
</tr>
<tr>
<td>SYP 4521</td>
<td>Criminal Victimization in Society</td>
</tr>
<tr>
<td>SYP 4536</td>
<td>Gangs and Society</td>
</tr>
<tr>
<td>SYP 4550</td>
<td>Sociology of Drug Abuse</td>
</tr>
<tr>
<td>SYP 4730</td>
<td>Sociology of Aging</td>
</tr>
<tr>
<td>SYP 4734</td>
<td>Minority Aging</td>
</tr>
<tr>
<td>SYP 5526</td>
<td>Sociological Criminology</td>
</tr>
<tr>
<td>SYP 5562</td>
<td>Reactions to Domestic Violence</td>
</tr>
</tbody>
</table>

1. **UCF General Education Program** (36 hrs)
   - A. Communication Foundations 9 hrs
   - B. Cultural and Historical Foundations 9 hrs
   - C. Mathematical Foundations
     - Select MAC 1105 College Algebra (or higher) 3 hrs
     - Select STA 2023 Statistical Methods I 3 hrs
   - D. Social Foundations
     - Select one: ECO 2013, ECO 2023, POS 2041 3 hrs
     - Select SYG 2000 General Sociology 3 hrs
   - E. Science Foundations 6 hrs

2. **Common Program Prerequisites** None

3. **Core requirements** (21 hrs)
   - SYA 3300 Research Methods 4 hrs
   - SYA 3400 Research Methods and Stat 4 hrs
   - SYA 4450 Data Analysis 4 hrs
   - SYG 2000 General Sociology 3 hrs
   - Select one course
     - SYA 3110 Development of Social Thought 3 hrs
     - SYA 3120 Modern Sociological Thought 3 hrs
   - Select one course
     - SYP 3530 Social Stratification 3 hrs
     - SYP 4000 Sociological Social Psychology 3 hrs

4. **Restricted Electives** (24 hrs)
   - Select eight courses from the following
     - SYA 4650 Applied Sociology
     - SYA 5625 Proseminar
     - SYA 5937 Advanced Population
     - SYD 3410 Urban Sociology
     - SYD 3700 Race & Ethnic Minorities in the US
     - SYD 3800 Sex Roles in Modern Society
     - SYD 4020 Population
     - SYG 2010 Social Problems
     - SYO 3000 Modern Sociology
     - SYO 3360 Social Organization & Human Relations
     - SYO 3410 Sociology of Mental Illness

5. **Departmental Exit Requirements**
   - A minimum GPA of 2.0 in all courses used for the major
   - Computer Competency met by SYA 4450
   - Students will be required to take a standard exit exam

6. **Foreign Language Requirements** (0-8 hrs)
   - Admission: Met by graduation requirement.
   - Graduation: Two semesters or equivalent proficiency exam and either a third semester/proficiency or an approved enhancement course. A list of approved enhancement courses is available from the department.

7. **Electives** (variable)
   - Select primarily from upper level courses, with departmental advisor’s approval. These courses may be outside of the department.

8. **University Minimum Exit Requirements**
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

**Total Semester Hours Required** 120 hours

**Related Programs:** Anthropology, Criminal Justice

**Related Minors:** African-American Studies, American Studies, Anthropology, Anthropology in Multicultural Studies, Asian Studies, Canadian Studies, Judaic Studies, Latin American Studies,
Russian Area Studies, Sociology, and Women's Studies

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements
- Courses taken at community colleges do not substitute for Upper Division courses
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes:
It is suggested that transfer students complete two lower-level courses with the prefix SYA, SYD, SYG, SYO, or SYP.
SPANISH: BACHELOR OF ARTS

College of Arts and Sciences
Department of Foreign Languages & Literatures, FA 523
E-Mail: foreignlanguage@ucf.edu
Dr. B. H. Decker, (407) 823-2472

Admission Requirements None

Placement in Language courses
- Placement in Foreign Language courses is based on one year of high school language being equivalent to one semester of college work. For example, four years of high school Spanish place the student in the first semester of the third year.
- Native Spanish speakers or students who have received advanced education abroad must substitute select classes.

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- 36 credits in Spanish must be taken at the 3000 level or above
- At least 6 of the 36 Spanish credits must be at the 4000 level
- At least 30 hours must be taken in Foreign Language courses taught in Spanish
- Students must earn at least a "C" in each upper division Spanish course
- Departmental Residency Requirement consists of at least 18 semester hours of regularly scheduled 3000-4000 level courses taken from the UCF Department of Foreign Languages and Literatures
- Language credit by exam will not be given in courses lower in level than those in which students are presently enrolled. Native speakers will be allowed Credit by Examination in literature courses only.
- Students must see their departmental advisor to obtain proper counseling and have their schedule approved before registering for courses in their major
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural and Historical Foundations 9 hrs
   C. Mathematical Foundations 6 hrs
      Select MGF 1203 Finite Mathematics 3 hrs
      (may substitute a higher level math)
      Prefer CGS 1060C Intro to Computer Sci 3 hrs
   D. Social Foundations 6 hrs
   E. Science Foundations 6 hrs

2. Common Program Prerequisites (0-14 hrs)
   SPN 1120* Elem Spanish Lang & Civ I 4 hrs
   SPN 1121* Elem Spanish Lang & Civ II 4 hrs
   SPN 2230* Interm Spanish Lang & Civ I 3 hrs
   SPN 2231* Interm Spanish Lang & Civ II 3 hrs
   * May be met by proficiency test or completion of SPN 2231

3. Core requirements (12 hrs)
   SPN 3420* Composition 3 hrs
   SPN 3760* Adv Spanish Oral Comm 3 hrs
   SPW 3100 & 3101 Survey of Spanish Literature
   or
   SPW 3130 & 3131 Survey of Latin-American Literature
   * A native or near-native Spanish speaker must substitute an alternate upper-division Spanish course in consultation with a departmental advisor.

4. Upper Division Restricted Electives (24 hrs)
   Select two of the following 6 hrs
   FOL 3730 Romance Philology
   SPN 4801 Spanish Morphosyntax
   SPN 4800 Spanish American Syntax
   SPN 4780 Spanish Phonetics
   Spanish literature beyond the survey level
   (taught in Spanish) 6 hrs
   Spanish courses 12 hrs

5. Departmental Exit Requirements
   - Earn a grade of "C" or higher in at least 36 hours of upper division Spanish courses
   - Students are required to take a departmental exit exam
   - Computer Competency met by CGS 1060C or equivalent

6. Foreign Language Requirements (0-16 hrs)
   Admission: Met by Graduation requirements.
   Graduation: Met by Common Program Prerequisites.

7. Electives (variable)
   Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

8. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 30 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 120 hours

Related Programs: French, Foreign Language Combination

Related Minors: French, Italian, Judaic Studies, Latin American and Iberian Area Studies, Russian Area Studies, Spanish

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated by the department chair for equivalency credit. The student must provide all supporting information.
- Native speakers, or students who have received advanced education in Spanish-speaking societies, may not take lower division Spanish courses. They must substitute Third-year level composition and conversation courses.
STATISTICS: BACHELOR OF SCIENCE

College of Arts and Sciences
Department of Statistics, CC II 212, (407) 823-5562
E-mail: statistics@ucf.edu
Dr. D. Nickerson, (407) 823-5528

Admission Requirements

None

Degree Requirements

- UCF students who change degree programs and select this major must adopt the most current catalog.
- All statistics courses except STA 2023, STA 3032, and those protected by Florida Common Course Numbering must be taken from, or approved by the Statistics Department at UCF.
- Departmental Residency Requirement: at least 15 semester hours of regularly scheduled 3000-4000 level courses must be taken from the UCF Statistics Department.
- Students must earn at least a "C" in each STA course.
- A minimum 2.0 average is required in all computer science and mathematics courses that count toward a statistics major.
- Students should consult with a departmental advisor.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

1. UCF General Education Program (39 hrs)
   - A. Communication Foundations 9 hrs
   - B. Cultural and Historical Foundations 9 hrs
   - C. Mathematical Foundations 7 hrs
   - Select MAC 2311 Calculus I 4 hrs
   - Select STA 2023 Statistical Methods I 3 hrs
   - D. Social Foundations 6 hrs
   - E. Science Foundations
     - Select BSC 2010C General Biology 4 hrs
     - Select PHY 2053C College Physics or CHM 2045C Chemistry Fundamentals 4 hrs

2. Common Program Prerequisites (7 hrs)
   - COP 3502C* Computer Science I 3 hrs
   - MAC 2311 Calculus I 3 hrs
   - MAC 2312 Calculus II 4 hrs
   - BSC 2010C* General Biology 4 hrs
   *See Transfer Notes for possible substitutes

3. Core requirements (51 hrs)
   - STA 2023 Statistical Methods I 3 hrs
   - STA 4102 Computer Process of Stat Data 3 hrs
   - STA 4163 Statistical Methods II 3 hrs
   - STA 4164 Statistical Methods III 3 hrs
   - STA 4321 Statistical Theory I 3 hrs
   - STA 4322 Statistical Theory II 3 hrs
   - COT 4500 Numerical Calculus 3 hrs
   - MAC 2313 Calculus with Analytic Geo III 4 hrs
   - ENC 3241 Technical Report Writing 3 hrs
   - Select one course
     - MAS 3106 Linear Algebra
     - MAS 3105 Elementary Linear and Matrix Algebra
   - Select one course
     - COT 3100 Introduction to Discrete Structure
     - MWF 2300 Logic and Proof in Mathematics
   - Complete three credits
     - CGS 3422 Programming & Numerical Methods
     - COP 2213C Pascal Language
     - COP 2220C, 2221C, & 2222C C Programming I, II, & III
   - Select three from among the following: 9 hrs
     - STA 3096 Statistical Graphics

4. Restricted Electives (6 hrs)
   - Select from upper-division or graduate statistics (e.g., STA 5205, STA 5825), mathematics, or computer science courses.
   - Selected courses in engineering may be used but must first be approved by the Statistics Department.
   - MAC 2233, 2253, 2254, all MAE courses; and M HF 4404 may not be used.

5. Departmental Exit Requirements
   - Earn a grade of "C" or better in each STA course.
   - Computer Competency met by STA 4102

6. Foreign Language Requirements (0-8 hrs)
   - Admission: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
   - Graduation: none

7. Electives (variable)
   - Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

8. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall).
   - 60 semester hours earned after CLEP awarded.
   - 48 semester hours of upper division credit completed.
   - 30 semester hours in regular courses completed at UCF.
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted.
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable).

Total Semester Hours Required: 120 hours

Related Programs: Math, Math education

Related Minors: Statistics, Math

Transfer notes:
- "D" grades from other institutions do not meet departmental requirements.
- Courses taken at community colleges do not substitute for Upper Division courses.
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
- COP 3502C*: any COP programming language course. However, COP 3502C is a prerequisite for Computer Sciences courses and may need to be taken.
- BSC 2010C*: any laboratory BSC, CHM or PHY course. However this is a prerequisite for BSC 2011C and will need to be taken.

STA 4173 Biostatistical Methods
STA 4222 Sample Survey Methods
STA 4502 Nonparametric Stat Methods
STA 4664 Statistical Quality Control
STA 4852 Applied Time Series
Select two courses and associated labs (incl. 4 hrs GEP) 4 hrs
BSC 2011C Biological Diversity
CHM 2045C Chemistry Fundamentals I
CHM 2046 & L Chemistry Fundamentals II
PHY 2053C College Physics I
PHY 2054C College Physics II
Select one course 3 hrs
Select any science course from the College of Arts & Sciences or any 3000-4000 level science course from the college of Health & Public Affairs

9. Core requirements (51 hrs)
   - STA 2023 Statistical Methods I 3 hrs
   - STA 4102 Computer Process of Stat Data 3 hrs
   - STA 4163 Statistical Methods II 3 hrs
   - STA 4164 Statistical Methods III 3 hrs
   - STA 4321 Statistical Theory I 3 hrs
   - STA 4322 Statistical Theory II 3 hrs
   - COT 4500 Numerical Calculus 3 hrs
   - MAC 2313 Calculus with Analytic Geo III 4 hrs
   - ENC 3241 Technical Report Writing 3 hrs
   - Select one course
     - MAS 3106 Linear Algebra
     - MAS 3105 Elementary Linear and Matrix Algebra
   - Select one course
     - COT 3100 Introduction to Discrete Structure
     - MWF 2300 Logic and Proof in Mathematics
   - Complete three credits
     - CGS 3422 Programming & Numerical Methods
     - COP 2213C Pascal Language
     - COP 2220C, 2221C, & 2222C C Programming I, II, & III
   - Select three from among the following: 9 hrs
     - STA 3096 Statistical Graphics

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THEATRE: BACHELOR OF ARTS

College of Arts and Sciences
Department of Theatre, THE 120 (407) 823-2861
E-mail: theatre@ucf.edu

Dr. Rusnock, (407) 823-2861

The Bachelor of Arts Degree is offered for students who do not plan to pursue the theatre as a profession. BA students may be interested in a Liberal Arts education or may eventually choose to pursue graduate studies in theatre.

Admission Requirements
• Entrance into most theatre classes is restricted to majors. Exceptions must be approved by the Department Chair.
• The departmental faculty evaluates students wishing to become majors via an interview, audition and portfolio review. For complete information, contact the Department of Theatre.

Degree Requirements
• UCF students who change degree programs and select this major must adopt the most current catalog.
• Students must maintain a minimum "C" (2.00) overall Theatre GPA to continue in the major.
• Students must consult with a departmental advisor.
• Departmental Residency Requirement consists of at least 30 semester hours of regularly scheduled courses taken from the UCF Theatre Department.
• All theatre students must participate, in some capacity, on one of the three main-stage productions during both the Fall and Spring Semesters. Students failing to successfully participate will be placed on probation for one semester. Continued failure may result in being dropped as a major.
• All Theatre students must include a participation credit course during every semester.
• Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

1. UCF General Education Program (36 hrs)
   A. Communication Foundations
      Select SPC 1600C Fund Oral Communication 3 hrs
      Select two semesters of English Composition 6 hrs
   B. Cultural and Historical Foundations
      Select one 2 semester sequence 6 hrs
      Select The 1020 Theatre Survey 3 hrs
   C. Mathematical Foundations
      Select MGF 1203 Finite Mathematics (may substitute a higher level math) 3 hrs
      Select CGS 1060C Intro to Computer Sci or CGS 2100L Computer Fund for Business 3 hrs
   D. Social Foundations
      Social Foundations 6 hrs
   E. Science Foundations
      Science Foundations 6 hrs

2. Common Program Prerequisites (12 hrs)
   THE 1020* Theatre Survey GEP
   THE 3305* Dramatic Literature I 3 hrs
   THE 2090* Theatre Production/Perform 1 1 hr
   TPA 2290* Theatre Production/Perform I 1 hr
   TPA 2210* Stagecraft I 3 hrs
   TPP 2190* Theatre Production/Perform I 1 hr
   TPP 2110* Acting I - Introduction 3 hrs
*See Transfer Notes for possible substitutes

3. Core requirements (19 hrs)
   THE 3110 Theatre History I 3 hrs
   THE 3111 Theatre History II 3 hrs
   THE 3303 Play Analysis 3 hrs
   THE 3306 Dramatic Literature II 3 hrs
   TPP 3310C Directing I 3 hrs
   THE 4093 Theatre Production/Perform IV 1 hr
   THE 4094 Theatre Production/Perform V 1 hr
   THE 4096 Theatre Production/Perform VI 1 hr
   THE 4097 Theatre Production/Perform VII 1 hr

4. Restricted Electives (12 hrs)
   Select 12 hours from the following
   THE 3230 Cultural Diversity - Theatre 3 hrs
   THE 3243 Musical Theatre Survey 3 hrs
   THE 4307 Contemporary Theatre Practice 3 hrs
   THE 4372 Drama of Tennessee Williams 3 hrs
   TPA 3043C Costume History I 3 hrs
   TPA 3197 Summer Theatre Studio/Tech/Design 3 hrs
   TPA 3295 Theatre Studio/Tech/Design 3 hrs
   TPA 3601 Stage Management 3 hrs
   TPA 3044C Costume History II 3 hrs
   TPA 4400 Theatre Management 3 hrs
   TPP 3197 Summer Theatre/Performance 3 hrs
   TPP 3952 Studio Performance 3 hrs

5. Departmental Exit Requirements
• Earn a grade of "C" or better in each Theatre course.
• Take a Departmental Exit Examination and write a critique of a theatre production.
• Computer Competency met by computer science course.

6. Foreign Language Requirements (0-8 hrs)
   Admission: Met by graduation requirement
   Graduation: Two semesters or equivalent proficiency exam.

7. Electives (variable)
   Select primarily from upper level courses, with departmental advisor's approval. May be outside of the department.

8. University Minimum Exit Requirements
• A "C" GPA (2.0) in all work attempted (both UCF and overall).
• 60 semester hours earned after CLEP awarded.
• 48 semester hours of upper division credit completed.
• 30 semester hours in regular courses completed at UCF.
• A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted.
• Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable).

Total Semester Hours Required 120 hours

Related Programs: Film, Music, Theatre BFA
Related Minors: Music, Theatre

Transfer notes:
• "D" grades from other institutions do not meet departmental requirements.
• Courses taken at community colleges do not substitute for Upper Division courses.
• Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
• THE 1020*: may use any introductory course
• THE 3305*: may use THE 2300
• THE 2090*: may use THE 2516
• TPA 2290*: may use TPA 1290
• TPA 2210*: may use TPA 1290
• TPP 2110*: may use TPP 2210 or THE 2271
• TPA 2210*: may use THE 2261
### THEATRE: BACHELOR OF FINE ARTS

**College of Arts and Sciences**  
**Department of Theatre, THE 120 (407) 823-2861**  
**E-mail: theatre@ucf.edu**  
Mr. Rusnock, (407) 823-2399

The Bachelor of Fine Arts Degree is offered for students who, upon graduation, plan to pursue a specialized career in professional theatre. It provides the student with a very structured and intensive career preparation in either performance, stage management, or design/tech. The BFA is also an excellent degree for students who are interested in pursuing graduate studies in theatre. Work within the BFA program requires energy and dedication; therefore, other part-time study or outside employment is generally impossible. BFA standards are high, both for admission and for continuation in the program. Casting, crew, and design assignments are regulated to serve the artistic growth of students coordinating production experience with classroom exploration.

### Admission Requirements
- Entrance into most theatre classes is restricted to majors. Exceptions must be approved by the Department Chair.
- The departmental faculty evaluates students wishing to become majors via an interview, audition, and portfolio review. For complete information, contact the Department of Theatre.
- A performance major must be interviewed and perform two three minute monologues of contrasting styles.
- Performance majors interested in musical theatre should prepare a ballad, with taped musical accompaniment, in addition to their monologues.
- Design/tech track requires an interview and portfolio review.
- The portfolio should contain no more than fifteen examples of the student's best work representing a variety of mediums.
- All students must submit a resume, black and white head shot, three letters of recommendation, and transcripts of previous college work at the time of interview.

### Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students must maintain a minimum "B" (3.00) overall Theatre GPA to continue in the major.
- Theatre grades of less than "C" will not be counted.
- Continuation in the BFA program requires a positive annual evaluation.
- Students must consult with a departmental advisor.
- Departmental Residency Requirement consists of 60 semester hours of regularly scheduled courses taken from the UCF Theatre Department.
- All theatre students should participate, in some capacity, on two of the three main-stage productions during both Fall and Spring semesters. Students failing to successfully participate will be placed on probation for one semester. Continued failure may result in being dropped as a major.
- All theatre students must include a participation credit course during every semester.
- All BFA performance majors are required to audition for all Fall and Spring productions and must accept the roles assigned.
- Due to the conservatory nature, the BFA demands a closely integrated curriculum. Therefore, transfer students are not generally encouraged to pursue a BFA program. However, exceptionally talented students who have completed the General Education Program and the Common Program Prerequisites before transferring within the Florida Public University/Community College System may be admitted.
- Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

#### 1. UCF General Education Program

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Communication Foundations</td>
<td>9 hrs</td>
</tr>
<tr>
<td>Select</td>
<td>SPC 1600C Fund Oral Communication</td>
<td>3 hrs</td>
</tr>
<tr>
<td>B.</td>
<td>Cultural and Historical Foundations</td>
<td>9 hrs</td>
</tr>
<tr>
<td>Select</td>
<td>one 2 semester sequence</td>
<td>6 hrs</td>
</tr>
<tr>
<td>C.</td>
<td>Mathematical Foundations</td>
<td>6 hrs</td>
</tr>
<tr>
<td>Select</td>
<td>MGF 1203 Finite Mathematics (may substitute a higher level math)</td>
<td>3 hrs</td>
</tr>
<tr>
<td>D.</td>
<td>Social Foundations</td>
<td>6 hrs</td>
</tr>
<tr>
<td>E.</td>
<td>Science Foundations</td>
<td>6 hrs</td>
</tr>
</tbody>
</table>

#### 2. Common Program Prerequisites

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THE</td>
<td>1020* Theatre Survey</td>
<td>GEP</td>
</tr>
<tr>
<td>THE</td>
<td>3305* Dramatic Literature I</td>
<td>3 hrs</td>
</tr>
<tr>
<td>THE</td>
<td>2090* Theatre Production/Performance I</td>
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</tr>
<tr>
<td>TPA</td>
<td>2290* Theatre Production/Performance I</td>
<td>1 hr</td>
</tr>
<tr>
<td>TPA</td>
<td>2210* Stagecraft I</td>
<td>3 hrs</td>
</tr>
<tr>
<td>TTP</td>
<td>2190* Theatre Production/Performance I</td>
<td>1 hr</td>
</tr>
<tr>
<td>TTP</td>
<td>2110* Acting I - Introduction</td>
<td>3 hrs</td>
</tr>
</tbody>
</table>

*See Transfer Notes for possible substitutes

#### 3. Core Requirements (all tracks except Musical Theatre)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>TPA</td>
<td>2211 Stagecraft II</td>
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<tr>
<td>TTP</td>
<td>3650 Script Analysis</td>
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<tr>
<td>THE</td>
<td>3306 Dramatic Literature II</td>
<td>3 hrs</td>
</tr>
<tr>
<td>THE</td>
<td>3110 Theatre History I</td>
<td>3 hrs</td>
</tr>
<tr>
<td>THE</td>
<td>3111 Theatre History II'</td>
<td>3 hrs</td>
</tr>
<tr>
<td>TTP</td>
<td>3310C Directing I</td>
<td>3 hrs</td>
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#### 4. Specialization: select one area

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>TTP</td>
<td>2170C Acting II - Fundamentals</td>
<td>3 hrs</td>
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<tr>
<td>DAA</td>
<td>2200C Ballet I</td>
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<tr>
<td>TTP</td>
<td>2710C Voice Production I</td>
<td>2 hrs</td>
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<tr>
<td>TTP</td>
<td>3172C Acting III - Characterization</td>
<td>3 hrs</td>
</tr>
<tr>
<td>TTP</td>
<td>4193 Thea. Prod./Perf. IV</td>
<td>1 hr</td>
</tr>
<tr>
<td>TTP</td>
<td>4194 Thea. Prod./Perf. V</td>
<td>1 hr</td>
</tr>
<tr>
<td>DAA</td>
<td>2201C Ballet II</td>
<td>3 hrs</td>
</tr>
<tr>
<td>TTP</td>
<td>3512C Stage Combat</td>
<td>2 hrs</td>
</tr>
<tr>
<td>TTP</td>
<td>3XXX Music Thea. Voice I</td>
<td>2 hrs</td>
</tr>
<tr>
<td>TTP</td>
<td>3XXXC Musical Theatre Voice II</td>
<td>2 hrs</td>
</tr>
<tr>
<td>TTP</td>
<td>3711C Voice Production II</td>
<td>2 hrs</td>
</tr>
<tr>
<td>TTP</td>
<td>3712C Voice Production III</td>
<td>2 hrs</td>
</tr>
<tr>
<td>TTP</td>
<td>3730C Voice Production IV</td>
<td>2 hrs</td>
</tr>
<tr>
<td>TTP</td>
<td>4140C Acting IV - Studio</td>
<td>3 hrs</td>
</tr>
<tr>
<td>TTP</td>
<td>4142C Acting V - Verse</td>
<td>3 hrs</td>
</tr>
<tr>
<td>TTP</td>
<td>4265 Acting for TV/Film</td>
<td>3 hrs</td>
</tr>
<tr>
<td>TTP</td>
<td>4531C Period Movement</td>
<td>2 hrs</td>
</tr>
<tr>
<td>TTP</td>
<td>4940 Theatre Performance Internship</td>
<td>6 hrs</td>
</tr>
<tr>
<td>TPA</td>
<td>2248C Makeup Techniques</td>
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<tr>
<td>TTP</td>
<td>3223 Marketing Yourself in Theatre</td>
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<tr>
<td>DAA</td>
<td>2570 Theatre Jazz Dance</td>
<td>3 hrs</td>
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<tr>
<td></td>
<td>Restricted electives (see list of courses)</td>
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### Stage Management Specialization

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<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SPC 3425</td>
<td>Group Interaction &amp; Decision Making</td>
<td>3 hrs</td>
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<tr>
<td>TPA 4602</td>
<td>Advanced Stage Management</td>
<td>3 hrs</td>
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<tr>
<td>TPA 4400</td>
<td>Theatrical Management</td>
<td>3 hrs</td>
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<tr>
<td>TPP 2170C</td>
<td>Acting II - Fundamentals</td>
<td>3 hrs</td>
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<tr>
<td>TPA 2220</td>
<td>Stage Lighting</td>
<td>3 hrs</td>
</tr>
<tr>
<td>TPA 2248C</td>
<td>Makeup Techniques</td>
<td>2 hrs</td>
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<tr>
<td>TPA 3060</td>
<td>Scene Design I</td>
<td>3 hrs</td>
</tr>
<tr>
<td>TPA 3216C</td>
<td>Stagecraft III</td>
<td>3 hrs</td>
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<tr>
<td>TPA 2208</td>
<td>Theatre Drafting</td>
<td>2 hrs</td>
</tr>
<tr>
<td>TPA 3221</td>
<td>Lighting Design</td>
<td>3 hrs</td>
</tr>
<tr>
<td>TPA 3230</td>
<td>Costume Construction</td>
<td>3 hrs</td>
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<tr>
<td>TPA 4294</td>
<td>Thea. Prod./Perf. IV</td>
<td>1 hr</td>
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<tr>
<td>TPA 4295</td>
<td>Thea. Prod./Perf. V</td>
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<tr>
<td>TPA 3601</td>
<td>Stage Management</td>
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</tr>
<tr>
<td>TPA 3260</td>
<td>Sound Design for Theatre</td>
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<tr>
<td>TPA 4940</td>
<td>Design/ Tech Internship</td>
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### Design/Tech Specialization

<table>
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<tr>
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<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>TPA 2220</td>
<td>Stage Lighting</td>
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<tr>
<td>TPA 4049</td>
<td>Costume Design</td>
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<tr>
<td>TPA 3043C</td>
<td>Costume History I</td>
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<tr>
<td>TPA 3044C</td>
<td>Costume History II</td>
<td>3 hrs</td>
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<tr>
<td>TPA 3060</td>
<td>Scene Design I</td>
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</tr>
<tr>
<td>TPA 3061</td>
<td>Scene Design II</td>
<td>3 hrs</td>
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<tr>
<td>TPA 3077</td>
<td>Scene Painting</td>
<td>2 hrs</td>
</tr>
<tr>
<td>TPA 3216</td>
<td>Stagecraft III</td>
<td>3 hrs</td>
</tr>
<tr>
<td>TPA 3208</td>
<td>Theatre Drafting</td>
<td>2 hrs</td>
</tr>
<tr>
<td>TPA 3221</td>
<td>Lighting Design</td>
<td>3 hrs</td>
</tr>
<tr>
<td>TPA 3230</td>
<td>Costume Construction</td>
<td>3 hrs</td>
</tr>
<tr>
<td>TPA 3250</td>
<td>Cadd for Theatre</td>
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<tr>
<td>TPA 3251</td>
<td>Advanced CADD for Theatre</td>
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<tr>
<td>TPA 4294</td>
<td>Thea. Prod./Perf. IV</td>
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<tr>
<td>TPA 4295</td>
<td>Thea. Prod./Perf. V</td>
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<tr>
<td>TPA 3601</td>
<td>Stage Management</td>
<td>2 hrs</td>
</tr>
<tr>
<td>TPA 3260</td>
<td>Sound Design for Theatre</td>
<td>3 hrs</td>
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<tr>
<td>TPA 4940</td>
<td>Technical Theatre/Design Internship</td>
<td>6 hrs</td>
</tr>
<tr>
<td>TPA 3223</td>
<td>Marketing Yourself in Theatre</td>
<td>3 hrs</td>
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<tr>
<td>ART 2201C</td>
<td>Design Fundamentals I</td>
<td>3 hrs</td>
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</tbody>
</table>

#### Restricted Electives (see specializations)

#### 5. Restricted Electives

- THE 3230  Cultural Diversity - Theatre 3 hrs
- THE 3243  Musical Theatre Survey 3 hrs
- THE 4307  Contemporary. Thea. Pract. 3 hrs
- THE 4372  Drama of Tenn. Williams 3 hrs
- TPA 3197  Summer Theatre Studio/Tech/Design 3 hrs
- TPA 3295  Theatre Studio/Tech/Design 3 hrs
- TPA 3601  Stage Management 3 hrs
- TPA 4400  Theatre Management 3 hrs
- TPP 3197  Summer Theatre Perform. 3 hrs
- TPP 3952  Studio Performance 3 hrs

#### 6. Departmental Exit Requirements

- Earn a grade of "C" or better in each Theatre course
- Take a Departmental Exit Examination

### 7. Foreign Language Requirements (0-8 hrs)

**Admission:** Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.

**Graduation:** none

### 8. Electives (None)

### 9. University Minimum Exit Requirements

- A "C" GPA (2.0) in all work attempted (both UCF and overall)
- 60 semester hours earned after CLEP awarded
- 48 semester hours of upper division credit completed
- 32 semester hours in regular courses completed at UCF
- A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
- Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

### Total Semester Hours Required

129 hours

### Related Programs

- Film, Music, Theatre BA

### Related Minors

- Music, Theatre

### Transfer notes:

- "D" grades from other institutions do not meet departmental requirements
- Courses taken at community colleges do not substitute for Upper Division courses
- Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

### Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:

- THE 1020*: may use any introductory course
- THE 3305*: may use THE 2300
- THE 2090*: may use THE 2925
- TPA 2290*: may use TPA 1290
- TPP 2190*: may use TPP 1190
- TPP 2110*: may use TPP 2210 or THE 2271
- TPA 2210*: may use THE 2261
THEATRE - MUSICAL THEATRE TRACK: BACHELOR OF FINE ARTS

College of Arts and Sciences
Department of Theatre, THE 120 (407) 823-2861
E-mail: theatre@ucf.edu
Mr. Earnest, (407) 823-5744

The Bachelor of Fine Arts Track in Musical Theatre has been developed to serve those students interested in a career in the entertainment industry and the musical theatre stage. It is offered for students who, upon graduation, plan to pursue a specialized career in professional theatre.

Because of its geographic location, UCF is a top choice for students interested in musical theatre. Disney, Universal, and the budding expansion of the arts in Central Florida make it necessary for students to receive advanced studies in acting, musical theatre voice, and dance.

Work within the BFA program requires energy and dedication; therefore, other part-time study or outside employment is generally impossible. BFA standards are high, both for admission and for continuation in the program. Casting, crew, and design assignments are regulated to serve the artistic growth of students coordinating production experience with classroom exploration.

Admission Requirements
- Entrance into most theatre classes is restricted to majors. Exceptions must be approved by the Department Chair.
- The departmental faculty evaluates students wishing to become majors via an interview, audition, and portfolio review. For complete information, contact the Department of Theatre.
- A performance major must be interviewed and perform two three minute monologues of contrasting styles.
- Performance majors interested in musical theatre should prepare a ballad, with taped musical accompaniment, in addition to their monologues.
- Design/Tech track requires an interview and portfolio review.
- The portfolio should contain no more than fifteen examples of the student’s best work representing a variety of mediums. Three-dimensional pieces can be submitted in slide format. For details, contact the Department of Theatre.
- All students must submit a resume, black and white head shot, three letters of recommendation, and transcripts of previous college work at the time of interview.

Degree Requirements
- UCF students who change degree programs and select this major must adopt the most current catalog.
- Students must maintain a minimum “B” (3.00) overall Theatre GPA to continue in the major.
- Theatre grades of less than “C” will not be counted.
- Continuation in the BFA program requires a positive annual evaluation.
- Students must consult with a departmental advisor.
- Departmental Residency Requirement consists of 60 semester hours of regularly scheduled courses taken from the UCF Theatre Department.
- All theatre students should participate, in some capacity, on two of the three main-stage productions during both Fall and Spring semesters. Students failing to successfully participate will be placed on probation for one semester. Continued failure may result in being dropped as a major.
- All theatre students must include a participation credit course during every semester.
  - All BFA performance majors are required to audition for all Fall and Spring productions and must accept the rolls assigned.
  - Due to the conservatory nature, the BFA demands a closely integrated curriculum. Therefore, transfer students are not generally encouraged to pursue a BFA program. However, exceptionally talented students who have completed the General Education Program and the Common Program Prerequisites before transferring within the Florida Public University/Community College System may be admitted.
  - Courses designated in 1 (General Education Program) and 2 (Common Program Prerequisites) are usually completed in the first 60 hours.

1. UCF General Education Program (36 hrs)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>A. Communication Foundations</td>
<td></td>
<td>9 hrs</td>
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<tr>
<td>Select SPC 1600C Fund Oral Communication</td>
<td></td>
<td>3 hrs</td>
</tr>
<tr>
<td>Select two semesters of English Composition</td>
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<td>6 hrs</td>
</tr>
<tr>
<td>B. Cultural and Historical Foundations</td>
<td></td>
<td>9 hrs</td>
</tr>
<tr>
<td>Select one 2 semester sequence</td>
<td></td>
<td>6 hrs</td>
</tr>
<tr>
<td>Select THE 1020 Theatre Survey</td>
<td></td>
<td>3 hrs</td>
</tr>
<tr>
<td>C. Mathematical Foundations</td>
<td></td>
<td>6 hrs</td>
</tr>
<tr>
<td>Select MGF 1203 Finite Mathematics (may substitute a higher level math)</td>
<td></td>
<td>3 hrs</td>
</tr>
<tr>
<td>Prefer CGS 1060C Intro to Computer Sci or CGS 2100C Computer Fund for Business</td>
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<td>3 hrs</td>
</tr>
<tr>
<td>D. Social Foundations</td>
<td></td>
<td>6 hrs</td>
</tr>
<tr>
<td>E. Science Foundations</td>
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<td>6 hrs</td>
</tr>
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2. Common Program Prerequisites (12 hrs)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>THE 1020*</td>
<td>Theatre Survey</td>
<td></td>
</tr>
<tr>
<td>THE 3305*</td>
<td>Survey of Dramatic Literature</td>
<td></td>
</tr>
<tr>
<td>THE 3090*</td>
<td>Theatre Production/Performance I</td>
<td></td>
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<tr>
<td>TPA 2290*</td>
<td>Theatre Production/Performance I</td>
<td></td>
</tr>
<tr>
<td>TPA 2210*</td>
<td>Stagecraft I</td>
<td></td>
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<tr>
<td>TPP 2190*</td>
<td>Theatre Production/Performance I</td>
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<tr>
<td>TPP 2110*</td>
<td>Acting I - Introduction</td>
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*See Transfer Notes for possible substitutes

3. Specialization: Lower Division (36 hrs)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MUT 1001</td>
<td>Music Fundamentals I</td>
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<tr>
<td>MUT 2XXX</td>
<td>Music Fundamentals II</td>
<td></td>
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<tr>
<td>TPP 2XXX</td>
<td>Musical Theatre Acting Perf I</td>
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</tr>
<tr>
<td>TPP 2XXX</td>
<td>Musical Theatre Acting Perf II</td>
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<tr>
<td>TPP 2100</td>
<td>Acting I</td>
<td></td>
</tr>
<tr>
<td>TPP 2170</td>
<td>Acting II</td>
<td></td>
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<tr>
<td>DAA 2200</td>
<td>Theatre Dance I</td>
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</tr>
<tr>
<td>DAA 2201</td>
<td>Intermediate Classical Ballet</td>
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<tr>
<td>DAA 2500</td>
<td>Jazz Dance I</td>
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<tr>
<td>DAA 2501</td>
<td>Jazz Dance II</td>
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<tr>
<td>DAA 2600</td>
<td>Theatre Tap Dance I</td>
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<tr>
<td>THE 2261</td>
<td>Technical Theatre Production</td>
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4. Specialization: Upper Division (42 hrs)

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>TPP 3172</td>
<td>Acting III</td>
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<tr>
<td>TPP 3730</td>
<td>Voice Production IV</td>
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<td>TPP 3XXX</td>
<td>Musical Theatre Acting Perf III</td>
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<tr>
<td>TPP 4XXX</td>
<td>Musical Theatre Acting Perf IV</td>
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<tr>
<td>THE 3243</td>
<td>Survey of Musical Theatre I</td>
<td></td>
</tr>
<tr>
<td>THE 3XXX</td>
<td>Survey of Musical Theatre II</td>
<td></td>
</tr>
<tr>
<td>TPP 3223</td>
<td>Theatre Careers</td>
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<tr>
<td>TPP 3512</td>
<td>Period Movement</td>
<td></td>
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<tr>
<td>TPP 4531</td>
<td>Stage Combat</td>
<td></td>
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<tr>
<td>TPP 4XXX</td>
<td>Musical Theatre Cabaret</td>
<td></td>
</tr>
<tr>
<td>TPA 3248</td>
<td>Make-up Techniques</td>
<td></td>
</tr>
<tr>
<td>THE 3110</td>
<td>Theatre History I</td>
<td></td>
</tr>
</tbody>
</table>
5. Departmental Exit Requirements
   - Earn a grade of "C" or better in each Theatre course
   - Take a Departmental Exit Examination
   - Computer Competency met by Computer Science courses

6. Foreign Language Requirements (0-8 hrs)
   Admiison: Two (2) years of one foreign language in high school, or one (1) year of one foreign language in college (or equivalent proficiency exam) prior to graduation.
   Graduation: none

7. Electives (None)

8. University Minimum Exit Requirements
   - A "C" GPA (2.0) in all work attempted (both UCF and overall)
   - 60 semester hours earned after CLEP awarded
   - 48 semester hours of upper division credit completed
   - 32 semester hours in regular courses completed at UCF
   - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted
   - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 129 hours

Related Programs: Film, Music, Theatre BA

Related Minors: Music, Theatre

Transfer notes:
   - "D" grades from other institutions do not meet departmental requirements
   - Courses taken at community colleges do not substitute for Upper Division courses
   - Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.

Acceptable Substitutes for common program prerequisites if taken prior to transferring to UCF:
   - THE 1020*: may use any introductory course
   - THE 3305*: may use THE 2300
   - THE 2090*: may use THE 2925
   - TPA 2290*: may use TPA 1290
   - TPP 2190*: may use TPP 1190
   - TPP 2110*: may use TPP 2210 or THE 2271
   - TPA 2210*: may use THE 2261

TPP 3310 Directing 3 hrs
TPP 3650 Script Analysis 3 hrs
TPP 3XXX Musical Theatre Voice I 2 hrs
TPP 3XXX Musical Theatre Voice II 2 hrs
VOCATIONAL EDUCATION AND INDUSTRY TRAINING - HEALTH OCCUPATIONS AND INDUSTRIAL/TECHNICAL: BACHELOR OF SCIENCE - TRACK

College of Education
Instruction Programs Department, ED346, (407) 823-2939
Coordinator: Dr. Larry Hudson, ED157, (407) 823-2848,
E-mail: lhudson@pegasus.cc.ucf.edu
Web Address: http://pegasus.cc.ucf.edu/~ucfed/

Admission Requirements
- have on file in the University Admissions Office passing scores on all parts of the College Level Academic Skills Test (CLAST) (No alternatives)
- have on file in the University Admissions Office a score at or above the 40th percentile on the SAT (950) or ACT (20 enhanced)
- present an overall GPA of 2.5
- complete a formal application for admission to a particular teacher education program
- meet any special departmental requirements

Degree Requirements
- Students should see an advisor
- The courses designated in 1 (General Education) and 2 (Common Program Prerequisites) should usually be completed in the first 60 hours

1. UCF General Education Program (36 hrs)
   A. Communication Foundations 9 hrs
   B. Cultural-Historical Foundations 9 hrs
   C. Mathematical Foundations 6 hrs
   D. Social Foundations 6 hrs
   E. Science Foundations 6 hrs
      plus one lab

2. Common Program Prerequisites (9 hrs)
   EDF 2005 Intro to Education 3 hrs
   *EDG 2701 Teaching Diverse Populations 3 hrs
   EME 1040 Intro to Technology 3 hrs
   *In addition to EDG 2701, students must take 6 additional hours with an international or diversity focus. The eligible courses will be determined by the institution in which the student is enrolled for their lower division course work. (These courses must be identified in the college/university catalog.)

3. Area of Emphasis (6 hrs)
   Middle/High School Teaching:
   EDF 4603 Analysis of Critical Issues in Ed 3 hrs
   EDF 4214 Classroom Learning Principles 3 hrs
   or
   Adult Teaching/Training:
   EVT 4169 Curr Dev for Ind Training 3 hrs
   ADE 4382 Teaching Adult Learners 3 hrs

4. Specialization Requirements (24 hrs)
   EVT 4065 Prin/Prac Voc Ed 3 hrs
   EVT 4368 Adv Tch/Tech Voc Ed 3 hrs
   EVT 3367 Eval Vocation Instruction 3 hrs

5. Upper Division Electives (9 hrs)
   (with advisor’s approval)

6. Specialization (30 hrs)
   Students must complete an area of specialization (occupational expertise) through one of the following routes:
   - occupation-specific courses
   - recognized occupational license/registration
   - occupational examination, or
   - sufficient documentation demonstrating comparable occupational expertise equivalent to 30 semester hours of credit. Appropriate documentation must be provided to advisor before this will be submitted for credit. Specialization must be completed before taking Directed Field Experience.

7. Directed Field Experience (EVT 4941) (12 hrs)

8. Foreign Language Requirements (0-6 hrs)
   State University System foreign language admission requirement: 2 years in high school or 1 year of college instruction in a single foreign language. (This requirement applies to those students admitted to the University without the required 2 units of foreign language in high school)

9. Departmental Exit Requirements
   Achieve a 2.5 GPA in all courses within the major

10. University Minimum Exit Requirements
    - A 2.0 GPA in all work attempted (both UCF and overall)
    - 60 semester hours earned after CLEP awarded
    - 48 semester hours of upper division credit completed
    - 30 semester hours in regular courses completed at UCF
    - Complete the General Education Program, the Gordon Rule, the CLAST and 9 hours of Summer credit (if applicable)

Total Semester Hours Required 126 hours

Transfer notes:
Courses transferred from private and out-of-state schools must be evaluated for equivalency credit. The student must provide all supporting information.
UCF MINOR AND CERTIFICATE PROGRAMS

Minors are authorized only 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. Students should be aware that the addition of a minor could result in Excess Hour surcharges. The only time that minors are exempt from the surcharge is when they are completed within 115% of the hours required for the baccalaureate degree.

If you plan to graduate with a minor, have that minor added to your audit during the Early Registration period. Contact the undergraduate records office of the college offering the minor for more information. All graduation requirements must be from a single UCF catalog for which a student is eligible. Minors offered are:

<table>
<thead>
<tr>
<th>Minor</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Studies</td>
<td>301</td>
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<tr>
<td>African-American Studies</td>
<td>301</td>
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<tr>
<td>American Studies</td>
<td>301</td>
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<tr>
<td>Anthropology</td>
<td>301</td>
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<tr>
<td>Anthropology in Multicultural Studies</td>
<td>302</td>
</tr>
<tr>
<td>Art History</td>
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<td>Art-Studio</td>
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<td>Asian Studies</td>
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<tr>
<td>Biology</td>
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<tr>
<td>Business</td>
<td>303</td>
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<tr>
<td>Canadian &amp; Commonwealth Area Studies</td>
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<td>Chemistry</td>
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<td>Communicative Disorders</td>
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<td>Community Arts-PAVE</td>
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<td>Computer Information Technology</td>
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<td>Computer Science</td>
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<td>Computer Science - Applied</td>
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<td>Criminal Justice</td>
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<td>Digital Media</td>
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<td>Economics</td>
<td>307</td>
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<tr>
<td>English - Creative Writing</td>
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<td>English - Linguistics</td>
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<td>English - Literature</td>
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<td>English - Technical Writing and Editing</td>
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<td>English - Writing</td>
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<td>Environmental Studies</td>
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<tr>
<td>Film - Cinema Studies</td>
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<td>Film - Screenwriting</td>
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<td>French</td>
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<td>German</td>
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<td>Health Sciences</td>
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<td>History</td>
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<td>Hospitality Management</td>
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<td>Humanities - Multicultural</td>
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<td>International Business</td>
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<td>Interpersonal Communication</td>
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<td>Italian</td>
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<td>Jazz Studies</td>
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<td>Judaic Studies</td>
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<td>Latin American and Iberian Area Studies</td>
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<td>Legal Studies</td>
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<td>Magazine Journalism</td>
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<td>Management Information Systems</td>
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<tr>
<td>Military Science</td>
<td>316</td>
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<tr>
<td>Molecular Biology and Microbiology</td>
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<tr>
<td>Music</td>
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<td>Music Composition</td>
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<td>Music Technology</td>
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<td>Network Computing</td>
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<td>Organizational Communication</td>
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<td>Political Science</td>
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<td>Political Science/Prelaw</td>
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<td>Psychology</td>
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<td>Public Administration</td>
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<td>Religious Studies</td>
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<tr>
<td>Russian Area Studies</td>
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<td>Social Sciences - Interdisciplinary</td>
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<td>Sociology</td>
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<td>Space Studies</td>
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<td>Spanish</td>
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<td>Technology and Society</td>
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<td>Theatre-General</td>
<td>322</td>
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<td>Translation and Interpretation</td>
<td>322</td>
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<tr>
<td>Women's Studies</td>
<td>322</td>
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<tr>
<td>Foreign Study Abroad Program</td>
<td>323</td>
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<tr>
<td>English Study Abroad Program</td>
<td>323</td>
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</tbody>
</table>
AEROSPACE STUDIES: Minor
College of Engineering
Department of Aerospace Studies, EN 281
LTC Judge, (407) 823-1247

Credit Hour Requirements  16 hours
Required Courses  (16 hr)
AFR 1101 The Air Force Today I  1 hr
AFR 1111 The Air Force Today II  1 hr
AFR 2130 The Development of Air Power I  1 hr
AFR 2131 The Development of Air Power II  1 hr
AFR 3220 Air Force Leadership and Mgmt I  3 hrs
AFR 3230 Air Force Evaluation and Mgmt II  3 hrs
AFR 4201 Nat Srvy Forces in Cont Am Soc I  3 hrs
AFR 4210 Nat Srvy Forces in Cont An Soc II  3 hrs

Other Requirements
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 12 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

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AFRICAN-AMERICAN STUDIES: Minor
College of Arts and Sciences
African American Studies Program, HFA 201
Dr. Gladstone Yearwood, (407) 823-0026

The African American Studies minor is designed to complement a student's major area of study. The minor requires a core of African American Studies courses as well as a selection of directed electives. Required courses are in Fine Arts, History, English, Foreign Languages and Literatures, Political Science, Psychology, Sociology, Anthropology, Film, and Theatre.

Credit hour Requirements  18 hours
Required Courses  (6 hrs)
AFA 3104 The African American Experience  3 hrs
AMH 3571 Black American History I  3 hrs
Restricted Electives  (12 hrs)
AFA 3XXX Study Abroad in the Caribbean  3 hrs
A-M 3614 Topics in African-American Literature
ARH 3520 African Art
ARH 3522H Honors: African American Arts Seminar
ARH 5933 Seminar in African and African-American Arts
INR 3253 International Politics of Africa
FIL 3XXX Black Cinema
LAH 3470 History of the Caribbean
MUL 2016 Evolution of Jazz
PUP 3314 Minorities in American Politics
SOP 3724 The Psychology of Racial Prejudice
SYD 3700 Race and Ethnic Minorities in the United States
THE 3230 Cultural Diversity via Theater

Additional courses may be used only with the prior permission of the program Director.

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AMERICAN STUDIES: Minor
College of Arts and Sciences
Dean's Office, CAS 190
Dr. J. Fernandez, (407) 823-2573

Credit Hour Requirements  21 hours
Required Courses  (9 hrs)
At least three hours from each of these fields
- literature and humanities
- social sciences
- history

Restricted Electives  (12 hrs)
Courses chosen from the list of approved courses (available from the American Studies advisor).

Other Requirements
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

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ANTHROPOLOGY: Minor
College of Arts and Sciences
Department of Sociology & Anthropology, FA 405
anthropology@ucf.edu
Dr. Jay Corzine, (407) 823-2227

The Anthropology minor develops a more sophisticated understanding of the human condition. The minor is especially appropriate for all UCF undergraduates.

Credit Hour Requirements  21 hours
Required Courses  (12 hrs)
ANT 2511 The Human Species  3 hrs
ANT 2100 Archaeol & Rise of Human Culture  3 hrs
ANT 2410 Cultural Anthropology  3 hrs
ANT 3212 Peoples of the World  3 hrs

Restricted Electives  (3 hrs)
2000-4000 level Anthropology courses

Restricted Upper Division Electives  (6 hrs)
3000-4000 level Anthropology courses

Other Requirements
- Maintain an overall GPA of at least 2.0 in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within

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301
the department

- No credit by exam (CLEP, TSD, Military credit) may be used.

* * * * * *

ANTHROPOLOGY IN MULTICULTURAL STUDIES: Minor
College of Arts and Sciences
Department of Sociology & Anthropology, FA 405
anthropology@ucf.edu
Dr. Jay Corzine, (407) 823-2227

This minor develops a more sophisticated understanding of the recent dilemmas of Hispanic, Native American, and Pacific Rim cultures, sex and gender controversies in America and other societies, and the theoretical and practical issues of modern applied anthropology. The minor is especially appropriate for students majoring in political science, international business, or for any student seeking an enhanced understanding of contemporary cultural relations.

Credit Hour Requirements 18 hours

Required Course (3 hrs)
Select one course
ANT 2000 General Anthropology
ANT 2410 Cultural Anthropology

Restricted Electives (15 hrs)
Select from the following:
ANT 3212 Peoples of the World
ANT 3312 Ethnology of North Amer Indians
ANT 3332 People and Cultures of Latin Amer
ANT 3360 Peoples of the Far East
ANT 3241 Magic, Ritual, and Belief
ANT 3302 Sex, Gender and Culture
SYD 3700 Race and Ethnic Minorities in the US

Substitutions require consent of the department chair.

Other Requirements
- Maintain an overall GPA of at least 2.0 in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.

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ART HISTORY: Minor
College of Arts and Sciences
Art Department, VAB 117
art@ucf.edu
Mr. Charles Wellman, (407) 823-2676

Credit Hour Requirements 27 hours

Required Courses (15 hrs)
ARH 2050 The History of Art I 3 hrs
ARH 2051 The History of Art II 3 hrs
ARH 4310 Early Italian Renaissance Art 3 hrs
ARH 4430 19th Century Art 3 hrs
ARH 4450 20th Century Art 3 hrs

Non-western Course Requirement (3 hrs)
Select from the following:
ARH 4545 Art of India
ARH 3520 African Art
ARH 4655 Meso American Art

Restrictive Elective: (3 hrs)
ARH 4350 Baroque Art
ARH 4892 Women in Art
ARH 4458 Women and Art in the 20th Century America
ARH 5478 Contemporary Women Artists
ARH 4800 Theory and Criticism of the Visual Arts

6 hours of electives (6 hrs)
any ARH 3XXX-4XXX courses

Other Requirements
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- At least 6 of the required hours must be regularly scheduled 3000-4000 level courses in an area of specialization and taken at UCF.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

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ART-STUDIO: Minor
College of Arts and Sciences
Art Department, VAB 117
art@ucf.edu
Mr. J. Chavda, (407) 823-2676

Credit Hour Requirements 24 hours

Required Courses (18 hrs)
ARH 2050 The History of Art I 3 hrs
ARH 2051 The History of Art II 3 hrs
ART 2201C Design Fundamentals I 3 hrs
ART 2203C Design Fundamentals II 3 hrs
ART 2300C Drawing Fundamentals I 3 hrs
ART 2301C Drawing Fundamentals II 3 hrs

Restricted Upper Division Courses (6 hrs)
six semester hours of studio art at the 3-4000 level

Other Requirements
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- At least 6 of the required hours must be regularly scheduled 3000-4000 level courses in an area of specialization and taken at UCF.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

* * * * * *

ASIAN STUDIES: Minor
College of Arts and Sciences
Department of Political Science, FA 415
politics@ucf.edu
Dr. Robert Bledsoe, (407) 823-2608

An interdisciplinary minor in which seven UCF departments;
Anthropology, Art, Economics, Foreign Languages and Literatures, History, Philosophy, and Political Science participate in order to offer students a basic and well-rounded background in the field. Courses are to be selected in consultation with a departmental advisor.

Credit Hour Requirements 24 hours
Required Course (3 hrs)
Select one course
ANT 3360 Peoples of the Far East
HUM 3401 Asian Humanities

Restricted Electives (21 hrs)
Approved courses (see department for listing)

Foreign Language Requirement (0-8 hrs)
One year or the equivalent proficiency examination. Students taking foreign language classes must complete at least six hours in the sequence chosen (e.g. Chinese, Japanese).

Other Requirements
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

*BIOLOGY: Minor*
College of Arts and Sciences
Department of Biology, BL 210
biology@ucf.edu
http://pegasus.cc.ucf.edu/-biology/
Dr. Walter Taylor, (407) 823-2141

Credit Hour Requirements 32 hours
Required Courses (32 hrs)
BSC 2010C General Biology 4 hrs
BSC 2011C Biological Diversity 4 hrs
CHM 2045C Chemistry Fundamentals I 4 hrs
CHM 2046 Chemistry Fundamentals II 3 hrs
CHM 2210 Organic Chemistry 3 hrs
PCB 3023 Molecular Cell Biology 3 hrs
PCB 3043 Principles of Ecology 3 hrs
PCB 3063 Genetics 3 hrs
PCB 4683C Population Biology and Evolution 5 hrs

Other Requirements
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.
- A minor in Biology will not be awarded to students who have, or expect to earn, any other Life Science degree.

*CANADIAN & COMMONWEALTH AREA STUDIES PROGRAM: Minor*
College of Arts and Sciences
FA 415
Dr. Elliot Vittes, (407) 823-2608

Canadian & Commonwealth Area Studies offers a minor degree. The program focuses on various aspects of Canada, the United Kingdom, and Commonwealth countries. Two tracks are offered to address more specific interests of students. Eighteen credits are required for the minor. A total of six credits may be transferred into the minor with the director's permission.

Credit Hour Requirements 18 hours
Track 1. Canadian Studies (6 hrs)
AMH 3800 Canadian History 3 hrs
CPO 3132 Canadian Studies 3 hrs

Restricted Upper Division Electives (6 hrs)
Select from the following:
ANT 3312 Ethnology of North Amer Indians
ANT 3313 Indians of North Amer High Plains
CPO 4133 Government & Politics of Canada
CPO 4062 Comparative Judicial Process
PUP 3204 Environmental Politics
others by director's permission

*BUSINESS: Minor-for Non-Business Majors*
College of Business
Department of Economics, BA 325
Ms. Barbara Moore, (407) 823-3266

Credit Hour Requirements 21-24 hours
Required Accounting Course(s) (3-6 hrs)
ACG 2021 Principles of Financial Accounting
ACG 2071 Principles of Managerial Accounting

Required Courses (15 hrs)
ECO 2013 Principles of Economics I
ECO 2023 Principles of Economics II
FIN 3403 Business Finance
MAN 3025 Management of Organizations
MAR 3023 Marketing

Restricted Elective (3 hrs)
A 3000/4000 level business course
(GEB 3004 may not be used)

Other Requirements
- A grade of "C" is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 9 hours of upper division credit used in the minor must be earned at UCF.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.
Select one emphasis: (6 hrs)

Macdonald emphasis
CPO 4123 Government and Politics of Great Britain
EUH 4501 English History: 1485-1815
EUH 4502 British History: 1815-Present
PHH 3402 Modern British Philosophy

Carriér emphasis
FRE 2200 Intermediate French Language & Civilization I
FRE 2201 Intermediate French Language & Civilization II
FRE 2240 Intensive French Conversation
FRE 3420 French Composition
FRE 4421 Advanced French Conversation
FRE 4422 Advanced French Composition
FRW 3740 The French Literature of Canada

Credit Hour Requirements 18 hours

Track 2. Commonwealth Studies
A focus on the British Isles and the extended Commonwealth countries of Australia, New Zealand, and Canada.

Required Courses (6 hrs)
CPO 3132 Canadian Studies 3 hrs
EUH 4502 British History: 1815-Present 3 hrs

Restricted Upper Division Electives (12 hrs)
CPO 4123 Government and Politics of Great Britain
CPO 4062 Comparative Judicial Process
EUH 4501 English History: 1485-1815
ENL 4220 English Renaissance Poetry and Prose
ENL 4240 English Romantic Writers
ENL 4253 The Victorian Age: Poetry
ENL 4333 Shakespeare Studies
ENL 4341 Milton and His Age
ENL 4273 Modern British Literature
PHH 3402 Modern British Philosophy
others by director’s permission.

Other Requirements
- An overall GPA of 2.0 is required for courses used to satisfy the minor.
- “D” or “S” grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor without prior approval of the program director.
- At least 12 hours must be taken at a senior institution.

COMMUNICATIVE DISORDERS: Minor

College of Health and Public Affairs
Department of Communicative Disorders
12424 Research Parkway, Suite 200-210
Ms. Jane Searles, (407) 249-4798
E-mail: jsearles@mail.ucf.edu

Credit Hour Requirements 25 hours

Required Courses
SPA 3002 Intro to Communicative Disorders 3 hrs
SPA 3112C Basic Phonetics 4 hrs
LIN 4710C Foundations of Language 4 hrs
SPA 3101 Physiological Bases of Speech/Hearing 3 hrs
SPA 4032 Audiology I 3 hrs
SPA 4402C Communicative Disorders: Language 4 hrs
SPA 4251C Organic Speech Disorders 4 hrs

Other Requirements
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- “D” or “S” grades from other institutions are not accepted.
- At least 19 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

Licensed Speech Language and Audiology Assistant
This state license may be obtained by completing the minor plus one additional course as recommended by the academic advisor.
**COMMUNITY ARTS-PAVE: Minor**
College of Arts and Sciences  
Department of Art, VAB 117  
art@ucf.edu  
Dr. Joyce Lilie, (407) 823-2676

**Minor Requirements**
- Partners in Art in Visual Education (P.A.V.E.)  
- A minor in Community Arts/P.A.V.E. is offered for the student who is majoring in Art, Music, Theatre, or English (with a Creative Writing focus). Students interested in the minor should contact the department chair.

**Other Requirements**
- A GPA of 2.0 is required in all courses used to satisfy the minor. 
- "D" or "F" grades from other institutions are not accepted. 
- At least 15 hours used in the minor must be earned at UCF within the department. 
- No credit by exam (CLEP, TSD, Military credit) may be used toward the minor.

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**COMPUTER INFORMATION TECHNOLOGY: Minor, Certificate**
College of Arts and Sciences  
School of Computer Science, CSB 201  
computerscience@ucf.edu  
Dr. Ron Dutton, (407) 823-2341

<table>
<thead>
<tr>
<th>Credit Hour Requirements</th>
<th>36 hours</th>
<th>18 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required Courses</strong></td>
<td>(36 hrs)</td>
<td></td>
</tr>
<tr>
<td>COP 3502C</td>
<td>3 hrs</td>
<td>COP 3502C</td>
</tr>
<tr>
<td>COP 3503C</td>
<td>3 hrs</td>
<td>COP 3503C</td>
</tr>
<tr>
<td>COT 3100C</td>
<td>3 hrs</td>
<td>COT 3100C</td>
</tr>
<tr>
<td>CDA 3103C</td>
<td>3 hrs</td>
<td>COT 3960</td>
</tr>
<tr>
<td>Syntax courses</td>
<td>9 hrs</td>
<td></td>
</tr>
<tr>
<td>select from Pascal, C, C++, Java, Fortran</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CGS 2540, 2541, 2542</td>
<td>3 hrs</td>
<td></td>
</tr>
<tr>
<td>CGS 3266, 3267, 3268</td>
<td>3 hrs</td>
<td></td>
</tr>
<tr>
<td>CGS 3280, 3281, 3282</td>
<td>3 hrs</td>
<td></td>
</tr>
<tr>
<td>CGS 3163, 3164</td>
<td>2 hrs</td>
<td></td>
</tr>
<tr>
<td>CGS 3761, 3762</td>
<td>2 hrs</td>
<td></td>
</tr>
<tr>
<td>CGS 3341, 3342</td>
<td>2 hrs</td>
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</tr>
<tr>
<td><strong>Other Requirements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A grade of &quot;C&quot; is required in all courses used to satisfy the minor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;D&quot; or &quot;F&quot; grades from other institutions are not accepted.</td>
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<tr>
<td>At least 18 hours used in the minor must be earned within the Computer Science department.</td>
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</tr>
<tr>
<td>No credit by exam (CLEP, TSD, Military credit) may be used toward the minor.</td>
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</tr>
</tbody>
</table>

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**COMPUTER SCIENCE, APPLIED: Certificate**
College of Arts and Sciences  
School of Computer Science, CSB 201  
computerscience@ucf.edu  
Dr. Ron Dutton, (407) 823-2341

The certificate program in Applied Computer Science is designed for students who wish to obtain a practical, working knowledge of computers and the applications of computer science. This coursework covers a broad spectrum of topics ranging from word processing applications to distributed computing. This certificate is not a component of the CSAB accredited B.S. degree from UCF.

<table>
<thead>
<tr>
<th>Credit Hour Requirements</th>
<th>18 hours</th>
<th>12-14 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required Courses</strong></td>
<td></td>
<td>(4-6 hrs)</td>
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<tr>
<td>Select any two of the following sequences</td>
<td></td>
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<tr>
<td>CGS 2516C/2517C/2518C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CGS 2540C/2541C/2542C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CGS 2580C/2581C/2582C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CGS 3163/3164</td>
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<td></td>
</tr>
<tr>
<td>CGS 3170C/3171C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CGS 3266/3267/3268</td>
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<td></td>
</tr>
<tr>
<td>CGS 3280/3281/3282</td>
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<tr>
<td>CGS 3761/3762</td>
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<td></td>
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<tr>
<td>CGS 3341</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CGS 3342</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Restricted Electives**
- Any course with CGS prefix. Either CGS 1060C or CGS 2100C, (but not both), may be used toward this certificate. 
- Any language syntax courses such as Pascal, C, Java (COP 2213, COP 2223, etc.). 
- COP 2500C (Concepts in Computer Science). 
- May not include independent studies and internships.

**Other Requirements**
- A minimum grade of "C" is required in each course used to satisfy the certificate. 
- "D" or "F" grades from other institutions are not accepted. 
- At least 12 hours used in the minor must be earned at UCF within the School of Computer Science.
CRIMINAL JUSTICE: Minor
College of Health and Public Affairs
Department of Criminal Justice and Legal Studies,
HPA 311
Dr. Joseph B. Sanborn, Jr., (407) 823-2603
E-mail: sanborn@pegasus.cc.ucf.edu

Credit Hour Requirements
18 hours
Required Courses
(6-7 hrs)
- CCJ 3024 Criminal Justice System 3 hrs
- CCJ 3014 Crime in America 3 hrs

Restricted Electives
(12 hrs)
Two of the following:
- CCJ 3290 Prosecution and Adjudication
- CCJ 3306 The Corrections and Penology
- CCJ 4105 Police and Society

Six semester hours of Criminal Justice Courses
(selected with the aid of an advisor).

Other Requirements
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

DIGITAL MEDIA: Certificate
College of Arts and Sciences
CREAT Digital Media Program, CSB 234
creat@cas.ucf.edu
Program Director: Dr. J. Michael Moshell, (407) 823-5341
Creative Director: David Haxton, (407) 823-3110

The certificate program in Digital Media provides students an opportunity to study this evolving field, and to participate in junior and senior projects in partnership with media professionals.

Entrance Requirement
- Admission to the senior year of the Certificate Program requires evaluation of a portfolio of work which demonstrates the student's creativity and technical accomplishment in some artistic or technical domain.
- Admission to the Senior Project requires the student to demonstrate initiative, creativity, and mature technical ability in his or her own area of specialty.
- All evaluations are conducted by the program Curriculum Committee.

Credit Hour Requirements:
12 hours
Required Courses:
(6 hrs)
- MMC 3932 New Media Technology Survey 3 hrs
- CAP 4702 Seminar in Digital Arts 3 hrs
(substitutions must be approved by the program Curriculum Committee prior to being taken)

Senior Project:
(6 hrs)
Participation in two semesters of Senior Project
(Credit for the Senior Project is given under various departmental course numbers to conform to different majors' graduation requirements)
Other Requirements

- A minimum grade of "C" is required in each course used to satisfy the certificate.
- "D" or "S" grades from other institutions are not accepted.
- At least 12 hours used in the certificate must be earned at UCF.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can be used in the certificate only with prior approval.

**ECONOMICS: Minor**
(for both Business Majors and non-majors)

College of Business Administration
Department of Economics, BA 325
Dr. Djehane Hosni, (407) 823-2069

Credit Hour Requirements 24 hours

**Required Courses** (15 hrs)

- ECO 2013 Principles of Economics I 3 hrs
- ECO 2023 Principles of Economics II 3 hrs
- ECO 3101 Intermediate Price Theory 3 hrs
- ECO 3203 Aggregate Econ Conditions Anal 3 hrs
- ECO 3411 Quantitative Business Tools II 3 hrs

**Upper Division Restricted Electives** (9 hrs)

Select from any ECO, ECP or ECS courses at the 3000-4000 level

Other Requirements

- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- 3 hours of Internship or Independent Study credit can be used toward the minor with prior approval of the academic advisor.

**ENGLISH - CREATIVE WRITING: Minor**

College of Arts and Sciences
Department of English, FA 301
english@ucf.edu
Dr. Dawn Trouard, (407) 823-2212

Credit Hour Requirements 21 hours

**Required Course** (3 hrs)

- CRW 3013 Creative Writing for English Majors

**Restricted Electives** (6 hrs)

Select one course

- CRW 3120 Fiction Writing Workshop
- CRW 3310 Poetry Writing Workshop
- CRW 3211 Creative Nonfiction Writing

Select one course

- CRW 4122 Advanced Fiction Writing Workshop
- CRW 4320 Advanced Poetry Writing Workshop
- CRW 4224 Advanced Nonfiction Workshop

**Restricted Upper Division Electives** (12 hrs)

- CRW 3311 Structure of Verse
- CRW 3410 Writing Scripts

**Restricted Electives**

- CRW 4114 History of Prose Style
- CRW 5932 Teaching Creative Writing

and any of the above courses not already used

Other Requirements

- A grade of "C" is required in each course used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

**ENGLISH - LINGUISTICS: Minor**

College of Arts and Sciences
Department of English, FA 301
english@ucf.edu
Dr. Dawn Trouard, (407) 823-2212

Credit Hour Requirements 18 hours

**Required Courses** (9 hrs)

- LIN 3010 Principles of Linguistics
- LIN 4100 History of the English Language
- LIN 4680 Modern English Grammar

**Restricted Upper Division Electives** (9 hrs)

- LIN 4612 African American English
- LIN 4660 Linguistics and Literature
- LIN 4801 Language and Meaning
- LIN 5137 Linguistics
- ANT 3640 Language and Culture
- PHI 4400 Philosophy of Science

or any course approved by the Linguistics Committee

Other Requirements

- A grade of "C" is required in each course used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

**ENGLISH - LITERATURE: Minor**

College of Arts and Sciences
Department of English, FA 301
english@ucf.edu
Dr. Dawn Trouard, (407) 823-2212

Credit Hour Requirements 21 hours

**Restricted Electives** (12 hrs)

- ENL 2012 English Literature I
- ENL 2021 English Literature II
- ENL 4273 Modern British Literature
- AML 3031 American Literature I
- AML 3051 American Literature II
- LIT 2110 World Literature I
- LIT 2120 World Literature II

**Restricted Upper Division Electives** (9 hrs)
**ENGLISH - TECHNICAL WRITING & EDITING: Minor**  
College of Arts and Sciences  
Department of English, FA 301  
english@ucf.edu  
Dr. Dawn Trouard, (407) 823-2212

**Credit Hour Requirements**  
21 hours  
- **Required courses**  
  - ENC 3211 Theory & Practice of Tech Writing 3 hrs  
  - ENC 3311 Advanced Expository Writing 3 hrs  
  - ENC 4215 Techniques of Technical Publications 3 hrs  
  - ENC 4218 Visual Elements in Documentation 3 hrs  
  - ENC 4293 Technical Documentation I 3 hrs  
  - ENC 4294 Technical Documentation II 3 hrs  
  - ENC 4295 Technical Documentation III 3 hrs  
  
Students completing the minor may intern with a Central Florida corporation.

**Other Requirements**  
- A grade of "C" is required in each course used to satisfy the minor.  
- "D" or "S" grades from other institutions are not accepted.  
- At least 15 hours used in the minor must be earned at UCF within the department.  
- No credit by exam (CLEP, TSD, Military credit) may be used.  
- Internship or Independent Study credit can not be used toward the minor.

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**ENGLISH - WRITING: Minor**  
College of Arts and Sciences  
Department of English, FA 301  
english@ucf.edu  
Dr. Dawn Trouard, (407) 823-2212

**Credit Hour Requirements**  
18 hours  
- **Restricted Elective Courses** (18 hrs)  
  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRW 1001</td>
<td>Imaginative Writing for Non-English Majors</td>
<td></td>
</tr>
<tr>
<td>CRW 3120</td>
<td>Fiction Writing Workshop</td>
<td></td>
</tr>
<tr>
<td>CRW 3310</td>
<td>Poetry Writing Workshop</td>
<td></td>
</tr>
<tr>
<td>CRW 3013</td>
<td>Creative Writing for English Majors</td>
<td></td>
</tr>
<tr>
<td>CRW 3211</td>
<td>Creative Nonfiction Writing</td>
<td></td>
</tr>
<tr>
<td>CRW 3311</td>
<td>Structure of Verse</td>
<td></td>
</tr>
<tr>
<td>CRW 4122</td>
<td>Advanced Fiction Writing Workshop</td>
<td></td>
</tr>
<tr>
<td>CRW 4123</td>
<td>Science Fiction Writing</td>
<td></td>
</tr>
</tbody>
</table>

**Required Course**  
- CRW 3200 Advanced Poetry Writing Workshop 3 hrs

**Other Requirements**  
- A grade of "C" is required in each course used to satisfy the minor.  
- "D" or "S" grades from other institutions are not accepted.  
- At least 15 hours used in the minor must be earned at UCF within the department.  
- No credit by exam (CLEP, TSD, Military credit) may be used.  
- Internship or Independent Study credit can not be used toward the minor.

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**ENVIRONMENTAL STUDIES: Minor**  
College of Arts and Sciences  
Department of Philosophy, HFA 411  
liveoak@ucf.edu  
Director: Dr. Ronnie Hawkins, (407) 823-6514

The Environmental Studies minor degree is an interdisciplinary program that assists students prepare for a diverse set of academic endeavors and careers. It delivers the tradition of a liberal arts education with the rigor of the natural and social sciences, providing the introspection and artistic presentation of the humanities with the inquisitiveness that we share concerning our environment.

**Credit Hour Requirements**  
21 hours  
- **Required Course**  
  - IDS 3XXX Interdisc Environmental Studies 3 hrs  
- **Science & Environmental Electives** (9 hrs)  
  - **Natural Sciences**  
    | Course                                | Title                                    |
    |---------------------------------------|------------------------------------------|
    | BSC 1030 &L  | Biology and Environment + lab            |
    | BSC 2010C   | General Biology                          |
    | BSC 2011C   | Biological Diversity                     |
    | BOT 3154C   | Local Flora                              |
    | BOT 4680C   | Florida Wildflowers                      |
    | BOT 3800    | Ethnobotany                              |
    | BOT 3820C   | Plants and the Urban Environment         |
    | BOT 4303C   | Plant Kingdom                            |
    | BOT 4686C   | Conservation and Management of Native Plants |
    | BOT 5623C   | Plant Geography and Ecology              |
    | BOT 4713C   | Plant Taxonomy                           |
    | BSC 4XXXC   | Marine Biology                           |
    | BSC 5935    | Trends in Marine Biology                 |
    | PCB 3043    | Principles of Ecology                    |
    | PCB 3043L   | Principles of Ecology Laboratory         |
    | PCB 3442    | Florida Aquatic Ecology                  |
    | PCB 4302C   | Physiochemical Limnology                 |
    | PCB 4303C   | Biological Limnology                     |
    | PCB 4683C   | Population Biology and Evolution         |
    | PCB 5045C   | Conservation Biology                     |
    | PCB 5326C   | Ecosystems of Florida                    |
    | PCB 5485    | Models in Ecology                        |
    | PCB XXXX    | Landscape Ecology                        |
    | CHM 3120C   | Analytical Chemistry                     |
    | HSC 4500    | Epidemiology                             |

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FILM-SCREENWRITING: Minor
College of Arts and Sciences
Film Program, COM 217
film@ucf.edu
Mr. A. Major, 823-3456

Entrance Requirement
› Submission of writing portfolio
› Acceptance by Film committee

Credit Hour Requirements
24 hours

Required Courses
24 hours
FIL 2400 History of Motion Pictures 3 hrs
FIL 3006 Art of the Cinema 3 hrs
FIL 3401 Film History to 1945 3 hrs
FIL 3402 Film History from 1945 to Present 3 hrs
FIL 3503 Film Theory and Criticism I 3 hrs
FIL 3XXX Film Theory and Criticism II 3 hrs

Restricted Electives
6 hrs
FIL 3309 Women in Film
FIL 3520 Italian Film
FIL 3521 French Film
FIL 3522 German Film
FIL 3922 Film Colloquium
FIL 3XXX Black Cinema
FIL 4504 Motion Picture Genre/Aesthetics

Other Requirements
› A grade of "B" is required in all courses used to satisfy the minor.
› "C" or "S" grades from other institutions are not accepted.
› At least 12 hours must be earned at UCF within the department.
› No credit by exam (CLEP, TSD, Military credit) may be used.
› Internship or Independent Study credit can not be used toward the minor.

FILM-CINEMA STUDIES: Minor
College of Arts and Sciences
Film Program, COM 217
film@ucf.edu
Mr. A. Major, 823-3456

Other Requirements
› A GPA of 2.0 is required in all courses used to satisfy the minor.
› 18 hours must be taken at the upper division.
› "D" or "S" grades from other institutions are not accepted.
› At least 15 hours used in the minor must be earned at UCF.
› No credit by exam (CLEP, TSD, Military credit) may be used.
› Internship or Independent Study require prior approval to be used toward the minor.

FRENCH: Minor
College of Arts and Sciences
Foreign Languages and Literatures, FA 523
School of Social Work will plan fieldwork to complete this program. The program may be of particular interest to students who are majoring in health sciences, psychology, social work, nursing, or sociology. Other students, such as those majoring in music, music education, physical education, or art education may also find the program valuable.

Credit Hour Requirements 15 hours
Required Courses
GEY 3930/SOW 3930 Gerontology an 
Interdisciplinary Overview 3 hrs
XXX 4941 Internship 120 hours 3 hrs
Electives
(9 hrs)
* A GPA of 2.0 is required in all courses used to satisfy the minor.
* "D" or "S" grades from other institutions are not accepted.
* At least 12 hours used in the certificate must be earned at UCF within the department.
* No credit by exam (CLEP, TSD, Military credit) may be used.
* Internship or Independent Study credit can not be used toward the minor without departmental permission.

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GERONTOLOGY: Minor
College of Health and Public Affairs
School of Social Work, HPA 204
Ms. Margaret Sauer, (407) 823-2114
E-mail: msauer@pegasus.cc.ucf.edu

Credit Hour Requirements 18 hours
Required Courses
GEY 3930/SOW 3930 Gerontology an 
Interdisciplinary Overview 3 hrs
XXX 4941 Internship 120 hours 3 hrs
Electives
(6 hrs)
* Select four (4) additional courses from the following: A maximum of two courses in their major and at least two (2) courses must be outside their college.
* HSA 4220 Long Term Care 3 hrs
* HSA 3210 Long Term Administration 3 hrs
* NUR 4286 Gerontologic Nursing 3 hrs
* NUR 4932 A Multidisciplinary Approach to End of Life Issues 3 hrs
+ DEP 3464 Psychology of Aging 3 hrs
+ EXP 3930 Human Factors in Aging 3 hrs
* HSC 4564 Health Care Needs of the Elderly 3 hrs
* SYP 4730 Sociology of Aging 3 hrs
* SYP 4734 Minority Aging 3 hrs
* SOW 4645 Social Sciences for the Elderly 3 hrs
+ Colleges of Health & Public Affairs courses
+ College of Arts & Sciences courses

Other Requirements
* A GPA of 2.0 is required in all courses used to satisfy the minor.
* "D" or "S" grades from other institutions are not accepted.
* At least 12 hours used in the certificate must be earned at UCF within the department.
* No credit by exam (CLEP, TSD, Military credit) may be used.
* Internship or Independent Study credit can not be used toward the minor.

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GERMAN: Minor
College of Arts and Sciences
Foreign Languages and Literatures, FA 523
E-mail: foreignlanguage@ucf.edu
Dr. Bernard Decker, (407) 823-2472

Credit Hour Requirements 18 hours
Restricted Electives
* Select 6 courses in German, including the 3000-level advanced oral communication and composition courses.
* A native or near-native speaker must substitute an alternate upper division course for the advanced oral communication course. Approval of a departmental advisor is required prior to registration.

Other Requirements
* A GPA of 2.0 is required in all courses used to satisfy the minor.
* "D" or "S" grades from other institutions are not accepted.
* At least 15 hours used in the minor must be earned at UCF within the department.
* No credit by exam (CLEP, TSD, Military credit) may be used.
* Internship or Independent Study credit can not be used toward the minor without departmental permission.

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GERONTOLOGY CERTIFICATION PROGRAM: Certificate
College of Health and Public Affairs
School of Social Work, HPA 204
Ms. Margaret Sauer, (407) 823-2114
E-mail: msauer@pegasus.cc.ucf.edu

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. If currently majoring in an area of certificate coursework, the student should work with their department to coordinate fieldwork. Otherwise, the
HEALTH SCIENCES: Minor
College of Health and Public Affairs
Department of Health Professions and Physical Therapy, TR 534
Mr. Timothy Worrell, (407) 823-2214
E-mail: worrell@pegasus.cc.ucf.edu

Credit Hour Requirements 18 hours
Required Courses
HSA 3122 U.S. Health Care Systems 3 hrs
HUN 2002 Modern Concepts of Nutrition 3 hrs
HSC 3110C Medical Self Assessment 3 hrs
Restricted Upper Division Electives (9 hrs)
9 additional hours of upper-division courses in the Health Professions department.

Other Requirements
- Majors may not count courses presently required in a department program.
- A GPA of 2.5 is required in all coursework, and a minimum grade of "C" is required in all Health Professions courses.
- "D" or "S" grades from other institutions are not accepted.
- Internship or Independent Study credit may not be used toward the minor.

HISTORY: Minor
College of Arts and Sciences
Department of History, FA 551
history@ucf.edu
Dr. Richard Crepeau, (407) 823-2224

Credit Hour Requirements
18 hours
Restricted Upper Division Electives (15 hrs)
Five upper division courses taught within the History Department
History Elective (3 hrs)
Any course taught within the History Department

Other Requirements
- A grade of "C" or better is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- Internship or Independent Study credit can not be used toward the minor.

HOSPITALITY MANAGEMENT: Minor
-for Business Majors
College of Business
Department of Hospitality Management, BA 409
Dr. Taylor Ellis, (407) 823-2023

Credit Hour Requirements 18 hours
Required Courses
HFT 3540 Guest Services Management I 3 hrs
HFT 4752 Guest Services Management II 3 hrs
FSS 3223 Hospitality Enterprises Management 3 hrs
HFT 4210 Hospitality Enterprises Management II 3 hrs
HFT 4250C Hospitality Operations 3 hrs
HFT 4717 Hospitality Operations II 3 hrs

Other Requirements
- A GPA of 2.5 is required in all coursework, and a minimum grade of "C" is required in all Health Services courses.
- "D" or "S" grades from other institutions are not accepted.
- At least 12 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit may be used.
HOSPITALITY MANAGEMENT:  
Minor— for Non-Business Majors  
College of Business  
Department of Hospitality Management, BA 409  
Dr. Taylor Ellis, (407) 823-2023

Credit Hour Requirements  
18 hours

Required Courses
- HFT 3540 Guest Services Management I (3 hrs)
- HFT 4752 Guest Services Management II (3 hrs)
- HFT 4210 Hospitality Enterprises Management II (3 hrs)
- HFT 4250C Hospitality Operations (3 hrs)
- HFT 4717 Hospitality Operations II (3 hrs)
- HFT 3XXX Hospitality Reporting and Analysis (3 hrs)

Other Requirements
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 12 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

HUMANITIES-MULTICULTURAL:
Minor
College of Arts and Sciences  
Department of Philosophy, FA 411  
philosophy@ucf.edu  
Dr. John Riser, (407) 823-2273

An interdisciplinary, multicultural minor focusing on several cultural areas, as well as on critical theory and gender studies. Students interested in the Liberal Arts major will find this minor particularly helpful. Courses are to be selected in consultation with a departmental advisor.

Credit Hour Requirements
Select 9 hours in three areas below, or 27 hours
Select 12 hours in two areas below 24 hours

Selection areas
- Asian culture or philosophy  
  HUM 3320 Contemporary Multicultural Studies  
  HUM 3401 Asian Humanities  
  ASH 4404 China in 19th and 20th Centuries  
  ASH 4442 Modern Japan, 19th and 20th Centuries  
  ANT 3360 Peoples of the Far East  
  ANT 3363 Anthropology of Japan
- European History, Literature or Philosophy  
  HUM 3431 Ancient World: Greece  
  HUM 4301 The Classical Ideal  
  HUM 4303 The Spiritual Ideal  
  EUH 3122 Medieval Society and Civilization  
  EUH 3142 Renaissance and Reformation  
  EUH 3235 Romanticism and Realism  
  LIT 3082 Continental European Fiction Since 1900  
  LIT 3313 Science Fiction

INTERNATIONAL BUSINESS:  
Minor— for Business Majors  
College of Business  
Office of Student Support, BA 240  
Dr. John Cheney, (407) 823-5756

Credit Hour Requirements  
18 hours

Required Courses
- (9 hrs)
  GEB 4361 Business in the International Envt 3 hrs
  ECO 3703 International Economics 3 hrs
  FIN 4604 International Financial Management 3 hrs

Restricted Elective
- (3 hrs)
  MAR 4156 International Marketing
  MAN 4600 International Management

Electives
- (6 hrs)
  ANT 3422 People of the World  
  ECS 4003 Comparative Economic Systems  
  ECS 4013 Economic Development  
  GEO 3470 World Political Geography  
  INR 4035 International Political Economy  
  INR 4401 International Law I  
  INR 4224 Contemporary International Politics of Asia  
  INR 4243 International Politics of Latin America  
  Special Topics Seminars in International Business;
**ITALIAN: Minor**

College of Arts and Sciences
Foreign Languages and Literatures, FA 523
foreignlanguage@ucf.edu
Dr. Bernard Decker, (407) 823-2472

Credit Hour Requirements 18 hours

**Required Courses**
- COM 3311 Communication Research Methods
- SPC 3301 Interpersonal Communication

**Restricted Electives**
- Select 6 courses in Italian, including the 3000-level advanced oral communication and composition courses.
- A native or near-native speaker must substitute an alternate upper division course for the advanced oral communication course. Approval of a departmental advisor is required prior to registration.

Other Requirements
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

**JUDAIC STUDIES: Minor, Certificate**

College of Arts and Sciences
Judaic Studies Program, FA 201
Dr. Moshe Pelli, (407) 823-5039

The Interdisciplinary Program in Judaic Studies offers both a Minor and a Certificate. The Program cooperates with the departments of English, Foreign Languages, History, Philosophy, Political Science, and Sociology/Anthropology, and with the Liberal Studies and Women's Studies Programs. Students who wish to minor in Judaic Studies are encouraged to meet with the program director.

The certificate in Judaic Studies will be awarded to students completing 15 credits in Judaic Studies.

Credit Hour Requirements 18-26 hours

Required Courses (or proficiency)
- HBR 1120 Elem Modern Hebrew Lang and Cult I
- HBR 1121 Elem Modern Hebrew Lang and Cult II

- Internship or Independent Study credit can not be used toward the minor without departmental permission.

**INTERPERSONAL COMMUNICATION: Minor**

College of Arts and Sciences
School of Communication, COM 288
communication@ucf.edu
Dr. K. Phillip Taylor, (407) 823-2681

Credit Hour Requirements 21 hours

**Required Courses**
- (6 hrs)
  - COM 3311 Communication Research Methods
  - SPC 3301 Interpersonal Communication

**Restricted Electives**
- (15 hrs)
  - COM 3011 Communication and Human Relations
  - SPC 3425 Group Interaction and Decision-Making
  - SPC 4331 Nonverbal Communication
  - SPC 4350 Studies in Listening
  - SPC 4540 Attitudes and Communication
  - COM 4461 Intercultural Communication
  - COM 4462 Conflict Management

Other Requirements
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the School of Communication.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

**JAZZ STUDIES: Certificate**

College of Arts and Sciences
Department of Music, FA 205
music@ucf.edu
Dr. Lee Eubank, (407) 823-2869

This certificate is designed for undergraduate students majoring in music who wish to devote time to specific coursework in each of these areas. This is only a component of the B.A. or B.Music degree, provided that the student works with an advisor in the program.

Admission Requirement
- Student must satisfactorily audition for the Department of Music.

Credit Hour Requirements 13 hours

**Required Courses**
- (13 hrs)
  - MUT 3170 Jazz Theory I 2 hrs
  - MUT 3171 Jazz Theory II 2 hrs
  - MUT 3641 Jazz Improvisation I 2 hrs
  - MUT 3642 Jazz Improvisation II 2 hrs
  - MUL 2016 Evolution of Jazz 3 hrs
  - MUS 4932 Independent Study in Jazz 2 hrs

Other Requirements
- Must complete all course and non-course requirements (recitals and proficiency examinations) of the Music major in order to qualify for the certificate within the degree.
- A GPA of 2.0 is required in all music courses attempted, whether or not used to satisfy the certificate.
- "D" or "S" grades from other institutions are not accepted.
- At least 9 hours used in the certificate must be earned at UCF within the Department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the certificate.

**JUDICIAL STUDIES: Certificate**

College of Arts and Sciences
Department of Music, FA 205
music@ucf.edu
Dr. Lee Eubank, (407) 823-2869

This certificate is designed for undergraduate students majoring in music who wish to devote time to specific coursework in each of these areas. This is only a component of the B.A. or B.Music degree, provided that the student works with an advisor in the program.

Admission Requirement
- Student must satisfactorily audition for the Department of Music.

Credit Hour Requirements 13 hours

**Required Courses**
- (13 hrs)
  - MUT 3170 Jazz Theory I 2 hrs
  - MUT 3171 Jazz Theory II 2 hrs
  - MUT 3641 Jazz Improvisation I 2 hrs
  - MUT 3642 Jazz Improvisation II 2 hrs
  - MUL 2016 Evolution of Jazz 3 hrs
  - MUS 4932 Independent Study in Jazz 2 hrs

Other Requirements
- Must complete all course and non-course requirements (recitals and proficiency examinations) of the Music major in order to qualify for the certificate within the degree.
- A GPA of 2.0 is required in all music courses attempted, whether or not used to satisfy the certificate.
- "D" or "S" grades from other institutions are not accepted.
- At least 9 hours used in the certificate must be earned at UCF within the Department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the certificate.

**JUDICIAL STUDIES: Certificate**

College of Arts and Sciences
Judaic Studies Program, FA 201
Dr. Moshe Pelli, (407) 823-5039

The Interdisciplinary Program in Judaic Studies offers both a Minor and a Certificate. The Program cooperates with the departments of English, Foreign Languages, History, Philosophy, Political Science, and Sociology/Anthropology, and with the Liberal Studies and Women's Studies Programs. Students who wish to minor in Judaic Studies are encouraged to meet with the program director.

The certificate in Judaic Studies will be awarded to students completing 15 credits in Judaic Studies.

Credit Hour Requirements 18-26 hours

Required Courses (or proficiency)
- (0-8 hrs)
  - HBR 1120 Elem Modern Hebrew Lang and Cult I
  - HBR 1121 Elem Modern Hebrew Lang and Cult II

- Internship or Independent Study credit can not be used toward the minor without departmental permission.
Restricted Upper Division Electives (18 hrs)

Jewish History
- JST 3144 Dead Sea Scrolls
- JST 3401 The Jewish People I
- JST 3402 The Jewish People II
- JST 3550 Introduction of Modernism into Judaism
- JST 3701 History of the Holocaust

Literature
- HBT 3220 The Israeli Short Story in Translation
- JST 3100 The Hebrew Creative Mind
- JST 3751 History of the Holocaust

Culture
- JST 3820 Modern Hebrew Culture
- JST 3810 The Jewish National Movement
- JST 3XXX Modern Jewish Experience

Other courses, including special topics, with the approval of the Director

A grade of "C" or better is required in all courses used to satisfy the minor.

"D" or "S" grades from other institutions are not accepted.

At least 12 hours used in the minor must be earned at UCF.

No credit by exam (CLEP, TSD, Military credit) may be used.

Internship or Independent Study credit can not be used toward the minor.

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LATIN AMERICAN & IBERIAN AREA STUDIES: Minor

College of Arts and Sciences
Foreign Languages and Literatures, FA 505
foreignlanguage@ucf.edu
Dr. Jose Fernandez, (407) 823-2573

The minor provides students with a background that can be applied to careers in teaching, government, business, non-profit organizations, as well as international, inter-American and Peninsular Affairs.

Credit Hour Requirements 18 hours

Admission Requirement
Admission by interview with the program Director

Required Skills
Students must complete the introductory language sequence in Spanish or show proficiency

Restricted Electives (18 hrs)
18 semester hours taken from the following, with 12 of the hours in three different disciplines and at least 6 hours in one. Courses must be selected in consultation with the Director

Anthropology:
- ANT 3168 Maya Archaeology
- ANT 3332 People and Cultures of Latin America
- ANT 3163 Mesoamerican Archaeology
- ANT 4824 Advanced Archaeological Fieldwork
- ANT 4180 Seminar in Laboratory Analysis

Art:
- ARH 4655 Meso American Art

Economics:
- ECO 2013 Principles of Economics I
- ECO 3703 International Economics

Foreign Language:
- SPN 2230 Intermediate Spanish Lang & Civ I

SPN 2231 Intermediate Spanish Lang & Civ II
any upper division Spanish Language, Literature, Business or Civilization course

History:
- EUH 3315 History of Modern Spain
- LAH 3130 Latin American History I
- LAH 3200 Latin American History II
- LAH 3400 History of Mexico and Central America
- LAH 3470 History of the Caribbean

Political Science:
- CPO 4303 Comparative Latin American Politics
- INR 4243 International Politics of Latin America
- CPO 3034 Politics of Developing Areas

Required Thesis
A thesis must be approved before graduation

Other Requirements
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 18 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor without departmental permission.

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LEGAL STUDIES: Minor

College of Health and Public Affairs
Department of Criminal Justice and Legal Studies, HPA 311
Dr. Robert Remis, (407) 823-2603
E-mail: rremis@pegasus.cc.ucf.edu

Credit Hour Requirements 21 hours

Required Courses (3 hrs)
- PLA 3013 Law and the Legal System

Restricted Upper Division Electives (15 hrs)
15 semester hours of legal studies courses selected with the aid of an advisor.

Restricted Electives (3 hrs)
3 semester hours of law-related courses selected with the aid of an advisor.

Other Requirements
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 18 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor without departmental permission.

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MAGAZINE JOURNALISM: Minor

College of Arts and Sciences
School of Communication, COM 258
journalism@ucf.edu
Dr. Tim O'Keefe, (407) 823-2681

Prerequisites
- Grammar and Keyboard proficiency test
MARKETING: Minor
College of Business
Department of Marketing, BA 353
Dr. Ronald Michaels, (407) 823-2875

Credit Hour Requirements 18 hours
Required Courses (12 hrs)
- MAR 3023 Marketing 3 hrs
- MAR 3503 Customer Behavior 3 hrs
- MAR 3613 Marketing Analysis & Research 3 hrs
- MAR 3641 Marketing Intelligence 3 hrs
- MAR 4803 Marketing Management 3 hrs

Restricted Electives (6 hrs)
- Select two (2)
  - MAR 3323 Integrated Marketing Communication
  - MAR 3391 Professional Selling
  - MAR 3613 Marketing Analysis & Research
  - MAR 3403 Salesforce Management
  - MAR 4156 International Marketing
  - MAR 4231 Retail Management
  - MAR 4711 Sports Marketing
  - MAR 4712 Healthcare Marketing
  - MAR 4804 Marketing Strategy
  - MAR 4841 Services Marketing

Other Requirements
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the School of Communication.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship, Independent Study, or Directed Research credit can not be used toward the minor.

MASS COMMUNICATION: Minor
College of Arts and Sciences
School of Communication, COM 228
communication@ucf.edu
Dr. Mike Meeske (407) 823-2681

Credit Hour Requirements 18 hours
Restricted Electives (18 hrs)
- ADV 3000 Principles of Advertising
- FIL 2400 History of Motion Pictures
- FIL 3410 History of Animated Films
- JOU 3004 History of American Journalism
- MMC 4200 Mass Communication Law
- PUR 4000 Public Relations
- RTV 3000 Foundations of Broadcasting
- RTV 4403 Radio, Television and Society
- VIC 3001 Visual Communication

Other Requirements
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the School of Communication.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship, Independent Study, or Directed Research credit can not be used toward the minor.
**MILITARY SCIENCE: Minor**
College of Engineering
Department of Military Science, BLDG 501
LTC John J. Ruzich, (407) 823-2430

Credit Hour Requirements

**Required Courses**
- MIS 3301 The Small Unit Leader 4 hrs
- MIS 3410 Leadership Responsibilities 4 hrs
- MIS 4421 Military Law 4 hrs
- MIS 4430 Advanced Military Science 4 hrs
- AMH 3540 Military History 3 hrs

Other Requirements
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

**MOLECULAR BIOLOGY AND MICROBIOLOGY: Minor**
College of Health and Public Affairs
Department of Molecular Biology and Microbiology, BIO 306
Dr. Robert Gennaro, (407) 823-5932
E-mail: gennaro@pegasus.cc.ucf.edu

Credit Hour Requirements

**Required Courses**
- BSC 2311 General Biology 4 hrs
- PCB 3233 Immunology 3 hrs
- PCB 3233L Immunology Laboratory 1 hr
- PCB 3523 Molecular Biology I 3 hrs
- PCB 4524 Molecular Biology II 3 hrs
- BSC 3404C Quantitative Biological Methods 4 hrs

**Restricted Electives**
- At least two courses from the Restricted Elective category of the baccalaureate curriculum.

Other Requirements
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

**MUSIC: Minor**
College of Arts and Sciences
Department of Music, FA 205
music@ucf.edu
Dr. Lee Eubank, (407) 823-2869

Credit Hour Requirements

**Admission Requirement**
A successful audition on the student's principal instrument or voice

**Required Courses**
- MUT 1111 Music Theory IA 2 hrs
- MUT 1112 Music Theory IB 2 hrs
- MUT 1241 Ear Training and Sight Singing IA 1 hr
- MUT 1242 Ear Training and Sight Singing IB 1 hr
- MUL 2010 Enjoyment of Music 3 hrs
- major ensemble- 4 semesters 4 hrs
  (credit must spread over at least 4 separate semesters)
- Performance level I-2 semesters 4 hrs
- Performance level II-2 semesters 4 hrs
  (on the same performance medium)
- MUS 1010 Music Forum 0 hrs
Other Requirements
- Two semesters of a major performing organization and two semesters of performance level II, must be completed at UCF
- A GPA of 2.0 is required in all music courses attempted, whether or not used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 12 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

*MUSIC COMPOSITION: Certificate*
College of Arts and Sciences
Department of Music, FA 205
music@ucf.edu
Dr. Lee Eubank, (407) 823-2869

This certificate is designed for undergraduate students majoring in music who wish to devote time to specific coursework in each of these areas. This is only a component of the B.A. or B.Music degree, provided that the student works with an advisor in the program.

Admission Requirement
Student must satisfactorily audition for the Department of Music.

Credit Hour Requirements

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUC 3311 MIDI Sequencing</td>
<td>3 hrs</td>
</tr>
<tr>
<td>MUT 4344 Seminar in Music Arranging</td>
<td>1 hr</td>
</tr>
<tr>
<td>MUC 1101 Composition I</td>
<td>1 hr</td>
</tr>
<tr>
<td>MUC 3104 Composition II</td>
<td>2 hrs</td>
</tr>
<tr>
<td>MUC 3401 Counterpoint</td>
<td>3 hrs</td>
</tr>
<tr>
<td>MUS 4932 Independent Study in Composition</td>
<td>2 hrs</td>
</tr>
</tbody>
</table>

Other Requirements
- Must complete all course and non-course requirements (recitals and proficiency examinations) of the Music major in order to qualify for the certificate within the degree.
- A GPA of 2.0 is required in all music courses attempted, whether or not used to satisfy the certificate.
- "D" or "S" grades from other institutions are not accepted.
- At least 9 hours used in the certificate must be earned at UCF within the Department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the certificate.

*MUSIC TECHNOLOGY: Certificate*
College of Arts and Sciences
Department of Music, FA 205
music@ucf.edu
Dr. Lee Eubank, (407) 823-2869

This certificate is designed for undergraduate students majoring in music who wish to devote time to specific coursework in each of these areas. This is only a component of the B.A. or B.Music degree, provided that the student works with an advisor in the program.

Admission Requirement
Student must satisfactorily audition for the Department of Music.

Credit Hour Requirements

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUC 3311 MIDI Sequencing I</td>
<td>3 hrs</td>
</tr>
<tr>
<td>MUC 4441 MIDI Sequencing II</td>
<td>3 hrs</td>
</tr>
<tr>
<td>MUC 4347 Digital Notation</td>
<td>3 hrs</td>
</tr>
<tr>
<td>MUC 1101 Composition I</td>
<td>1 hr</td>
</tr>
<tr>
<td>MUN 2023 Synthesizer Ensemble</td>
<td>1 hr</td>
</tr>
</tbody>
</table>

Other Requirements
- Must complete all course and non-course requirements (recitals and proficiency examinations) of the Music major in order to qualify for the certificate within the degree.
- A GPA of 2.0 is required in all music courses attempted, whether or not used to satisfy the certificate.
- "D" or "S" grades from other institutions are not accepted.
- At least 9 hours used in the certificate must be earned at UCF within the Department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the certificate.

*NETWORK COMPUTING: Certificate*
College of Arts and Sciences
School of Computer Science, CSB 201
computerscience@ucf.edu
Dr. Ron Dutton, (407) 823-2341

The certificate program in Network Computing is designed for students who wish to obtain a practical or working knowledge of computers with a specialization in computer networks. This certificate is not a component of the CSAB accredited B.S. degree from UCF.

Credit Hour Requirements

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COP 2500C Concepts in Computer Science</td>
<td>4 hrs</td>
</tr>
<tr>
<td>CGS 3280/3281/3282 Networks Sequence</td>
<td>3 hrs</td>
</tr>
<tr>
<td>CGS 2504C/2541C/2542C Database Sequence</td>
<td>3 hrs</td>
</tr>
<tr>
<td>CGS 3163/3164 Distributed Systems Sequence</td>
<td>3 hrs</td>
</tr>
<tr>
<td>CGS 3266/3267/3268 Architecture Sequence</td>
<td>3 hrs</td>
</tr>
<tr>
<td>CGS 3761/3762 Operating Systems Sequence</td>
<td>3 hrs</td>
</tr>
</tbody>
</table>

Restricted Electives

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 2516C/2517C/2518C Spreadsheet Sequence</td>
<td>3 hrs</td>
</tr>
<tr>
<td>CGS 3170C/3171C Internet Sequence</td>
<td>3 hrs</td>
</tr>
<tr>
<td>CGS 2580C/2581C/2582C Word Processing Sequence</td>
<td>3 hrs</td>
</tr>
</tbody>
</table>

Any language syntax courses such as Pascal, C, Java (COP 2213, COP 2223, etc.)

Any course listed above, but otherwise not used, may be applied towards this certificate.

May not include independent studies and internships.

Other Requirements
- A minimum grade of "C" is required in each course.
- "D" or "S" grades from other institutions are not accepted.
- At least 12 hours used in the minor must be earned at UCF within
the School of Computer Science.

- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit cannot be used toward the minor.

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ORGANIZATIONAL COMMUNICATION: Minor
College of Arts and Sciences
School of Communication, COM 258
communication@ucf.edu
Dr. K. Phillip Taylor, (407) 823-2681

Credit Hour Requirements

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>(6 hrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 3120</td>
<td>Organizational Communication 3 hrs</td>
</tr>
<tr>
<td>COM 3311</td>
<td>Communication Research Methods 3 hrs</td>
</tr>
</tbody>
</table>

Restricted Upper Division Electives (15 hrs)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 3011</td>
<td>Communication and Human Relations</td>
</tr>
<tr>
<td>COM 3111</td>
<td>Business and Professional Communication</td>
</tr>
<tr>
<td>SPC 3425</td>
<td>Group Interaction and Decision-Making</td>
</tr>
<tr>
<td>SPC 3445</td>
<td>Leadership Through Oral Communication</td>
</tr>
<tr>
<td>COM 4461</td>
<td>Intercultural Communication</td>
</tr>
<tr>
<td>COM 4462</td>
<td>Conflict Management</td>
</tr>
</tbody>
</table>

Other Requirements

- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the School of Communication.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit cannot be used toward the minor.

PHILOSOPHY: Minor
College of Arts and Sciences
Department of Philosophy, FA 411
philosophy@ucf.edu
Dr. John Rizer, (407) 823-2273

The Philosophy minor is intended to provide a limited, yet substantive, introduction to representative problems and patterns of reasoning in philosophy. Students, in consultation with a departmental advisor, will select courses in accordance with the distributions listed below.

Credit Hour Requirements

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>(6 hrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHI 2011</td>
<td>Philosophical Reasoning</td>
</tr>
<tr>
<td>PHI 2101</td>
<td>Critical Thinking</td>
</tr>
<tr>
<td>PHI 3130</td>
<td>Formal Logic I</td>
</tr>
<tr>
<td>History of Philosophy</td>
<td>(6 hrs)</td>
</tr>
<tr>
<td>PHI 3041</td>
<td>Russian Philosophy</td>
</tr>
<tr>
<td>PHI 3100</td>
<td>Ancient Philosophy</td>
</tr>
<tr>
<td>PHI 3200</td>
<td>Medieval Philosophy</td>
</tr>
<tr>
<td>PHI 3400</td>
<td>Modern Continental Philosophy</td>
</tr>
<tr>
<td>PHI 3402</td>
<td>Modern British Philosophy</td>
</tr>
<tr>
<td>PHI 3601</td>
<td>Contemporary Continental Philosophy</td>
</tr>
<tr>
<td>PHI 3620</td>
<td>Contemporary Analytic Philosophy</td>
</tr>
</tbody>
</table>

Values and Society (6 hrs)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHI 3400</td>
<td>Philosophy of Law</td>
</tr>
<tr>
<td>PHI 2600</td>
<td>Ethics</td>
</tr>
<tr>
<td>PHI 3640</td>
<td>Environmental Ethics</td>
</tr>
<tr>
<td>PHI 3670</td>
<td>Ethical Theory</td>
</tr>
<tr>
<td>PHI 3700</td>
<td>Philosophy of Religion</td>
</tr>
<tr>
<td>PHI 3800</td>
<td>Aesthetics</td>
</tr>
<tr>
<td>PHI 3803</td>
<td>Philosophy and Creativity</td>
</tr>
<tr>
<td>PHM 3100</td>
<td>Freedom and Justice</td>
</tr>
<tr>
<td>PHM 3123</td>
<td>Feminist Theories</td>
</tr>
<tr>
<td>PHP 3786</td>
<td>Existentialism</td>
</tr>
</tbody>
</table>

Philosophical Analysis (6 hrs)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COT 3100C</td>
<td>Introduction to Discrete Structure</td>
</tr>
<tr>
<td>MHF 2300</td>
<td>Logic and Proof in Mathematics</td>
</tr>
<tr>
<td>PHI 3131</td>
<td>Formal Logic II</td>
</tr>
<tr>
<td>PHI 3320</td>
<td>Philosophy of Mind</td>
</tr>
<tr>
<td>PHI 4360</td>
<td>Theories of Knowledge</td>
</tr>
<tr>
<td>PHI 4400</td>
<td>Philosophy of Science</td>
</tr>
<tr>
<td>PHI 4420</td>
<td>Philosophy of Social Science</td>
</tr>
<tr>
<td>PHI 4500</td>
<td>Metaphysics</td>
</tr>
</tbody>
</table>

OTHER REQUIREMENTS

- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit cannot be used toward the minor.
- Any substitutions must be approved by the department prior to being taken.

PHYSICS: Minor
College of Arts and Sciences
Department of Physics, HPB 310
physics@ucf.edu
Dr. Ralph Llewellyn, (407) 823-2325

Credit Hour Requirements

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>(11 hrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 2048</td>
<td>Physics for Eng and Sci I 3 hrs</td>
</tr>
<tr>
<td>PHY 2048L</td>
<td>Physics Laboratory for Eng and Sci I 1 hr</td>
</tr>
<tr>
<td>PHY 2049</td>
<td>Physics for Eng and Sci II 3 hrs</td>
</tr>
<tr>
<td>PHY 2049L</td>
<td>Physics Laboratory for Eng and Sci II 1 hr</td>
</tr>
<tr>
<td>PHY 3101</td>
<td>Physics for Eng and Sci III 3 hrs</td>
</tr>
</tbody>
</table>

Restricted Upper Division Electives (9 hrs)
Selected from upper-level Physics lecture or laboratory courses appropriate for majors

Other Requirements

- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 12 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit cannot be used toward the minor.

* * * * * *

POLITICAL SCIENCE: Minor
College of Arts and Sciences
Department of Political Science, FA 415
politics@ucf.edu
Dr. Robert Bledsoe, (407) 823-2608

Credit Hour Requirements
18 hours
Required Courses (6 hrs)
PO2 2041 American National Government 3 hrs
PO2 4284 Judicial Process and Politics 3 hrs
Restricted Elective (3 hrs)
INR 4401 International Law I
INR 4402 International Law II
PO2 4603 American Constitutional Law
PO2 4604 American Constitutional Law II
Restricted Upper Division Electives (9 hrs)
Three Upper Division Political Science Courses (selected with the aid of a departmental advisor)
Only 3 hours of POS 4941 (Internship) may be counted

Other Requirements
A 2.0 GPA is required in all courses used to satisfy the minor.
"D" or "S" grades from other institutions are not accepted.
At least 12 hours used in the minor must be earned at UCF within the department.
No credit by exam (CLEP, TSD, Military credit) may be used.
Internship or Independent Study credit can not be used toward the minor without departmental permission.

POLITICAL SCIENCE/PRELAW: Minor
College of Arts and Sciences
Department of Political Science, FA 415
politics@ucf.edu
Dr. Roger Handberg, (407) 823-2608

Credit Hour Requirements 18 hours
Required Courses (6 hrs)
PO2 2041 American National Government 3 hrs
PO2 4284 Judicial Process and Politics 3 hrs
Restricted Elective (3 hrs)
INR 4401 International Law I
INR 4402 International Law II
PO2 4603 American Constitutional Law
PO2 4604 American Constitutional Law II
Restricted Upper Division Electives (9 hrs)
Three Upper Division Political Science Courses (selected with the aid of a departmental advisor)
Only 3 hours of POS 4941 (Internship) may be counted

Other Requirements
A 2.0 GPA is required in all courses used to satisfy the minor.
"D" or "S" grades from other institutions are not accepted.
At least 12 hours used in the minor must be earned at UCF within the department.
No credit by exam (CLEP, TSD, Military credit) may be used.
Internship or Independent Study credit can not be used toward the minor without departmental permission.

PSYCHOLOGY: Minor
College of Arts and Sciences
Psychology Department, PH 302
psychology@ucf.edu
Dr. Jack McGuire, (407) 823-2216

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.

Credit Hour Requirements 22 hours
Required Courses (10 hrs)
PSY 2013 General Psychology 3 hrs
STA 2014 Principles of Statistics 3 hrs
or
STA 2023 Statistical Methods I 4 hrs
Restricted Electives (12 hrs)
11 hours of Psychology courses, selected in consultation with the departmental advisor.

Other Requirements
A GPA of 2.0 is required in all courses used to satisfy the minor.
"D" or "S" grades from other institutions are not accepted.
At least 12 hours used in the minor must be earned at UCF within the department.
No credit by exam (CLEP, TSD, Military credit) may be used.
Internship or Independent Study credit can not be used toward the minor.

PUBLIC ADMINISTRATION: Minor
College of Health and Public Affairs
Department of Public Administration, HPA 343
Dr. Xiao Hu Wang, (407) 823-2604
E-mail: xwang@mail.ucf.edu

Credit Hour Requirements 18 hours
Required Courses (18 hrs)
PAD 3003 Public Admin in American Society 3 hrs
PAD 4034 The Administration of Public Policy 3 hrs
PAD 4104 Administrative Theory 3 hrs
PAD 4204 Fiscal Management 3 hrs
PAD 4414 Public Personnel Administration 3 hrs
PAD 4720 Survey Research in Public Admin 3 hrs

Other Requirements
A GPA of 2.0 is required in all courses used to satisfy the minor.
"D" or "S" grades from other institutions are not accepted.
At least 15 hours used in the minor must be earned at UCF within the department.
No credit by exam (CLEP, TSD, Military credit) may be used.
Internship or Independent Study credit can not be used toward the minor.

RELIGIOUS STUDIES: Minor
College of Arts and Sciences
Philosophy Department, FA 411
philosophy@ucf.edu
Dr. Steve Levensohn, (407) 823-2273

The religious studies minor provides a limited yet coherent range of courses which introduce the student to a range of religious institutions and ideas. Courses are drawn from the departments of Anthropology & Sociology, Art, English, History, Judaic Studies, Philosophy, Political Science, and Psychology, and are to be selected
in consultation with the Religious Studies advisor.

Credit Hour Requirements  
21 hours

Required Courses  
(3 hrs)
REL 2300 World Religions  
3 hrs

Restricted Electives  
(18 hrs)
See department for approved list of courses

Other Requirements

- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

**RUSSIAN AREA STUDIES: Minor**

College of Arts and Sciences
History Department, FA 544
history@ucf.edu
Dr. Richard Crepeau, FA 551, (407) 823-2224

Credit Hour Requirements  
15-24 hours

Language requirement  
(0-8 hrs)
2 semester hours or proficiency

Required Courses  
(9 hrs)
EUA 4576 History of Russia in the 20th Century  
3 hrs
CPO 4645 Government and Politics of Russia  
3 hrs
PHH 3041 Russian Philosophy  
3 hrs

Restricted Upper Division Electives  
(6 hrs)
EUA 4571 History of Russia to 1801  
3 hrs
EUA 4574 History of Russia: 1801-1917  
3 hrs
CPO 3614 Politics of Eastern Europe  
3 hrs
ECO 3703 International Economics  
3 hrs

Other Requirements

- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 12 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

**SOCIAL SCIENCES - INTERDISCIPLINARY: Minor**

College of Arts and Sciences
Liberal Studies Program
liberalstudies@ucf.edu
Dr. Don Jones, (407) 823-0144

Credit Hour Requirements  
21 hours

Required Courses  
(3 hrs)
A methods course, selected from
POS 3703 Scope and Methods of Political Science  
PSY 3214C Research Methods in Psychology  
SYA 3300 Research Methods

Restricted Electives  
(18 hrs)
Select a minimum of 6 hours in each of 3 different departments
Communication
Economics
Political Science
Public Service Administration
Psychology
Sociology & Anthropology

Other Requirements

- A cumulative GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF.
- At least 15 hours must be upper division classes.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

**SOCIOMETRY: Minor**

College of Arts and Sciences
Department of Sociology & Anthropology, FA 405
sociology@ucf.edu
Dr. Jay Corzine, (407) 823-2227

Credit Hour Requirements  
18 hours

Required Courses  
(3 hrs)
SYG 2000 General Sociology  
3 hrs

Restricted Electives  
(3 hrs)
2000-4000 level Sociology courses

Restricted Upper Division Electives  
(12 hrs)
3000-4000 level Sociology courses

Other Requirements

- Maintain an overall GPA of at least 2.0 in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship credit can not be used toward the minor.
- No more than 3 hours of Independent Study credit can be used toward the minor.

**SPACE STUDIES: Minor**

College of Engineering
Department of Mechanical, Materials and Aerospace Engineering, ENGR 311
Dr. E. Ramon Hosler, (407) 823-5828
Fax (407) 823-0208

In response to the needs of the Central Florida space community, UCF offers a multidisciplinary Minor in Space Studies. It is intended for students of all disciplines and includes courses from aerospace engineering, electrical engineering, environmental engineering, instructional programs, physics, physical education, and political science.

Credit Hour Requirements  
21 hours

Required Courses  
(9 hrs)
AST 2002 Astronomy  
3 hrs
**GEO 4140C** Remote Sensing of the Environment 3 hrs
**PUP 3508** Space Studies 3 hrs
**or**
**PUP 4510** Space Policy

**Restricted Electives** *(12 hrs)*
- EAS 3010 Fundamentals of Aerospace Flight
- EAS 3101 Fundamentals of Aerodynamics
- EAS 3530 Space Systems Concepts
- EAS 4505 Orbits Mechanics
- EGN 4830 Telecommunications
- GEO 1200 Physical Geography
- GEO 2370 Resources Geography
- INR 4404 Space Law
- PET 4351 Applied Exercise and Human Physiology
- PUP 3508 Space Studies
- PUP 4510 Space Policy
- SCE 5825 Space Science for Educators

**Other Requirements**
- Formal declaration of the minor should occur before nine credit hours have been completed.
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

**SPANISH: Minor**
**College of Arts and Sciences**
Foreign Languages and Literatures, FA 523
foreignlanguage@ucf.edu
Dr. Bernard Decker, (407) 823-2472

**Credit Hour Requirements** 18 hours
**Restricted Electives**
- Select 6 courses in Spanish, including the 3000-level advanced oral communication and composition courses.
- A native or near-native speaker must substitute an alternate upper division course for the advanced oral communication course. Approval of a departmental advisor is required prior to registration.

**Other Requirements**
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor without departmental permission.

**STATISTICS: Minor**
**College of Arts and Sciences**
Statistics Department, CC II 212
statistics@ucf.edu
Dr. David Nickerson, (407) 823-5528

**Credit Hour Requirements** 18 hours
**Required Courses** *(9 hrs)*
- STA 2023 Statistical Methods I 3 hrs
- STA 3032 Probability and Statistics for Engineers 3 hrs
- STA 4163 Statistical Methods II 3 hrs
- STA 4164 Statistical Methods III 3 hrs

**Restricted Upper Division Electives** *(9 hrs)*
- STA 3xxx-4xxx courses
  (STA 2023 or STA 3032 or the equivalent can not be used as a restricted elective)

**Other Requirements**
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.

**TECHNOLOGY AND SOCIETY: Minor**
**College of Engineering**
Dr. Richard G. Denning, PAV 491, (407) 384-2161

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.

**Credit Hour Requirements** 18 hours
**Suggested Prerequisite Courses**
- MAC 1105 College Algebra
- GEP Cultural and Historical Foundations

**Restricted Upper Division Electives**
A minimum of 9 hours must be taken from the EGN/ETI prefix courses listed below
- EGN 4033 Technology and Social Change
- EGN 4813 Science in History
- EGN 4814 Technology in History
- EGN 4818 Technology in North America
- EGN 4823 Topics in Urban Development
- EGN 4824 Energy and Society
- EGN 4825 Environment and Society
- EGN 4830 Telecommunications
- EGN 4832 Computers, Cybernetics and Society
- EGN 4844 Man and Machine
- ETI 3671 Technical Economic Analysis
- ETI 4205 Applied Logistics
- ETI 4700 Occupational Safety
- GEO 2370 Resources Geography
- LIT 3313 Science Fiction
- LIT 4433 Survey of Technical and Scientific Literature
- PUP 3204 Environmental Politics
- PUP 4503 Government and Science
- PUP 4510 Space Policy

**Other Requirements**
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 15 hours used in the minor must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the minor.
THEATRE-GENERAL: Minor
College of Arts and Sciences
Theatre Department, THE 120
theatre@ucf.edu
Mr. Joe Rusnock, (407) 823-2861

Required Courses 27 hrs
Entrance Requirement
A successful interview and audition or portfolio review

Required Courses (27 hrs)
Note: The number assigned may change. Use the Prefix and title to determine the proper course.
THE 1020 Theatre Survey 3 hrs
THE 2090* Theatre Production/Performance I 1 hr
THE 3303 Play Analysis 3 hrs
THE 2091* Theatre Production/Performance II 1 hr
THE 3092* Theatre Production/Performance III 1 hr
THE 3110 Theatre History I 3 hrs
THE 3111 Theatre History II 3 hrs
THE 3305 Dramatic Literature I 3 hrs
THE 2271 Performance Studies 3 hrs
THE 2261 Technical Theatre Production 3 hrs
THE 3306 Dramatic Literature II 3 hrs
* Course must be taken at UCF

Other Requirements
- Participation on a minimum of one (1) departmental production during both the Fall and Spring terms for four (4) semesters.
- A grade of "C" is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 18 hours used in the minor, including those marked by an asterisk, must be earned at UCF within the department.
- No credit by exam (CLEP, TSD, Military credit) may be used.
- Internship or Independent Study credit can not be used toward the certificate.

TRANSLATION AND INTERPRETATION: Certificate
College of Arts and Sciences
Foreign Languages and Literatures, FA 505
foreignlanguage@ucf.edu
Mrs. Maria Redmon, FA 512, (407) 823-5738

Required Skills
Students must pass an oral exam for proficiency in Spanish and English before being admitted to the certificate program.

Required Courses 9 hrs
SPN 3800 Spanish Translation and Interpretation 3 hrs
SPT 3809 Medical Span Trans/Interp 3 hrs
SPT 3831 Spanish Legal Trans/Interp 3 hrs

Restricted Upper Division Electives 9 hrs
SPN 3933 Spanish Across the Curriculum 3 hrs
SPN 4941 Internship 3 hrs
Any upper division SPN or SPT course including 3 hrs

Independent Study (Requires advisor's prior approval)

Other Requirements
- A GPA of 2.0 is required in all courses used to satisfy the certificate.
- "D" or "S" grades from other institutions are not accepted.
- At least 12 hours used in the certificate must be earned at UCF within the Department of Foreign Languages and Literatures.
- No credit by exam may be used. Independent Study credit can not be used toward the certificate.

WOMEN'S STUDIES: Minor
College of Arts and Sciences
Women's Studies Program, HFA 201
Dr. Shelley Park, (407) 823-2269, email: spark@ucf.edu

Required Courses 18 hrs
Restricted Upper Division Electives (12-15 hrs)
AMH 3561 Women in American History I
AMH 3562 Women in American History II
AMH 5566 Colloquium: Women in American History
ANT 3302 Sex, Gender and Culture
ARH 4458 Women and Art in 20th Cent America
ARH 4892 Women in Art
ARH 5478 Contemporary Women Artists
COM 4XXX Gender Issues in Communication
CCJ 4670 Women and Crime
EUH 4610 Women in European Society
FIL 3309 Women in Film
LIT 3383 Women in Literature
LIT 4396 Advanced Feminist Theories
NUR 4935 Women's Health Issues
PHI 3022 Sexuality, Gender & Philosophy
PHM 3123 Feminist Theories
PUP 4323 Women and Politics
SOP 3742 Psychology of Women
SOW 5625 Social Work with Women
SYD 3800 Sex Roles in Modern Society
SYP 4810 Women in Contemporary Society
WST 4002 Researching Women and Gender

Restricted Electives (0-3 hrs)
AML 3614 Topics in African-American Literature
AML 4261 Literature of the South
ANT 3212 Peoples of the World
CCJ 4463 Cultural Diversity in Criminal Justice
CCJ 4681 Domestic Violence and the Justice System
LIT 3354 Ethnic Literature in America
PEM 2405 Self Defense for Women and Men
PHI 3640 Environmental Ethics
PHI 4360 Theories of Knowledge
PHI 4400 Philosophy of Science
PHI 4804 Critical Theory & Practice
POT 4066 Contemporary Political Theory
SOP 2772 Sexual Behavior
SYO 4100 Family Trends
THE 3230 Cultural Diversity through Theater
Other courses as approved by the Women's Studies advisor.

Other Requirements
- A GPA of 2.0 is required in all courses used to satisfy the minor.
- "D" or "S" grades from other institutions are not accepted.
- At least 12 hours used in the minor must be earned at UCF.
* No credit by exam (CLEP, TSD, Military credit) may be used.
* Internship or Independent Study credit can not be used toward the minor without approval of the program coordinator.

Women's Studies, together with the Department of Sociology and Anthropology and the Department of English, also offers a 15 hour certificate program in Gender Studies for graduate and post-baccalaureate students. For more information, consult the graduate catalogue or contact Dr. Shelley Park.

**ADDITIONAL UCF PROGRAMS**

**FOREIGN STUDY ABROAD: Program**
College of Arts and Sciences
Foreign Languages and Literatures, FA 201
foreignlanguage@ucf.edu
Dr. Heinrich Barsch (407) 275-4397

The Department of Foreign Languages and Literatures has been offering a Summer Study program in Spain since 1972, in Italy since 1975, in Québec Canada since 1990, and in Germany since 1991. These programs are approved by the State of Florida Board of Regents and are offered annually. Credit courses are available in language at various levels. The programs are open to all students of the State University System of Florida and to others as well.

**Jonquière, Québec, Canada**

Jonquière is a modern city of 60,000 in the picturesque and mountainous Lac Saint-Jean region, about 120 miles north of Québec City. Students live with carefully selected French-speaking families, receive 6 hours or more of classroom instruction in French each weekday, and must pledge to speak French only at all times during the program. Courses in French language and civilization are offered at the intermediate and advanced levels, and all participants earn 8 credits. Educational weekend excursions and a number of socio-cultural activities are included. The program takes place during Summer A term.

**Koblenz, Germany**

Koblenz is a charming city located in one of the most picturesque regions of Europe, at the junction of the Rhine and Moselle rivers. Since France, Belgium and Luxemburg are very close, the city has always had an international flair. The program is housed at the University of Koblenz and offers courses in German language and civilization at the intermediate and advanced levels; all participants earn 8 credits. A number of spectacular excursions are included. This program takes place during Summer B term.

**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 letters are given in English; language courses are conducted in Italian. A number of weekend excursions throughout central Italy are included. This popular program takes place during Summer B term.

**Madrid and Andalucia, Spain**

This program is intended for students who wish to begin or continue their study of Spanish language and civilization. Students are housed with select Spanish families and earn 8-9 semester credits for the program. Language and literature courses are offered from the beginning through advanced levels. This intense learning experience includes a tour of Andalucia and its famed cities. The program takes place during Summer B term.

**ENGLISH STUDY ABROAD: Program**
College of Arts and Sciences
Department of English, FA 301
english@ucf.edu
Dr. Anna Lillios, (407) 823-2212, lillios@ucf.edu

The Department of English has established an exchange with University College Northampton (UCN) in England. Students have several options: they may participate in the reciprocal-exchange program for a semester or a year; or they may study in UCN's summer program. These programs have been approved by both UCF and UCN and are offered annually. Credit courses are available in many different fields, besides English. The semester and yearlong programs are open to UCF students of all majors who have a 3.0 GPA; the summer program is open to all qualified UCF students, as well as adults and students of other institutions.

**Northampton, England, and Galway, Ireland**

University College of Northampton is located in the heart of England one hour from London, Oxford, and Cambridge. Northampton is both an ancient county town and a prosperous modern city. The 100-acre campus has up-to-date classrooms and facilities that accommodate 10,000 students in over 100 degree programs. Students who study in England during the school year enroll at UCF and take a wide variety of courses for full credit at UCN. Students who participate in the summer program will go on many excursions, as well as spend a week in Ireland. The summer program takes place during Summer B term.
The University course numbering system is as follows:

0-0999 are subcollegiate level and may not be counted in meeting degree requirements.
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 Office 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).
6000-7999 are beginning graduate and professional level courses open only to graduate students and do not apply toward a baccalaureate degree. (See Graduate Catalog)

Courses in this catalog are identified by prefixes and numbers that were assigned by Florida's Statewide Course Numbering System. This common numbering system is used by all public postsecondary institutions in Florida and by two participating private institutions. The major purpose of this system is to facilitate the transfer of courses between participating institutions.

Each participating institution controls the title, credit, and content of its own courses and recommends the first digit of the course number to indicate the level at which students normally take the course. Course prefixes and the last three digits of the course numbers are assigned by members of faculty discipline committees appointed for that purpose by the Florida Department of Education in Tallahassee. Individuals nominated to serve on these committees are selected to maintain a representative balance as to type of institution and discipline field or specialization.

The course prefix and each digit in the course number have meaning in the Statewide Course Numbering System (SCNS). The list of course prefixes and numbers, along with their generic titles, is referred to as the "SCNS taxonomy." Descriptions of the content of courses are referred to as "course equivalency profiles."

### Example of Course Identifier

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Level Code</th>
<th>Century Digit</th>
<th>Decade Digit</th>
<th>Unit Digit</th>
<th>Lab Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYG</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>No laboratory component in this course</td>
</tr>
<tr>
<td>Sociology, General</td>
<td>Freshman level at this institution</td>
<td>Entry-level General Sociology</td>
<td>Survey Course</td>
<td>Social Problems</td>
<td></td>
</tr>
</tbody>
</table>

Equivalent courses at different institutions are identified by the same prefixes and same last three digits of the course number and are guaranteed to be transferable between the participating institutions that offer the course, with a few exceptions. For example, a survey course in social problems is offered by 31 different postsecondary institutions. Each institution uses "SYG.010" to identify its social problems course. The level code is the first digit and represents the year in which the students normally take this course at a specific institution. In the SCNS taxonomy, "SYG" means "Sociology, General," the century digit "0" represents "Entry-Level General Sociology," the decade digit "1" represents "Survey Course," and the unit digit "0" represents "Social Problems."

In science and other areas, a "C" or "L" after the course number is known as a lab indicator. The "C" represents a combined lecture and laboratory course that meets in the same place at the same time. The "L" represents a laboratory course or the laboratory part of a course, having the same prefix and course number without a lab indicator, which meets at a different time or place.

Transfer of any successfully completed course from one participating regionally accredited postsecondary institution to another is guaranteed in cases where the course to be transferred is offered by the receiving institution and is identified by the same prefix and last three digits at both institutions. For example, SYG 1010 is offered at a community college. The same course is offered at a state institution.
university as SYG 2010. A student who has successfully completed SYG 1010 at the community college is guaranteed to receive transfer credit for SYG 2010 at the state university if the student transfers. The student cannot be required to take SYG 2010 again since SYG 1010 is equivalent to SYG 2010. Transfer credit must be awarded for successfully completed equivalent courses and used by the receiving institution to determine satisfaction of requirements by transfer students on the same basis as credit awarded to native students. It is the prerogative of the receiving institution, however, to offer credit for courses successfully completed which have not been designated as equivalent.

Sometimes, as in Chemistry, a sequence of one or more courses must be completed at the same institution in order for the courses to be transferable to another institution, even if the course prefix and numbers are the same. This information is contained in the individual SCNS course equivalency profiles for each course in the sequence.

**THE COURSE PREFIX**

The course prefix is a three-letter designator for a major division of an academic discipline, subject matter area, or sub-category of knowledge. The prefix is not intended to identify the department in which a course is offered. Rather, the content of a course determines the assigned prefix used to identify the course.

**AUTHORITY FOR ACCEPTANCE OF EQUIVALENT COURSES**

State Board of Education Rule 6A-10.024(19), Florida Administrative Code, reads:

When a student transfers among regionally accredited postsecondary institutions that participate in the common course designation and numbering system, the receiving institution shall award credit for courses satisfactorily completed at the previous participating institutions when the courses are judged by the appropriate common course designation and numbering system faculty task forces to be equivalent to courses offered at the receiving institution and are entered in the course numbering system. Credit so awarded can be used by transfer students to satisfy requirements in these institutions on the same basis as native students.

**EXCEPTIONS TO THE GENERAL RULE FOR EQUIVALENCY**

The following courses are exceptions to the general rule for course equivalencies and may not be transferable. Transferability is at the discretion of the receiving institution:

- A. Courses in the _900-_999 series (e.g., ART 2905)
- B. Internships, practica, clinical experiences, and study abroad courses
- C. Performance or studio courses in Art, Dance, Theatre, and Music
- D. Skills courses in Criminal Justice
- E. Graduate courses

College preparatory and vocational preparatory courses may not be used to meet degree requirements and are not transferable.

Questions about the Statewide Course Numbering System and appeals regarding course credit transfer decisions should be directed to Dr. David R. Dees in Academic Services, AD 210, Phone (407) 823-2691 or the Florida Department of Education, Office of Postsecondary Education Coordination, 1101 Florida Education Center, Tallahassee, Florida 32399-0400. Special reports and technical information may be requested by calling (850) 488-6402 or Suncom 278-6402.

An alphabetical listing of prefixes:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course Description</th>
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<tbody>
<tr>
<td>ACG</td>
<td>Accounting General</td>
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<td>ACO</td>
<td>Accounting: Occupational Technical</td>
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<td>ADE</td>
<td>Adult Education</td>
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<td>ADV</td>
<td>Advertising</td>
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<td>AFA</td>
<td>African-American Studies</td>
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<td>AFH</td>
<td>African History</td>
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<td>AFR</td>
<td>Air Force ROTC</td>
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<td>AMH</td>
<td>American History</td>
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<td>AML</td>
<td>American Literature</td>
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<td>ANG</td>
<td>Anthropology - Graduate</td>
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<tr>
<td>ANT</td>
<td>Anthropology</td>
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<tr>
<td>APA</td>
<td>Applied Accounting</td>
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<tr>
<td>APB</td>
<td>Applied Biology</td>
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<td>ARE</td>
<td>Art Education</td>
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<td>Art History</td>
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<td>Art</td>
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<tr>
<td>ASH</td>
<td>Asian History</td>
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<td>AST</td>
<td>Astronomy</td>
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<td>AVM</td>
<td>Aviation Management</td>
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<td>BCH</td>
<td>Biochemistry</td>
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<td>BCN</td>
<td>Building Construction</td>
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<td>BOT</td>
<td>Botany</td>
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<tr>
<td>BSC</td>
<td>Introductory Biology</td>
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<td>BTE</td>
<td>Business Teacher Education</td>
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<tr>
<td>BUL</td>
<td>Business Law</td>
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<tr>
<td>CAP</td>
<td>Computer Applications</td>
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<tr>
<td>CBH</td>
<td>Comparative Psychology &amp; Animal Behavior</td>
</tr>
<tr>
<td>CCE</td>
<td>Civil Construction Engineering</td>
</tr>
<tr>
<td>CCJ</td>
<td>Criminology &amp; Criminal Justice</td>
</tr>
<tr>
<td>CDA</td>
<td>Computer Design/Architecture</td>
</tr>
<tr>
<td>CEG</td>
<td>Civil Geotechnical Structures</td>
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<tr>
<td>CES</td>
<td>Civil Engineering Structure</td>
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<td>CET</td>
<td>Computer Engineering Technology</td>
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<td>CGN</td>
<td>Civil Engineering</td>
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<td>CGS</td>
<td>Computer General</td>
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<td>CHI</td>
<td>Chinese</td>
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<td>CHM</td>
<td>Chemistry</td>
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<td>Chemistry - Specialized</td>
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<tr>
<td>CIS</td>
<td>Computer &amp; Information Systems</td>
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<tr>
<td>CJT</td>
<td>Criminal Justice Technology</td>
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<tr>
<td>CLA</td>
<td>Classical and Ancient Studies</td>
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<tr>
<td>CLP</td>
<td>Clinical Psychology</td>
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<tr>
<td>COC</td>
<td>Computer Concepts</td>
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325
<table>
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<th>Code</th>
<th>Major</th>
<th>Code</th>
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<tbody>
<tr>
<td>COE</td>
<td>Cooperative Education</td>
<td>FOL</td>
<td>Foreign and Biblical Languages</td>
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<tr>
<td>COM</td>
<td>Communications</td>
<td>FOT</td>
<td>Foreign &amp; Biblical Languages in Translation</td>
</tr>
<tr>
<td>COP</td>
<td>Computer Programming</td>
<td>FRE</td>
<td>French Language</td>
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<tr>
<td>COT</td>
<td>Computer Theory</td>
<td>FRW</td>
<td>French Literature (Writings)</td>
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<tr>
<td>CPO</td>
<td>Comparative Politics</td>
<td>FSS</td>
<td>Food Service Systems</td>
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<tr>
<td>CRM</td>
<td>Computer Resources/Management</td>
<td>GEA</td>
<td>Geography: Regional Areas</td>
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<td>CRW</td>
<td>Creative Writing</td>
<td>GEB</td>
<td>General Business</td>
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<td>CWR</td>
<td>Civil Water Resources</td>
<td>GEO</td>
<td>Geography</td>
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<td>CYP</td>
<td>Communication Psychology</td>
<td>GER</td>
<td>German Language</td>
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<td>DAA</td>
<td>Dance Activities</td>
<td>GEW</td>
<td>German Literature (Writings)</td>
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<td>DAE</td>
<td>Dance Education</td>
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<td>Geology</td>
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<td>DEP</td>
<td>Development Psychology</td>
<td>HBR</td>
<td>Modern Hebrew Language</td>
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<tr>
<td>EAB</td>
<td>Experimental Analysis of Behavior</td>
<td>HBT</td>
<td>Hebrew Language Translation</td>
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<tr>
<td>EAS</td>
<td>Engineering: Aerospace</td>
<td>HFT</td>
<td>Hotel and Restaurant</td>
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<tr>
<td>ECM</td>
<td>Engineering: Computer Mathematics</td>
<td>HLP</td>
<td>Health Education</td>
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<tr>
<td>ECO</td>
<td>Economics</td>
<td>HMW</td>
<td>Modern Hebrew Literature (Writings)</td>
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<td>Health Services Administration</td>
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<td>Economic Systems &amp; Development</td>
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<td>Human Nutrition</td>
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<td>EDF</td>
<td>Education: Foundation</td>
<td>IDH</td>
<td>Interdisciplinary Honors</td>
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<td>Education: Supervision</td>
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<td>LAT</td>
<td>Latin</td>
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<td>EGM</td>
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<td>Leisure</td>
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<td>EGN</td>
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<td>LIN</td>
<td>Linguistics</td>
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<td>Engineering: Support</td>
<td>LIS</td>
<td>Library Science</td>
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<td>EIN</td>
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<td>LIT</td>
<td>Literature</td>
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<td>ELD</td>
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<td>Mathematics - Analysis</td>
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<td>EMA</td>
<td>Engineering: Materials</td>
<td>MAC</td>
<td>Mathematics - Calculus &amp; Precalculus</td>
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<td>Mathematics - Discrete</td>
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<td>Mathematics Education</td>
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<td>Education: Mental Retardation</td>
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<td>Management</td>
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<td>English Composition</td>
<td>MAP</td>
<td>Mathematics - Applied</td>
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<td>English - General</td>
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<td>English Literature</td>
<td>MAS</td>
<td>Mathematics: Algebraic Structures</td>
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<td>Engineering: Nuclear</td>
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<td>Entomology</td>
<td>MEC</td>
<td>Meteorology</td>
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<td>MGF</td>
<td>Mathematics: General &amp; Finite</td>
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<td>ESE</td>
<td>Education: Secondary</td>
<td>MHF</td>
<td>Mathematics: History &amp; Foundations</td>
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<td>Engineering Systems - Industrial</td>
<td>MIS</td>
<td>Military Science</td>
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<td>English as a Second Language</td>
<td>MLS</td>
<td>Medical Laboratory Science</td>
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<td>EST</td>
<td>Electronic Specialty Technology</td>
<td>MMC</td>
<td>Mass Media Communication</td>
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<td>ETC</td>
<td>Engineering Tech: Civil</td>
<td>MRE</td>
<td>Medical Records</td>
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<td>ETG</td>
<td>Engineering Tech: General</td>
<td>MTG</td>
<td>Mathematics: Topology &amp; Geometry</td>
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<td>ETI</td>
<td>Engineering Tech: Industrial</td>
<td>MUC</td>
<td>Music: Composition</td>
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<td>ETM</td>
<td>Engineering Tech: Mechanical</td>
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<td>Music Education</td>
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<td>European History</td>
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<td>Music: History/Musicology</td>
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<td>EVS</td>
<td>Environmental Science</td>
<td>MUH</td>
<td>Music: Music Literature</td>
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<td>Music: Music Ensembles</td>
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<td>Experimental Psychology</td>
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<td>Music</td>
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<td>Film</td>
<td>MUT</td>
<td>Music: Theory</td>
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<td>Finance</td>
<td>MVB</td>
<td>Music: Applied - Brasses</td>
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<td>FLE</td>
<td>Foreign Language Education</td>
<td>MVE</td>
<td>Music: Applied - Keyboard</td>
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</table>
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 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 catalog, special courses may be available. Consult your academic advisor for details.

<table>
<thead>
<tr>
<th>Undergraduates</th>
<th>Special Grad 1</th>
</tr>
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<tbody>
<tr>
<td>3905</td>
<td>5907</td>
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*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.
I: CONSENT OF THE INSTRUCTOR

HOURS CODE

Each course listed is followed by a code which shows hours of credit and contact hours. Example: ENV 4121C EN-CEE 3(2,3)

ENV 4121C is offered by the College of Engineering (EN), in the Civil and Environmental Engineering (CEE) Department, carries 3 hours of credit but requires 5 contact hours which consist of 2 hours in class and 3 hours laboratory or field work.

DUAL USAGE OF CREDIT HOURS

Courses used to meet the requirements of an undergraduate degree cannot typically also be used to meet the requirements of a graduate program. Contact your advisor or college for specific program requirements or additional information.

COLLEGE/DEPARTMENT INDICATOR

Following the course number for each course listed is an indicator denoting the college and department responsible for the course. The college designators are AS = Arts & Sciences, BA = Business Administration, ED = Education, EN = Engineering, and HPA = Health and Public Affairs. Department indicators are listed below (by college):

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<th>COLLEGE</th>
<th>DEPARTMENT</th>
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ALPHABETICAL LISTING OF COURSES BY PREFIX

AVAILABILITY OF COURSES
The University does not offer all of the courses listed in the catalog each year. The Class Schedule should be consulted to determine which courses are offered each semester.

ACG 2021 BA-ACCT 3(3,0)

ACG 2023 BA-ACCT 6(6,0)
Principles of Accounting I and II: PR: Junior standing and MAC 1105 or equivalent. Same as 2021, 2071. Credits may not be earned in both ACG 2023 and the ACG 2021, 2071 sequence.

ACG 2071 BA-ACCT 3(3,0)
Principles of Managerial Accounting: PR: ACG 2021 and MAC 1105 or equivalent. The purpose of this class is to thoroughly familiarize the student with the various uses of accounting information for planning and control.

ACG 3101 BA-ACCT 3(3,1)
Intermediate Financial Accounting I: PR: Junior standing and MAC 1105, ECO 2013 and ECO 2023; and ACG 2071 or ACG 2023 or its equivalent with a grade of "C" in the accounting course. Review of the accounting cycle, financial statement preparation and the framework of accounting theory. An in-depth study of current assets, fixed assets, and intangible assets.

ACG 3111 BA-ACCT 3(3,0)
Intermediate Financial Accounting II: PR: ACG 3101 with a grade of "C" or better. Accounting theory and practice for current and long-term liabilities, stockholders' equity, earnings per share, investments, revenue recognition, and selected current topics.

ACG 3301 BA-ACCT 3(3,0)
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 BA-ACCT 3(3,0)
Cost Accounting I: PR: Junior standing, MAC 1105, ECO 2013, and ECO 2023, and ACG 2071 with a grade of "C" in ACG 2071, completion of or concurrent enrollment in ACG 3101. Cost concepts, cost of goods manufactured, job order costing, process costing, standard costing, relevant cost analysis, and overhead/joint cost allocations.

ACG 3501 BA-ACCT 3(3,0)
Financial Accounting for Governmental and Nonprofit Organizations: PR: ACG 3101 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 4203 BA-ACCT 3(3,0)
Advanced Accounting: PR: Intermediate Financial Accounting II with a grade of "C" or better. Accounting for business combinations and the preparation of consolidated financial statements. Accounting issues related to foreign operations. Also includes a study of current reporting topics.

ACG 4401 BA-ACCT 3(3,1)
Accounting Information Systems: PR: ACG 3101 and CGS 2100C, with a grade of "C" or better. An introduction to manual and computer-based accounting information systems.

ACG 4651 BA-ACCT 3(3,0)
Auditing: PR: ACG 3111 and ACG 4401 with a grade of "C" or better. The standards, practices, and procedures followed in the audit function.

ACG 5005 BA-ACCT 3(3,0)
Financial and Managerial Accounting Concepts: PR: Acceptance into the graduate program. (Not open to Accounting majors.) The conceptual background for understanding financial statements and management accounting reports.

ACG 5206 BA-ACCT 3(3,0)

ACG 5346 BA-ACCT 3(3,0)
Cost Accounting II: PR: Acceptance for graduate study. ACG 3361, ACG 3111, FIN 3403, ECO 3411. Overhead allocation, capital budgeting and analysis. EQQ analysis, decentralization, and quantitative decision analysis.

ACG 5506 BA-ACCT 3(3,0)
Accounting for Governmental and Non-business Organizations: PR: ACG 3501, ACG 3111 and acceptance for graduate study. Study of problems and methods of applying managerial accounting concepts in a nonprofit environment.

ACG 5625 BA-ACCT 3(3,0)
Auditing and EDP: PR: Acceptance for graduate study, ACG 3111, ACG 4401, and ACG 4651. An examination of auditing procedures followed when a company uses a computer to process financial records.

ACG 5636 BA-ACCT 3(3,0)
Advanced Auditing Topics: PR: Acceptance for graduate study and ACG 4651, STA 2023. Special topics relative to the standards, practices, and procedures followed in the audit function. Includes statistical sampling, advanced computer systems, advanced applications, and reporting problems.

ACG 5675 BA-ACCT 3(3,0)
Operational Auditing: PR: Acceptance for graduate study and ACG 3111, ACG 4651. The standards, principles, practices, and procedures followed in the internal audit function.

ADE 4382 ED-IP 3(3,0)
Teaching Adult Learners: Effective teaching techniques including technology, distance instruction, and support systems appropriate to the special needs of adult learners.

ADV 3000 AS-COMM 3(3,0)
Principles of Advertising: Overview of the field of advertising; purposes, techniques, the role of agencies, advertisers and the media.

ADV 4003 AS-COMM 3(3,0)
Advertising Layout and Preparation: PR: Majors only, ADV 3000 or C.I. Advertising design and layout for print media; reproduction methods and requirements, art background not required.

ADV 4101 AS-COMM 3(3,0)
Advertising Copywriting: PR: ADV 3000 or C.I. and Grammar Proficiency Exam. Advertising copywriting teaches the development of creative strategies for advertising and emphasizes writing for various ad media.

ADV 4103 AS-COMM 3(3,0)
Radio-Television Advertising: PR: Majors only, ADV 3000 or C.I. Radio and television advertising sales, including
interpretation of rate structures, program audiences, and creative approaches to sponsor needs.

AFR 2102 AS-AAS 3(3,0)
Introductory Perspectives on African American Studies: Multidisciplinary perspectives are used to explore key issues and basic methodologies in African American Studies, featuring presentations by representative faculty from various disciplines.

AFR 3104 AS-AAS 3(3,0)

AFR 3200 AS-AAS 3(3,0)
African History Since 1870: PR: C.l. Sub-Saharan African institutions and peoples from the earliest time until 1870.

AFR 3210 EN-AFROTC 1(1,2)

AFR 3220 EN-AFROTC 1(1,2)
The Development of Air Power I: A study of the development of air power from experiments by 18th-century balloonists to the achievement of combat air power capabilities during World War II.

AFR 3230 EN-AFROTC 3(3,2)
Air Force Leadership and Management I: An introductory study of Air Force management fundamentals, communications skills, and basic leadership styles.

AFR 4201 EN-AFROTC 3(3,2)

AFR 4210 EN-AFROTC 3(3,2)

AFR 4230 EN-AFROTC 3(3,2)
Air Force Evaluation and Management II: A concluding study of Air Force management fundamentals, including performance evaluation skills.

AMH 3441 AS-HIST 3(3,0)
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.

AMH 3442 AS-HIST 3(3,0)
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.

AMH 3540 AS-HIST 3(3,0)
Military History: A survey of US military history from the European background of the colonial period through the contemporary military experience.

AMH 3561 AS-HIST 3(3,0)

AMH 3562 AS-HIST 3(3,0)
Women in American History II: PR: AMH 2010, AMH 2020 or C.I. Examines industrialization, entry of women into higher education and professions, winning of suffrage, changing profile of female wage earner, and rise of modern feminist movement.

AMH 3571 AS-HIST 3(3,0)

AMH 3572 AS-HIST 3(3,0)

AMH 3586 AS-HIST 3(3,0)
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.

AMH 3610 AS-HIST 3(3,0)
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.

AMH 3800 AS-HIST 3(3,0)
Canadian History: Canada since Colonial times and the present, but with emphasis on the period since the British North America Act, 1867.

AMH 4110 AS-HIST 3(3,0)
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.

AMH 4112 AS-HIST 3(3,0)
The Atlantic World: PR: C.I. The impact and transforming effect of the Atlantic System on the peoples of Western Europe, Western Africa, the Caribbean and the Americas.

AMH 4130 AS-HIST 3(3,0)
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.

AMH 4140 AS-HIST 3(3,0)
Jeffersonian America: PR: AMH 2010 and 2020 or C.I. The Confederation era, the Federalists, Jeffersonian Democracy, and the War of 1812.

AMH 4160 AS-HIST 3(3,0)
Jacksonian America: PR: AMH 2010 and 2020 or C.I. The risk of American nationalism, Jacksonian Democracy, the Mexican War, and sectional conflict.

AMH 4170 AS-HIST 3(3,0)
Civil War and Reconstruction: PR: AMH 2010 and 2020 or C.I. Reconstruction, and impact of industrialism.

AMH 4201 AS-HIST 3(3,0)
The Gilded Age and Progressivism: PR: AMH 2010 and 2020 or C.I. The Rise of Industrialized and Urbanized America, The emergence of the New South and the New West, the Populist Movement, overseas expansion, Progressivism.

AMH 4231 AS-HIST 3(3,0)
United States History: 1914-1939: PR: AMH 2010 and 2020 or C.I. The progressive reforms of Woodrow Wilson, World War I, post-war prosperity, the Depression, the New Deal, and the coming of World War II.

AMH 4270 AS-HIST 3(3,0)
United States History: 1939-1960: PR: AMH 2010 and 2020 or C.I. World War II, the Cold War and America in the fifties.

AMH 4273 AS-HIST 3(3,0)

AMH 4311 AS-HIST 3(3,0)
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.

AMH 4313 AS-HIST 3(3,0)
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.

AMH 4510 AS-HIST 3(3,0)

AMH 4511 AS-HIST 3(3,0)
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.

AMH 5116 AS-HIST 3(3,0)
Colloquium in U.S. Colonial History: PR: Senior Standing or C.I. Reading and discussion of the literature on selected topics of frontier history.

AMH 5117 AS-HIST 3(3,0)
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.

AMH 5118 AS-HIST 3(3,0)
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.

AMH 5169 AS-HIST 3(3,0)
Colloquium Age of Jackson: PR: Senior Standing or C.I. Intensive reading and class discussion on selected topics of the Jacksonian age.

AMH 5176 AS-HIST 3(3,0)
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.

AMH 5219 AS-HIST 3(3,0)
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.

AMH 5296 AS-HIST 3(3,0)
Colloquium in 20th Century U.S.: PR: Senior Standing or C.I. Reading and class discussion on selected topics in 20th-century U.S.

AMH 5391 AS-HIST 3(3,0)
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.

AMH 5407 AS-HIST 3(3,0)
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.

AMH 5446 AS-HIST 3(3,0)
Colloquium in U.S. Frontier: PR: Senior Standing or C.I. Reading and class discussion of the literature on selected topics of frontier history.

AMH 5515 AS-HIST 3(3,0)
Colloquium in U.S. Diplomatic History: PR: Senior Standing or C.I. A survey of the historical literature of American foreign policy. May be repeated for credit when content is different.

AMH 5566 AS-HIST 3(3,0)
Colloquium: Women in American History: Intensive reading and class discussion on selected topics of Women in American History from colonial time to the present.

AMH 5937 AS-HIST 3(3,0)
AP American History: Participants will enhance their knowledge of weighing evidence and interpretations presented in historical scholarship with respect to the social, cultural, intellectual, economic, and
American Literature I: PR: ENC 1102. Major American writers from beginning through Whitman.

AML 3051 AS-ENG 3(3,0)
American Literature II: PR: ENC 1102. Major American writers from Twain to present.

AML 3614 AS-ENG 3(3,0)
Topics in African-American Literature: PR: ENC 1102. Literature by and about African-American culture in the United States. May be repeated for credit.

AML 4101 AS-ENG 3(3,0)

AML 4153 AS-ENG 3(3,0)

AML 4261 AS-ENG 3(3,0)
Literature of the South: PR: ENC 1102 or C.I. 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 4265 AS-ENG 3(3,0)
Florida Writers: PR: ENC 1102. This course will examine writers who have lived in and written about Florida, such as Hemingway, Rawlings, Hurston, and Stevens.

AML 4321 AS-ENG 3(3,0)

AML 5156 AS-ENG 3(3,0)
Modern American Poetry: Study of trends, modes, major figures (Eliot, Pound, H.D.Lawrence, Stevens, Hart, Crane, Moore, W.C. Williams, etc.) within the Modernist movement in American poetry.

ANG 5167 AS-SOC/AN 3(3,0)
Maya Hieroglyphs: PR: ANG 5168 or C.I. The study of Maya writing, the translation of Maya hieroglyphs, and the significance of translations to reconstructions of ancient Maya culture.

ANG 5168 AS-SOC/AN 3(3,0)
The Ancient Maya: PR: Batchler's Degree or C.I. Overview of the archaeology of the ancient Maya of Mexico, Belize, Guatemala, and upper Mexico

ANG 5228 AS-SOC/AN 3(3,0)
Maya Iconography: PR: ANG 5168 or C.I. Study and interpretation of ancient Maya iconography as reflected in art, artifacts, and constructed features.

ANG 5324 AS-SOC/AN 3(3,0)
Contemporary Maya: PR: Bachelor's degree or C.I. Overview of the cultures and peoples comprising the contemporary Maya of Central America.

ANT 2000 AS-SOC/AN 3(3,0)
General Anthropology: An introductory survey of the four major subfields of anthropology: Social Anthropology, Physical Anthropology, Linguistics, and Archaeology.

ANT 2000H AS-SOC/AN 3(3,0)
General Anthropology Honors: Extensive honors work in the field of anthropology. Expectations, requirements, and standards are greater than for standard General Anthropology.

ANT 2100 AS-SOC/AN 3(3,0)
Archaeology and the Rise of Human Culture: The evolution of human society from foraging and hunting groups to the earliest cities and states.

ANT 2410 AS-SOC/AN 3(3,0)
Cultural Anthropology (Anthropology II): An introduction to human diversity as exemplified among various cultures and ethnic groups.

ANT 2511 AS-SOC/AN 3(3,0)
The Human Species: Human biological variation in an evolutionary perspective.

ANT 2511H AS-SOC/AN 3(3,0)
Honors The Human Species: PR: Admission to University Honors Program. Human biological variation in an evolutionary perspective.

ANT 3115 AS-SOC/AN 3(3,0)
Archaeological Method and Theory: A survey of archaeological field and laboratory techniques, including the interpretation of written archaeological reports.

ANT 3142 AS-SOC/AN 3(3,0)
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 3145 AS-SOC/AN 3(3,0)
Archaeology of Complex Societies: Theoretical perspectives on ancient hierarchies of power.

ANT 3163 AS-SOC/AN 3(3,0)
Mesoamerican Archaeology: An introduction to the prehistory of Mexico, Guatemala and upper Central America from earliest times through the Spanish conquest.

ANT 3168 AS-SOC/AN 3(3,0)
Maya Archaeology: An examination of the Prehistoric Maya culture focusing on both the archaeology and current issues in the field.

ANT 3184 AS-SOC/AN 3(3,0)

ANT 3212 AS-SOC/AN 3(3,0)

ANT 3241 AS-SOC/AN 3(3,0)
Magic, Ritual, and Belief: Patterns in religious behavior in various societies, with primary emphasis on myth, rite, taboo, and festival social phenomena.

ANT 3245 AS-SOC/AN 3(3,0)
Native American Religions: PR: ANT 2000 or C.I. The religious beliefs of native New World peoples.

ANT 3262 AS-SOC/AN 3(3,0)

ANT 3273 AS-SOC/AN 3(3,0)
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 AS-SOC/AN 3(3,0)
Sex, Gender and Culture: The traditional and changing roles of women and men viewed in a cross-cultural perspective.

ANT 3311 AS-SOC/AN 3(3,0)
Indians of the Southeastern United States: A study of the social and cultural history of the Indians of the Southeast.

ANT 3312 AS-SOC/AN 3(3,0)
Ethnology of North American Indians: A survey of the aboriginal cultures of North America, with emphasis on the pre-contact cultural condition.

ANT 3313 AS-SOC/AN 3(3,0)

ANT 3332 AS-SOC/AN 3(3,0)
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 3363 AS-SOC/AN 3(3,0)
Anthropology 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.

ANT 3541 AS-SOC/AN 3(3,0)
Biobehavioral Anthropology: An introduction to the study of human behavior in terms of mutual interaction between human biology and cultural environments.

ANT 3640 AS-SOC/AN 3(3,0)
Language and Culture: PR: Sophomore standing. The study of language in a non-western setting; language and behavior; language and perception.

ANT 4034 AS-SOC/AN 3(3,0)
History of Anthropological Thought: The exploration of the intellectual foundations of modern anthropology.

ANT 4180 AS-SOC/AN 3(1,4)
Seminar in Laboratory Analysis: The processing of archaeological finds from excavation through publication.

ANT 4462 AS-SOC/AN 3(3,0)
Medical Anthropology: PR: ANT 2000 or C.I. The field of medical anthropology. Topics will include theories, methods, and applications.

ANT 4525 AS-SOC/AN 3(3,0)
Functional Morphology of the Human Skeleton: PR: ANT 2511, ZOO 3733 is recommended. The functional anatomy of the human skeleton, with emphasis on its structure, function and evolution. Differences between fossil and modern humans are explored.

ANT 4586 AS-SOC/AN 3(3,0)

ANT 4824 AS-SOC/AN 9(9,0)
Advanced Archaeological Fieldwork: PR: Students admitted only with permission of instructor. Supervised archaeological fieldwork.

ANT 5166 AS-SOC/AN 3(3,0)
Problems in Maya Studies: PR: ANT 5168 The Ancient Maya or C.I. In-depth study of current methodological, theoretical, and/or topical problems in Maya studies. May be repeated for credit.

ANT 5168 AS-SOC/AN 3(3,0)
The Ancient Maya: PR: B.A. or C.I. Overview of the archaeology of the ancient Mayas of Mexico, Belize, Guatemala, and upper Central American.

ANT 5479 AS-SOC/AN 3(3,0)
Comparative Cultural Analysis: The dynamics of cultural processes in a multi-ethnic setting.

APA 3471 BA-ACCT 3(3,0)
Accounting for Engineers: General Accounting principles and practice, cost accounting, budgeting, and control techniques. Not usable for BSBA degree credit.

APB 3600 HPA-H&PT 3(3,0)
Introduction to Pharmacology: Review of terminology and regulations. Study of drug types and usage.

APB 4651 HPA-H&PT 2(2,0)
Medical Pharmacology I: Drugs in pulmonary diseases; effects on nervous system, and neurofactors, depressants & stimulants; influence on metabolism and endocines. (MDRV) Bronchodilators, mycolitics, etc.

APB 4652 HPA-H&PT 2(2,0)
Medical Pharmacology II: PR: APB 4651 or C.I. Drugs used in cardiovascular disorders. Includes inotropic, chronotropic agents, beta blocker drugs, calcium channel antagonists.

ARA 1120 AS-LANG 4(4,1)
Elementary Arabic Language and Civilization I: Introduces the student to Arabic language skills. Open only to students with no experience in the language.

ARA 1121 AS-LANG 4(4,1)
Elementary Arabic Language and Civilization II: PR: ARA 1120 or C.I. Continuation of ARA 1120.

ARA 2200 AS-LANG 3(3,1)
Intermediate Arabic Language and Civilization I: PR: ARA 1121 or C.I. Development of language skills and cultural knowledge at the intermediate level.

ARE 3550 AS-ART 3(3,0)
Introductory to Art Therapy: A survey of the literature, theories and practices of art therapy.

ARE 3944 AS-ART 3(2,3)
Community Arts Practicum: A supervised experience for students to facilitate art programming in a variety of community settings.

ARE 4262 AS-ART 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.

ARE 4313 ED-IP 3(2,1)
Art in the Elementary School: Basic principles, purposes, scope and sequence: organization for instruction; evaluation of activities; selected art experiences.

ARE 4351 ED-IP 3(2,1)
Teaching Art in the Elementary School: PR: EDF 4214 and EDG 4323. Transition from university art studio practices to public school teaching of art. Organizing, designing and analyzing art experiences, activities and classroom environments for the elementary school classroom.

ARE 4352 ED-IP 3(2,1)
Teaching Art in the Secondary School: PR: ARE 4143, EDF 4214, and EDG 4323. Transition from university art studio practices to High School Teaching of art. Organizing, designing and analyzing art experiences and activities appropriate for junior high and high school children.
Examination of teaching methodology relative to the high school and junior high school settings.

ARE 4356 ED-IP 3(3,1)
Teaching Art Appreciation & Criticism in the Classroom: PR: ARH 2050 and ARH 2051. An examination of art appreciation programs and concepts toward planning curriculum for the study of art history, popular art, art criticism, and aesthetics for specific educational settings.

ARE 4945 AS-ART 12(0,12)
Community Arts Internship: An on-site in-depth experience for community arts majors with a concentration in administration, education, or therapeutic experience.

ARE 5251 ED-IP 3(2,1)
Art for Exceptionalities: Concepts, principles, and methods of integrating art processes into the education of the physically, emotionally, and mentally handicapped.

ARE 5255 ED-IP 3(2,1)
Arts in Recreation: Art activities and experiences appropriate for use in playground, leisure services, occupational orientation and other recreational areas.

ARE 5454 ED-IP 3(3,0)
Found Arts: PR: Graduate admission or C.I. Materials available for instruction in public schools will be explored in depth in relation to their appropriateness and productive qualities. May be repeated for credit.

ARE 5648 ED-IP 3(3,0)
Contemporary Visual Arts Education: PR: ARE 4443 or C.I. Continued study of current programs and innovations in public school Visual Arts Programs.

ARH 2005 AS-ART 3(3,0)
Survey of Non-Western Art: An interdisciplinary examination of the history of major visual arts in various non-Western cultures.

ARH 2050 AS-ART 3(3,0)
The History of Art I: Painting, sculpture and architecture from the Baroque through the 20th century.

ARH 2051H AS-ART 3(3,0)
Honors History of Art II: Same as ARH 2051 with honors-level content.

ARH 3456 AS-ART 3(3,0)
Art After 1945: A seminar for upper-level art students to examine historically the art of Post WW II

ARH 3520 AS-ART 3(3,0)
African Art: Teach the continuatives between African, Afro-Caribbean and Afro-American Arts.

ARH 3522H AS-ART 3(3,0)
Honors: African American Arts Seminar: An exploration of traditional, academic, and contemporary urban African American visual arts.

ARH 3683 AS-ART 3(3,0)
Southern Folk Arts: PR: Junior Standing or C.I. This course will explore contemporary issues related to folk art including definition, collecting, marketing, art criticism, tradition, innovation, and its relationship to the so-called fine arts and popular arts.

ARH 3710 AS-ART 3(3,0)
History of Photography I: History of still photography from its earliest inception to 1900. The content of this course is designed for art majors.

ARH 3711 AS-ART 3(3,0)
History of Photography II: History of still photography from the early 20th century to the present. The content of this course is designed for art majors.

ARH 3720 AS-ART 3(3,0)
History of Prints: PR: ARH 2050 and ARH 2051 or C.I. History of printmaking in the Western world, surveying works by the "great printmakers."

ARH 3728 AS-ART 3(3,0)
American Art: PR: ARH 2050 and ARH 2051 or C.I. Surveys American Art to 1900. Leading artists are identified and representative examples of their work are discussed within the context of major themes, patterns, sources.

ARH 3802 AS-ART 3(3,0)
Happenings and Conceptual Art: PR: Junior Standing or C.I. Aesthetic and social significance of "Total Art" in its attempt to break down customary distinctions between life and art.

ARH 3820 AS-ART 3(3,0)
Visual Arts Administration Vitas: Grant applications; Personnel; copyright laws; museum practices, etc.

ARH 4017 AS-ART 3(3,0)
Greek & Roman Art: PR: ARH 2050 or HUM 3431 and ENC 1102 or C.I. A study of the art and architecture of the ancient civilizations of the Mediterranean, comprising Greece, Eturia, and Rome.

ARH 4310 AS-ART 3(3,0)
Italian Renaissance Art: PR: ARH 2050 and ARH 2051 or C.I. A survey of Italian Art and Architecture from 1300 to 1500.

ARH 4350 AS-ART 3(3,0)
Baroque Art: PR: ARH 2050 and ARH 2051 or C.I. A study of European Art in the 17th and 18th centuries.

ARH 4430 AS-ART 3(3,0)
19th Century Art: PR: ARH 2050 and ARH 2051. 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-ART 3(3,0)
20th Century Art: PR: ARH 2050 and ARH 2051 or C.I. A survey of the art from Fauvism, Futurism, Cubism to the art of the present.

ARH 4458 AS-ART 3(3,0)
Women and Art in the 20th Century America: A course on women artists, feminist aesthetics, and women's artistic cultures, focusing on 20th century America.

ARH 4545 AS-ART 3(3,0)
Art of India: Art and architecture of India from prehistoric times through the Gupta, Rajput, and Muslim periods.

ARH 4655 AS-ART 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 4800 AS-ART 3(3,0)

ARH 4892 AS-ART 3(3,0)
Women in Art: PR: ARH 2050 and ARH 2051 or C.I. A survey of women artists from ancient times to the present as well as
a study of the role Aesthetics and Ideology have played in determining representations of women in art.

ART 2110C AS-ART 3(2,4)
Beginning Ceramics: PR: ART 2201 or C.I. Basic concepts of ceramic design, experience in processes of forming, decorating, glazing, and firing pottery.

ART 2130C AS-ART 3(2,3)
Fibers, Fabrics, Textiles and Synthetics: Textile design and production, including non-loom weaving processes. May be repeated for credit.

ART 2133C AS-ART 3(3,0)
Fibers & Fabrics: Design and production training in surface design, floor loom weaving and fiber sculpture.

ART 2198C ED-IP 3(2,3)

ART 2201C AS-ART 3(2,4)
Design Fundamentals I: Materials, processes, form. Emphasis on two-dimensional design problems, including problems in black and white and basic color theory.

ART 2203C AS-ART 3(2,4)
Design Fundamentals II: Continuation of color theory and basic three-dimensional design using the various sculptural media.

ART 2220C AS-ART 3(2,4)
Graphic Design I: PR: ART 2201C. Basic principles, concepts, and techniques in graphic design and art for visual publication.

ART 2230C AS-ART 3(2,4)

ART 2238C AS-ART 3(2,4)
Graphic Design II: PR: ART 2220C or C.I. A survey of type, calligraphy and letter forms and their appropriate use as subject matter for graphic design and visual publication.

ART 2300C AS-ART 3(2,4)
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-ART 3(2,4)
Drawing Fundamentals II: Continuation of ART 2300C.

ART 2400C AS-ART 3(2,4)
Beginning Printmaking: Basic elements and techniques of printmaking covered. Relief, intaglio, and lithography. Assignments include practical application of printmaking as drawing tool.

ART 2510C AS-ART 3(2,4)
Beginning Painting: PR: ART 2300C, ART 2201C, or C.I. Methods and materials of the painter. Introduction to the problems in painting.

ART 2600C AS-ART 3(2,4)
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 3111C AS-ART 3(2,4)

ART 3161 AS-ART 3(3,0)
Mixed Media: PR: ART 2201C, ART 2203C, ART 2300C, ART 2301C. Concepts and techniques involving the creation of art objects by integrating painting, sculpture, drawing, design, and art history.

ART 3232C AS-ART 3(2,4)

ART 3239C AS-ART 3(2,4)

ART 3253C AS-ART 3(2,4)

ART 3281C AS-ART 3(2,4)
Type & Design: PR: ART 2201C, ART 2203C, ART 2300C, ART 2301C. A survey of type, calligraphy and letter forms and their appropriate use as subject matter for graphic design and publication.

ART 3330C AS-ART 3(2,4)

ART 3400C AS-ART 3(2,4)

ART 3520C AS-ART 3(2,4)

ART 3610C AS-ART 3(2,4)

ART 3680 AS-ART 3(3,0)
Animation Production Methods: PR: ART 2201C, ART 2203C, ART 2300C, ART 2301C. The development of a computer animation piece. All aspects of
production will be covered. May be repeated for credit.

ART 3701C AS-ART 3(2,4)
Sculpture: PR: Three semester hours in three-dimensional work, ART 2201C, ART 2203C, ART 2300C, ART 2301C.

ART 3833C AS-ART 3(4,2)
Processes and Ideas in Art: PR: Junior Standing. This course emphasizes the development of individual creativity and the generation of new insights concerning artistic expression. These "formative activities" must be manifested by students in the form of small sculptures and/or other forms of creativity.

ART 4107C AS-ART 3(2,4)

ART 4114C AS-ART 3(2,4)
Advanced Ceramics: PR: ART 2201C, ART 2203C, ART 2300C, ART 2301C, ART 3111C. Advanced problems in the ceramic process. May be repeated for credit.

ART 4121C AS-ART 3(2,4)

ART 4124C AS-ART 3(2,4)

ART 4138C AS-ART 3(2,4)
Advanced Fiber & Fabrics: PR: ART 2201C, ART 2203C, ART 2300C, ART 2301C, ART 2130C. Textile design and production, including non-loom weaving processes. May be repeated for credit.

ART 4235C AS-ART 3(2,4)

ART 4237C AS-ART 3(2,4)
Special Problems in Graphic Design: PR:

ART 2201C, ART 2203C, ART 2300C, ART 2301C, ART 4235C. Advanced problems in visual design and reproduction. May be repeated for credit.

ART 4260C AS-ART 3(2,4)
Advanced Illustration: PR: ART 2201C, ART 2203C, ART 2300C, ART 2301C, ART 3235C. Illustration problems involving the use of advanced level techniques in illustration media. May be repeated for credit.

ART 4320C AS-ART 3(2,4)
Advanced Drawing: PR: ART 2201C, ART 2203C, ART 2300C, ART 2301C, ART 3330C. May be repeated for credit.

ART 4402C AS-ART 3(2,4)
Advanced Printmaking: PR: ART 2201C, ART 2203C, ART 2300C, ART 2301C, ART 3400C. May be repeated for credit.

ART 4483C AS-ART 3(2,4)

ART 4530C AS-ART 3(2,4)

ART 4703C AS-ART 3(2,4)
Advanced Sculpture: PR: ART 2201C, ART 2203C, ART 2300C, ART 2301C, ART 3701C. May be repeated for credit.

ART 4935C AS-ART 3(3,1)
BFA Exhibit/Seminar: PR: ART 2201C, ART 2203C, ART 2300C, ART 2301C, must complete Studio course for BFA. This course is designed to prepare B.F.A. students for B.F.A. Exhibition.

ART 4945 AS-ART 6(0,6)
C.R.E.A.T. Project: PR: ART 2201C, ART 2203C, ART 2300C, ART 2301C, FIL 4288C. A practicum in which specialists from Art, Film, Computer Science and other humanities design and develop a project in partnership with industry.

ART 5109C AS-ART 3(2,1)
Multi-Cultural Crafts Design: The content of this course will include an appreciation for and the production of Western and Non-Western art forms.

ASH 3222 AS-HIST 3(3,0)
Islam and Its Empires: PR: Junior standing or C.I. History of the Middle East and North Africa from the birth of Islam to the 16th century.

ASH 3223 AS-HIST 3(3,0)
The Modern Middle East: PR: Junior standing or C.I. History of the Middle East and North Africa from the 16th century to the present.

ASH 4304 AS-HIST 3(3,0)
Women in East Asia: China & Japan: PR: AMH 2010 and AMH 2020, or EUH 2000 and EUH 2001, or WOH 2012 and WOH 2022. The historical changes and continuities in experiences of Chinese and Japanese women during the traditional period, the modern era and contemporary times.

ASH 4404 AS-HIST 3(3,0)
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.

ASH 4442 AS-HIST 3(3,0)
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.

AST 2002 AS-PHYS 3(3,0)
Astronomy: Descriptive survey of solar system, galaxies and universe; physical properties of stars, H-R diagram, stellar evolution, black holes, neutron stars.

AST 3110 AS-PHYS 3(3,0)

AST 3211 AS-PHYS 3(3,0)

AVM 2510 BA-HOSP 3(3,0)
Airline Management: PR: Junior Standing. The trends, operation, practices, and procedures of the airline industry. Special emphasis on ticketing, scheduling, marketing, and terminal management.
Demonstrate relationships among extant and morphology, structure and functions to kingdom utilizing comparative structure and function of the principal organs and tissue of vascular plants.

**Bot 1000: 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.

**Bot 1000L: Plant Science Lab**
CR: Bot 1000. The laboratory to accompany Bot 1000.

**Bot 3154C: Local Flora**
Local Flora: PR: BSC 2010C and BSC 2011C, 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 3800: Ethnobotany**
C.I. Historical and modern uses of plants economically important in various cultures. Designed for majors and non-majors.

**Bot 3820C: 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: BSC 2010C and BSC 2011C, or C.I. A study of development, structure and function of the principal organs and tissue of vascular plants.

**Bot 4303C: Plant Kingdom**
PR: BSC 2010C and BSC 2011C, or C.I. 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 4680C: Florida Wildflowers**

**Bot 4686C: Conservation and Management of Native Plants**
PR: Bot 4713C, PCB 3043 and/or Bot 4503C or C.I. Identification, conservation, propagation, and management of Florida rare, endangered, indicator or reclamation species.

**Bot 4713C: Plant Taxonomy**

**Bot 5495C: Terrestrial Cryptogams**
PR: Bot 4303C or C.I. A lecture-laboratory survey course on the biodiversity and classification of terrestrial-cryptogams (bryophytes, ferns, and fern allies) with special emphasis on those found in Florida.

**Bot 5623C: Plant Geography and Ecology**
PR: PCB 3043 or C.I. The study of the abiotic and biotic processes that control the distribution of terrestrial flora at local, landscape, and global scales.

**Bot 5705C: Plant Biosystematics**
PR: Graduate standing or C.I. Evolutionary processes among plant taxa and populations utilizing cytochemistry, morphology, biochemistry, breeding systems, and co-evolution.

**Bsc 1030: Biology and Environment**
PR: Bot 1020. The laboratory to accompany Bot 1020.

**BSC 1030L: Biology and Environment Laboratory**
CR: BSC 1030. The laboratory to accompany BSC 1030.

**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. Open only to students whose major requires this specific course.

**BSC 2010H: General Biology Honors**
PR: Eligibility for Honors Program. Basic and unifying concepts of modern biology. Introduction to quantitative experimentation using intensive, open-ended labs.

**BSC 2011C: Biological Diversity**
PR: BSC 2010C or C.I. Introduction to botany and zoology. Structure, function, and representative groups of plants and animals. Open only to students whose major requires this specific course.

**BSC 3404C: Quantitative Biological Methods**
PR: MCB 3020C, CHM 2046. A laboratory course which presents modern methods and instrumentation used in quantitative biological experimentation.

**BSC 3404H: Quantitative Biological Methods-Honors**
PR: MCB 3020C, CHM 2046. A laboratory course which presents the concepts, modern methods, techniques and instrumentation used in quantitative biological and molecular biological experimentation. Honors level content.

**BSC 4103: History of Biology**
PR: BSC 2010C, BSC 2011C and 8 hours in biology or C.I. People and events involved in the development of major biological concepts and disciplines. Suitable for majors and non-majors.

**BSC 4312C: Marine Biology**
PR: PCB 3043, PCB 4683C, and STA 2023. The biological, ecological, physical and chemical aspects of the world's oceans.
BSC 4401L AS-BIOL 1-4(0,3-12)
Biology Laboratory Techniques: PR: PCB 3043, CHM 2210, or C.I. Individual and small group instruction in current laboratory techniques beyond the scope of typical Biology laboratories. May be repeated for credit, up to a maximum of 4 credits total. Graded "s" or "u."

BSC 5034 AS-BIOL 3(3,0)
Biology and Society: PR: C.I. Biological concepts applied to current human problems food production, pollution, diseases, energy, life support systems, and natural ecosystems. Designed for teachers.

BSC 5408L AS-BIOL 3(0,9)
Advanced Biology Laboratory Techniques: PR: BS degree, C.I. This course will emphasize those biological techniques and resources necessary for students to begin thesis research. Individual and small group instruction in current laboratory techniques, literature searches, and hands-on practice of techniques will be stressed. May not be repeated for credit.

BSC 5935 AS-BIOL 1(0,4)
Trends in Marine Biology: PR: C.I. This course is presented at Sea World and each term will focus on a single topic relating to marine biology. The course requires weekend trips. May be repeated for credit.

BSC 5939 AS-BIOL 3(3,0)
Biology for AP Teachers: Participants will perform and evaluate the 12 required labs, analyze the design and grading of the Exam, and develop a representative program.

BTE 4410 ED-IP 4(4,0)
Course Construction in Business Education: PR: EVT 3365 or C.I. An overview and examination of business curriculum and methodology integrated into the vocational frameworks. Planning and preparation of materials, managing the laboratory and involvement in vocational student organizations.

BUL 3130 BA-ACCT 3(3,0)
Legal and Ethical Environment of Business: PR: Junior standing. Analysis of the law as a dynamic social and political institution in the business environment, including ethical consideration. (Not open to Accounting majors).

BUL 3320 BA-ACCT 3(3,0)
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 3321 BA-ACCT 3(3,0)
Business Law II: PR: BUL 3320. 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 4540 BA-ACCT 3(3,0)

BUL 5125 BA-ACCT 3(3,0)
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 4020 AS-COMP 3(3,0)
Digital Media: PR: COP 3530C or C.I. Information structures, algorithms and interactive tools for creation, compression, storage, indexing and transmission of multimedia (visual images, sound, tactile displays, etc.) Project-oriented.

CAP 4021 AS-COMP 3(3,0)
Building Virtual Worlds: PR: COP 3530C or C.I. Design and construction of software for networked interactive learning environments, entertainment and communication systems. Tools for enabling dramatic, artistic and technical creativity. Project oriented.

CAP 4453 AS-COMP 3(3,0)
Robot Vision: PR: COP 3530C and MAC 2312, or C.I. Pin hole camera and eye, perspective and orthographic projections, the processing of edges, regions, motion, shading, texture, object; robot arm usage.

CAP 4630 AS-COMP 3(3,0)

CAP 4702 AS-COMP 3(3,0)
Seminar in Digital Arts: PR: ENC 1102, CEG 1060C, Humanities related course, Technology related arts course, or C.I. A study of a variety of digital technologies from various disciplines in the CREAT program. Production of small projects using technology.

CAP 5415 AS-COMP 3(3,0)
Computer Vision: PR: COP 3530C. Image formation, binary vision, region growing and edge detection, shape representation, dynamic scene analysis, texture, stereo and range images, and knowledge representation.

CAP 5610 AS-COMP 3(3,0)

CAP 5636 AS-COMP 3(3,0)

CAP 5725 AS-COMP 3(3,0)
Computer Graphics Systems I: PR: COP 3530C or equivalent. Architecture of graphics processors; display hardware; principles of programming and display software; problems and applications of graphic systems.

CBH 3003 AS-PSYCH 3(3,0)
Comparative Psychology: PR: PSY 2013. A study of comparative behaviors of lower animals.

CCE 4004 EN-CEE 3(3,0)
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 4034 EN-CEE 3(3,0)
Construction Management: PR: Senior standing and EGN 3613. To provide students with the basic understanding of concepts of constructability, project management and methodologies for implementing them. May be repeated for credit.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCJ 3004</td>
<td>HPA-CJ/LS 3(3,0) Careers in Criminal Justice: PR: CCJ 3024. Introductory course with focus on components of the Criminal Justice process (law enforcement, courts, and corrections) and employment opportunities within the criminal justice system.</td>
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<tr>
<td>CCJ 3014</td>
<td>HPA-CJ/LS 3(3,0) 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.</td>
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<tr>
<td>CCJ 3024</td>
<td>HPA-CJ/LS 3(3,0) Criminal Justice System: An examination of the components and of their interdependence in light of their traditional autonomy.</td>
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<tr>
<td>CCJ 3204</td>
<td>HPA-CJ/LS 3(3,0) Criminal Law in Action: Basic concepts of criminal law: elements of major crimes, criminal responsibility, defenses, and parties to crime.</td>
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<tr>
<td>CCJ 3290</td>
<td>HPA-CJ/LS 3(3,0) Prosecution and Adjudication: PR: CCJ 3024 or PLA 3013 or C.I. Examination of structures and goals of offices and prosecution and criminal trial courts, and of the processes of charging, adjudicating, and sentencing defendants.</td>
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<tr>
<td>CCJ 3321</td>
<td>HPA-CJ/LS 3(3,0) Community-Based Corrections: PR: CCJ 3024 and CCJ 3306 or C.I. An overview and analysis of correction interventions and treatment programs in the community.</td>
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<tr>
<td>CCJ 3341</td>
<td>HPA-CJ/LS 3(3,0) Correctional Interventions in Criminal Justice: PR: CCJ 3014. Intervention techniques used with juvenile and adult offenders in institutional and community-based settings and study of the theoretical foundations.</td>
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<tr>
<td>CCJ 3450</td>
<td>HPA-CJ/LS 3(3,0) The Criminal Justice Manager: PR: CCJ 3024 or C.I. Elements of first-line supervision and executive development. Administrative leadership; its nature; methods, and traits. Recent theories and research in leadership.</td>
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<tr>
<td>CCJ 3451</td>
<td>HPA-CJ/LS 3(3,0) Justice System Technology: PR: CCJ 3024 or C.I. Examination of the relevance of scientific and technological developments to justice systems and their applicability to the operations and management of the systems.</td>
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<tr>
<td>CCJ 3483</td>
<td>HPA-CJ/LS 4(4,0) Labor Relations in Criminal Justice: PR: CCJ 3024 and CCJ 3450 or C.I. Examine the role of the public sector labor relations in criminal justice to include management-employee relationships, collective bargaining process, employee organizations, and federal-state laws.</td>
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<tr>
<td>CCJ 3667</td>
<td>HPA-CJ/LS 3(3,0) Victims and the CJ System: PR: CCJ 3024. Course examines Victims as they affect the Criminal Justice system, the dimensions of criminal victimization, and victim offender programs.</td>
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<tr>
<td>CCJ 4035</td>
<td>HPA-CJ/LS 3(3,0) Crime and the Media: PR: CCJ 3024 or C.I. Explore how the criminal justice system, criminals, and crime are portrayed in the media and its impact on society and the criminal justice system.</td>
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<tr>
<td>CCJ 4100</td>
<td>HPA-CJ/LS 3(3,0) Criminal Investigation: PR: CCJ 4105. Course acquaints students with basic procedures used in Criminal investigations, purpose of investigations, and ingredients for successful investigations.</td>
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<td>CCJ 4105</td>
<td>HPA-CJ/LS 3(3,0) Police and Society: PR: CCJ 3024. An examination of the varied roles of police in contemporary society. Emphasis is on dynamics of police/citizen interactions and the police subculture.</td>
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<tr>
<td>CCJ 4140</td>
<td>HPA-CJ/LS 3(3,0) Community Policing: PR: CCJ 3014, CCJ 4105. The viability of community policing. The theoretical basis for community interventions are related to the daily operations required by community policing.</td>
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<tr>
<td>CCJ 4233</td>
<td>HPA-CJ/LS 3(3,0) Legal Aspects of Policing: PR: CCJ 4105. The legal dimensions of various police decision-making stages: including stops and frisks; arrests; searches and seizures wiretappings; and, interrogations.</td>
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<tr>
<td>CCJ 4270</td>
<td>HPA-CJ/LS 3(3,0) Legal Aspects of the Criminal Court Process: PR: CCJ 3290. The legal dimension of various criminal court decision making stages, including; bail; charging; preliminary hearing; grand jury; pretrial hearings plea hearings; trial; and, sentencings.</td>
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<td>CCJ 4361</td>
<td>HPA-CJ/LS 3(3,0) Death Penalty: PR: CCJ 3024. This course provides students an opportunity to analyze and discuss complex issues surrounding the death penalty and the criminal justice system.</td>
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<td>CCJ 4454</td>
<td>HPA-CJ/LS 3(3,0) Policy Development in Law Enforcement: PR: CCJ 4105. The course is designed to deal with policy development in law enforcement. Major issues of organization, administration, personnel practices and police operations will be addressed.</td>
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<tr>
<td>CCJ 4459</td>
<td>HPA-CJ/LS 3(3,0) Justice Agency Operations: PR: CCJ 3024 and CCJ 3450 or C.I. Elements, functions, and processes essential to the continuing management of various criminal justice agencies, institutions and court systems.</td>
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<tr>
<td>CCJ 4463</td>
<td>HPA-CJ/LS 3(3,0) Cultural Diversity in Criminal Justice: PR: CCJ 3024. This course focuses on the problems and issues associated with race, ethnic and gender relations in the administration of justice in a democratic society.</td>
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<tr>
<td>CCJ 4466</td>
<td>HPA-CJ/LS 3(3,0) Criminal Justice Ethics: Focuses on the ethical issues and problems commonly encountered in the criminal justice system (policy courts and corrections).</td>
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<tr>
<td>CCJ 4540</td>
<td>HPA-CJ/LS 3(3,0) Delinquency Control: PR: CCJ 3024 and CCJ 3290 or C.I. Examination of programs and institutions including juvenile court process, intake services, and remedial procedures and practices.</td>
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<tr>
<td>CCJ 4615</td>
<td>HPA-CJ/LS 3(3,0) Serial Murder and Criminal Justice: PR: CCJ 3014. Study of extent, types, and explanations of serial murder, and responses of the general public, law enforcement, and prosecution.</td>
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contemporary foreign criminal justice and differences emerging from various political, cultural and legal systems.

CCJ 4641 HPA-CJ/LS 3(3,0)
Organized Crime: An examination of organized crime, including structures, history and activities, and of issues surrounding efforts to define and control it.

CCJ 4651 HPA-CJ/LS 3(3,0)
Drugs and Crime: Focuses on the problems of drugs and drug control in contemporary society. Students will examine the problems of drugs in our society as well as specific strategies used by criminal justice agencies to prevent and control illicit drug use.

CCJ 4661 HPA-CJ/LS 3(3,0)
Terrorism: PR: CCJ 3024 and CCJ 4105 or C. I. An examination of competing ideologies of a variety of social and political conflicts (both international and domestic) that give rise to terrorism and of the implications for the criminal justice system.

CCJ 4670 HPA-CJ/LS 3(3,0)
Women and Crime: This course covers women in criminal justice as offenders and prisoners, as well as crime victims and professionals working in the system.

CCJ 4681 HPA-CJ/LS 3(3,0)

CCJ 4701 HPA-CJ/LS 3(3,0)
Research Methods in Criminal Justice: Overview of the social science research methodology used in criminal justice, covers the major forms of research designs used by social science and evaluates their strengths and weaknesses.

CCJ 4907H HPA-CJ/LS 3(3,0)
Criminal Justice Research Methods Honors: PR: CCJ 3024. Overview of the social science research methodology used in criminal justice, covers the major forms of research designs used by social science and evaluates their strengths and weaknesses. Honors level content.

CCJ 4941 HPA-CJ/LS 6-9(0,12-3)
Criminal Justice Internship: PR: C. I. Internship in municipal, county, state or federal criminal justice agency. Includes assignments in police, courts, corrections components.

CCJ 5015 HPA-CJ/LS 3(3,0)
The Nature of Crime: This course provides an overview of major dimensions of crime in the U.S.; epidemiology of crime, costs of crime, and typologies of crime and criminals.

CCJ 5105 HPA-CJ/LS 3(3,0)

CCJ 5305 HPA-CJ/LS 3(3,0)
Foundations of Corrections: PR: C. I. Provides an overview of correctional process in U.S., including philosophical foundations and contemporary practices.

CCJ 5406 HPA-CJ/LS 3(3,0)
Research and Technology Implementation: Changing roles of social and physical sciences as related to the objectives and administration of public safety agencies.

CCJ 5456 HPA-CJ/LS 3(3,0)
The Administration of Justice: This course provides an overview of the criminal justice system and a critical analysis of formal and informal processing of offenders by criminal justice agencies.

CCJ 5467 HPA-CJ/LS 3(3,0)
Justice and Safety System Manpower: Processes essentials to administration to human resources in criminal justice and public safety agencies; structure and processes for acquisition, training, and maintenance of personnel.

CCJ 5704 HPA-CJ/LS 3(3,0)
Research Methods in Criminal Justice: An examination of the philosophy and techniques of research as applied in the Criminal Justice field.

CDA 3101 AS-COMP 1(1,0)
Introduction to Data Communications: I/O processing, DMA, interrupts, asynchronous and synchronous data communications, serial communication standards, modems, and protocols.

CDA 3103C AS-COMP 3(3,1)
Computer Organization: PR: COP 2500C. Combinational logic, arithmetic circuits, sequential logic design, finite state machine design, software tools for logic design, and assembly language programming.

CDA 4150 AS-COMP 3(3,0)
Computer Architecture: PR: COP 3402C and CDA 3103C. Basic processor design, hardwired and microprogrammed control, ALU, memory organization, pipelining, I/O and computer arithmetic.

CDA 5106 AS-COMP 3(3,0)
Advanced Computer Architecture I: PR: CDA 4150. Instruction set architectures, processor implementation, memory hierarchy, pipelining, computer arithmetic, vector processing, and I/O.

CDA 5110 AS-COMP 3(3,0)
Parallel Architecture and Algorithms: PR: COP 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 5215 AS-COMP 3(3,0)
Architecture and Design of VLSI: PR: CDA 4150 or equivalent. Overview of VLSI technology. Logical design of basic subsystems; integrated system design tools; design of a VLSI computer system.

CDA 5501 AS-COMP 3(3,0)

CDA 5530 AS-COMP 3(3,0)

CEG 3301 EN-CEE 3(3,0)
Engineering and Environmental Geology: PR: EGN 3310 and 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.

CEG 4101C EN-CEE 4(3,2)

CEG 4801C EN-CEE 3(2,2)
Geotechnical Engineering Design: PR:
CEG 4101C. Project course on design of foundations and other soil structures using geotechnical design methodologies.

CEG 4812 EN-CEE 1(1,0) Historical Developments in Civil Engineering: Seminar covering major historical developments in civil engineering.

CEG 5015 EN-CEE 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 5700 EN-CEE 3(3,0) Geo-Environmental Engineering: PR: CEG 4101C. Geotechnical applications to environmental problems, groundwater flow, soil contamination and groundwater transport, geosynthetics and stability of landfill design, control of contaminated sites.

CEN 5016 AS-COMP 3(3,0) Software Engineering: PR: COP 4020 and knowledge of Ada. Study of design techniques for large software systems, modularization, task assignment, management techniques, implementation techniques, testing, quality control, documentation, and maintenance.

CES 4100 EN-CEE 3(3,0) Structural Analysis I: PR: EGN 3331. Topics in structural mechanics, energy methods, analysis of determinate and indeterminate structures by flexibility and stiffness methods.

CES 4101 EN-CEE 3(3,0) Structural Analysis II: PR: CES 4101. Special structures; introduction to matrix structural analysis, dynamic loads including wind and earthquake.

CES 4130L EN-CEE 1(0,3) Structures Laboratory: PR: EGN 3331; CR: CES 4100. Laboratory exercises on the behavior of structures and structural materials.

CES 4605 EN-CEE 3(3,0) Steel Structures: PR: CES 4100. Design of structural steel members and buildings; emphasis on AISC-ASD building code; introduction to AISC-LRFD building code; tension and compression members, beams, beam-columns, connections.

CES 4608C EN-CEE 3(2,2) Steel Design: PR: CES 4605. Project course on design of steel components, connections, and frame structures using AISC specifications.

CES 4702 EN-CEE 3(3,0) Reinforced Concrete Structures: PR: CES 4100 or C.I. Design of RC members using ACI code; beam flexure and shear; compression bending; bond and development; introduction to continuous frames.

CES 4709C EN-CEE 3(2,2) Concrete Design: PR: CES 4702. Project course on design of concrete structures using concrete and structural analysis methodologies.

CES 5325 EN-CEE 3(3,0) Bridge Engineering: PR: CES 4605; CES 4702. Structural systems for bridges, loading, analysis by influence lines, slab and girder bridges, composite design, prestressed concrete, rating of existing bridges, specifications and economic factors.

CES 5606 EN-CEE 3(3,0) Advanced Steel Structures: PR: CES 4605. Behavior and design of steel buildings; emphasis on AISC-LRFD building code; complex connections, tension members, stability of compression members, laterally unsupported beams, frames, and beam columns.

CES 5706 EN-CEE 3(3,0) Advanced Reinforced Concrete: PR: CES 4702 or C.I. Design of frames, two-way floor systems, shear walls; shear and torsion; compression field theory; inelastic analysis; wind and seismic design; introduction to prestressed concrete.

CES 5821 EN-CEE 3(3,0) Masonry and Timber Design: PR: C.I. Structural properties of masonry and timber; design loads-codes and standards; analysis for axial loads, flexure and shear.

CET 2123C EN-ENT 2(2,3) Microprocessor Electronics I: PR: EET 3085C. Introduction to microprocessors. Includes machine language programming, an introduction to microprocessor-based system architecture, and binary and hexadecimal arithmetic.

CET 2131C EN-ENT 4(2,4) Microprocessor Electronics II: PR: CET 2123C. A continuation of CET 2123C, with emphasis on applications of microprocessor applications in engineering technologies.

CET 2364 EN-ENT 3(3,0) Systems Applications in C: PR: CET 3198C, CET 3303, COP 2220C, or knowledge of C. Use of C language in control of system processes, DOS and BIOS interrupts, and interfacing with assembly language.


CET 3198C EN-ENT 4(3,2) Digital Systems: PR: DC Circuits and Digital Circuits I. Finite State Machines and Algorithmic State Machines, includes design, synthesis and implementation of a digital system using schematic capture and VHDL.

CET 3323C EN-ENT 4(3,2) Digital Technology: PR: EET 3085C. Digital logic gates, memory devices, Karnaugh Maps, combinational logic, arithmetic units, registers and sequential logic.

CET 3383 EN-ENT 3(3,0) Applied Systems Analysis I: PR: Programming II (Pascal II). Study of system analysis, design, development and implementation cycle. Includes Object Oriented Programming (OOP) to implement system programs.

CET 4138 EN-ENT 4(3,2) Digital Programmable Devices: PR: CET 3198C or equivalent and C.I. Architecture and applications of various types of programmable logic devices. Design entry methods, e.g. HDL, schematic capture, etc. Lab exercises using PALS, PLDs, and FGPs.

CET 4188 EN-ENT 4(4,0) Microcomputer Technology II: PR: CET 3303. Continuation of CET 3303. Advanced assembly language programming including macros, system subroutines, high-level language interfacing, device drivers, and operating system enhancements.

CET 4333 EN-ENT 3(3,0) Computer Organization and Design: PR: CET 3198C. Basic computer architecture and system design. An introduction to
Mathematical techniques commonly required.

CGN 4600 EN-CEE 3(3,0)
Public Works Engineering: PR: ENV 3001 and CWR 3201. An overview of planning, design, operation and maintenance of public works, with emphasis on water and wastewater treatment plants. May be repeated for credit.

CGN 5320C EN-CEE 3(2,2)
Geographic Information systems: Programming theory and application of Geographic Information Systems to Civil Engineering projects.

CET 4334C EN-ENT 3(2,2)
Applied Computer Systems II: PR: CET 3198C and CET 3303. Computer communications methods with emphasis on serial and parallel data communications and computer networking.

CET 4427 EN-ENT 3(3,0)
Applied Database I: PR: CET 3383. Design and implementation of data base systems within the concept of central administration, structured data storage. Programming project.

CET 4505 EN-ENT 3(3,0)

CET 4523 EN-ENT 3(3,0)
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 4915C EN-ENT 3(1,4)
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.

CET 4931 EN-ENT 3(3,0)
Current Topics in Technology: PR: C.I. Study of recent state-of-the-art computer related topics from recognized electronics and computer oriented technical journals and texts. Requires written and verbal communication.

CGN 3501C EN-CEE 3(2,3)
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 EN-CEE 3(3,0)
Civil Engineering Systems: PR: EGN 3613; MAC 2313; STA 3032. Mathematical techniques commonly associated with operations research and economics which are applicable to the planning, design, and operation of civil engineering systems.

CGS 2517C AS-COMP 1(2,1)
Spreadsheet Concepts II: PR: CGS 2516C. The spreadsheet ranges, graphics, linking sheets (spreadsheets and others), and basic and intermediate macros.

CGS 2518C AS-COMP 1(2,1)
Spreadsheet Concepts III: PR: CGS 2517C. Advanced macros, database facilities, linkages to other decision making tools, and algorithmic issues.

CGS 2540C AS-COMP 1(2,1)
Database Concepts I: PR: CGS 1060C. The relational model using current software, logical and physical data structures, data concepts and modeling conceptual database design. Implementation and physical design relational database language fundamentals.

CGS 2541C AS-COMP 1(2,1)

CGS 2542C AS-COMP 1(2,1)

CGS 2580C AS-COMP 1(2,1)
Word Processor Concepts: PR: CGS 1060C. The history, features, design and commands of Windows environment word processor - text entry and editing summary of command and built-in functions, dictionaries and thesaurus, and formatting and report control.

CGS 2581C AS-COMP 1(2,1)

CGS 2582C AS-COMP 1(2,1)

CGS 3106 AS-COMP 3(3,0)
Business Systems Applications: PR: CGS 2100C 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 3164 AS-COMP 1(1,0) Distributed Computing Concepts II: PR: CGS 3163. Computer Supported Cooperative Work groups (CSCW) and distributed databases

CGS 3170C AS-COMP 1(2,1) Internet Applications I: PR: CGS 1060C. Development of the Internet; Internet applications including e-mail, FTP, www.

CGS 3171C AS-COMP 1(2,1) Internet Applications II: PR: CGS 1060 and CGS 3170C. A detailed study of the World Wide Web including: Web browsers, HTML, CGI Scripts, JAVA applets, HTTP servers, band width considerations

CGS 3266 AS-COMP 1(1,0) Computer Architecture Concepts I: PR: CGS 1060. Systems architecture including: CPU organization bus architecture, bus architecture, I/O and memory system and graphics, via a detailed study of one selected computer system.


CGS 3268 AS-COMP 1(1,0) Computer Architecture Concepts III: PR: CGS 3267. A detailed study of specialized computer architectures including network file servers and massively parallel computer systems.

CGS 3280C AS-COMP 1(2,1) Computer Networks Concepts I: PR: CGS 1060. Network transmission media, synchronous & asynchronous data communications, telecommunications, modems, CODEC's, transmission protocols

CGS 3281 AS-COMP 1(1,0) Computer Networks Concepts II: PR: CGS 3280C. Protocols, standards and applications for local area networks, metropolitan area networks and wide area networks: OSI

CGS 3282 AS-COMP 1(1,0) Computer Networks Concepts III: PR: CGS 3281. Advanced network topics including SONET, ATM and Mobile Computing

CGS 3422 AS-COMP 3(3,0) Programming and Numerical Methods: CR: MAC 2312. 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 3761 AS-COMP 1(1,0) Operating Systems Concepts I: PR: CGS 1060. A study of operating systems concepts including: file structures, virtual memory, process context information and process scheduling

CGS 3762 AS-COMP 1(1,0) Operating Systems Concepts II: PR: COP 3761. A detailed comparison of operating systems including UNIX Microsoft Windows, Windows NT and MVS.

CGS 4140 AS-COMP 3(3,0) Computerized Health Information Systems: PR: CGS 2100C 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 5310 ED-IP 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-LANG 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 1140H AS-LANG 4(4,0) Honors Elementary Chinese Language and Civilization I: PR: Honors students or C.I. Introduces the student to Chinese culture through the major language skills: Listening, speaking, reading and writing.

Open only to students with no experience in the language. Honors level content.

CHI 1141H AS-LANG 4(4,0) Honors Elementary Chinese Language and Civilization II: PR: Honors student or C.I. Continuation of CHI 1140H

CHM 1020 AS-CHEM 3(3,0) Concepts in Chemistry: PR: MAC 1105 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-CHEM 3(3,0) General Chemistry: PR: MAC 1105, MGF 1203 or equivalent. An introductory study of the fundamental concepts of chemistry, primarily oriented toward COH and PA majors.

CHM 1032L AS-CHEM 1(0,3) General Chemistry Laboratory: CR: CHM 1032. An introductory study of physical and chemical properties of elements and compounds.

CHM 2045C AS-CHEM 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, equilibrium, thermodynamics, and kinetics.

CHM 2045H AS-CHEM 4(3,1) Honors Chemistry Fundamentals I: PR: High school chemistry and admission to University Honors Program. Same as CHM 2045C with honors-level content.

CHM 2046 AS-CHEM 3(3,0) Chemistry Fundamentals II: PR: BSC 2010C, MCB 3020C, CHM 2046. Continuation of CHM 2045C.

CHM 2046H AS-CHEM 3(3,0) Honors Chemistry Fundamentals II: PR: CHM 2045CH. Same as CHM 2046 with honors-level content.

CHM 2046L AS-CHEM 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 2046LH AS-CHEM 1(0,3) Honors Chemistry Fundamentals Lab: PR: CHM 2045CH and CR: CHM 2046H. Illustration of chemical principles and introduction to the techniques of inorganic...
coupled with computer data processing to measure physical properties and determine atomic and molecular parameters. As well as modern instrumental techniques for chemical bonding.

Continuation of CHM 3410. Physical Chemistry I: PR: CHM 2210. Rigorous treatment of atomic and molecular structure, thermodynamics, kinetics, and structure elucidation skills.


Introduction to Forensic Science: PR: CHM 3120 or CHM 3411. A lecture-laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

The Chemistry of Materials: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry: PR: CHM 3120 or CHM 3411. A lecture-laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry I: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry II: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry III: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry IV: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry V: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry VI: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry VII: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry VIII: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry IX: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry X: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XI: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XII: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XIII: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XIV: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XV: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XVI: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XVII: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XVIII: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XIX: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XX: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XXI: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XXII: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XXIII: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XXIV: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XXV: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XXVI: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XXVII: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XXVIII: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XXIX: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.

Polymer Chemistry XXX: PR: CHM 3120 or CHM 3411. A laboratory course designed to introduce students to the techniques used to identify materials and compare trace evidence. Atomic and molecular structure states of matter, stoichiometry, equilibria, and quantum mechanics and structure.
identification of controlled substances.

CHS 3533C AS-CHEM 3(2,3)
Forensic Serology: Classical Methods:
PR: PCB 3233 & L, BSC 3404C, PCB 3063 & L and CR: PCB 3523. A review of
the sample recovery techniques, presumptive, antigenic, and enzymatic tests
used to evaluate biological samples for testimony in court.

CHS 3540C AS-CHEM 2(1,3)
Fire and Debris Analysis I: PR: CHM 3120C and C.I. A lecture/laboratory course
covering the procedures for recovering and identifying flammable liquids in fire related
evidence.

CHS 3595 AS-CHEM 3(3,0)
Forensic Science in the Courtroom: PR: CHS 3501. The special needs of the
forensic scientist in preparing for and participating in courtroom proceedings.

CHS 4200 AS-CHEM 3(3,0)
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 4534C AS-CHEM 3(1,6)
Forensic Serology: Molecular Methods:
PR: CHS 3533C and CR: BCH 4053, BCH 4054, and BCH 4103L. A review of
the sample recovery techniques and molecular procedures (RFLP/PCR) used to evaluate
biological samples for testimony in court.

CHS 4541C AS-CHEM 2(1,3)
Fire and Debris Analysis II: PR: CHS 3540C or C.I. An advanced
lecture/laboratory course covering the procedures for recovering and identifying
flammable liquids in real fire related evidence.

CHS 4591 AS-CHEM 6(0,4)
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 AS-CHEM 2(2,0)
Chemical Dynamics II: PR: CHS 5240. Continuation of CHS 5240.

CHS 5250 AS-CHEM 2(2,0)
Chemical Synthesis I: PR: CHM 2211, 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.

CHS 5262 AS-CHEM 2(2,0)
Industrial Chemical Processes: PR: CHM 3211 and 3411. Familiarization with basic
considerations of large-scale inorganic and organic chemical manufacturing
techniques, raw materials, and the petrochemical industry.

CJT 3803 HPA-CJ/LS 3(3,0)
Security Management: PR: CCI 3024. Examination of a global security
management environment impacted by downsizing a dramatically changing work
force, religious extremism/terrorism, technological revolution and other
challenges.

CJT 3804 HPA-CJ/LS 3(3,0)
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 HPA-CJ/LS 3(3,0)
Practical Security Applications: An examination of basic security principles
applied to practical specific security situations encountered in the Central
Florida area.

CJT 3842 HPA-CJ/LS 3(3,0)
Special Security Problems: Review and application of basic security principles to
security principles to retail security, transportation/cargo security, utility security, computer security,
and other special security situations.

CLA 3850 AS-PHIL 3(3,0)
Classical Mythology: Myths of the Greeks & Romans studied through excerpts from
ancient sources and experienced through works of art, literature, and music.

CLA 3851 AS-PHIL 3(3,0)
Comparative Mythology: Common themes found in the myths of various cultures; theories of their origins, meaning
and value in human experience.

CLP 3143 AS-PSYCH 3(3,0)
Abnormal Psychology: PR: PSY 2013 and
PPE 3003. Classification, causation, and
treatment of deviant patterns of behavior.

CLP 3302 AS-PSYCH 3(3,0)
Clinical Psychology: PR: PPE 3003 and
CLP 3143. An overview of approaches to
psychopathology, methods of clinical assessment, and various approaches to
individual and group counseling.

CLP 3413 AS-PSYCH 3(3,0)
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 4134 AS-PSYCH 3(3,0)
in-depth survey of the prevalence, classification, symptoms, diagnosis,
consequences, and treatments of disorders of infancy, childhood, and adolescence.

CLP 4402C AS-PSYCH 3(2,2)
Psychology of Physical Disability: PR:
PSY 2013. Psychological aspects of physical disability and rehabilitation.
Psychological adjustment, body-mind relationships, family and societal dynamics
relative to therapeutic intervention.

CLP 5004 AS-PSYCH 3(3,0)
Psychology of Adult Adjustment: PR:
C.I. A survey of situations encountered
during adulthood, including marriage, birth,
parenthood, trauma, illness, death, etc. Effective adjustment.

CLP 5166 AS-PSYCH 3(3,0)
Advanced Abnormal Psychology:
Consideration of classification, causation,
management and treatment of emotional
disorders. Review of theories and research
in the field. Lecture/Laboratory.

CMC 4240 AS-R/TV 3(1,2)
Corporate/Institutional Video: PR: RTV
3200, RTV 3260C (RTV 3260 may be
taken concurrently). Preparation of
non-broadcast corporate/institutional video
programs including planning, budgeting,
production, and evaluation.

COM 3011 AS-COMM 3(1,2)
Communication and Human Relations:
Introduction to semantics; symbols and
meaning and the relationship with human
behavior.

COM 3110 AS-COMM 3(3,0)
Business and Professional
Communication: PR: Majors only, SPC
1600C or C.I. Theoretical and practical
training in effective presentational speaking
for business and professions.

COM 3120 AS-COMM 3(3,0)
Organizational Communication: A study
of communication functions and problems within the contexts of hierarchies.

**COM 3311 AS-COMP 3(3,0)**
Communication Research Methods: Investigation of research methods used in communication. Understanding and interpretation of original research emphasized.

**COM 3330 AS-COMP 3(3,0)**
Computer Mediated Communication: PR: RTV 4403, MMC 3311, and RTV major. Digital media communities, synchronous and asynchronous computer-mediated communication forums are placed within the context of mass communication theory, media ecology and CMC theory.

**COM 3701 AS-COMP 3(3,0)**
Humor in Communication: Designed for upper division organizational and interpersonal communication majors, course probes the involvement of humor in language, message transmission, cognition, and social functioning.

**COM 4014 AS-COMP 3(3,0)**
Gender Issues in Communication: PR: SPC 1600C and Junior Standing. A study of how communication exchanges, both verbal and non-verbal, differ between men and women, and how these differences are manifested.

**COM 4461 AS-COMP 3(3,0)**
Intercultural Communication: Study of variables affecting messages and participants in intercultural contexts.

**COM 4462 AS-COMP 3(3,0)**
Conflict Management: The study of communication in everyday conflicts.

**COP 2200 AS-COMP 3(3,0)**
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 2210C AS-COMP 1(2,1)**
Pascal Programming Language: Programming in Pascal; use of the LAN, editor and debugger. Basic program structure and syntax; simple and structured data types.

**COP 2211C AS-COMP 1(2,1)**
Intermediate Pascal: PR: COP 3210 or equivalent knowledge. Programming in Pascal; structural data types, pointers, dynamic variables, strings, and units.

**COP 2212C AS-COMP 1(2,1)**
Advanced Pascal: PR: COP 2211C or equivalent knowledge. Programming in Pascal; recursion, objects, inheritance, methods, encapsulation, virtual methods, and polymorphism.

**COP 2213C AS-COMP 3(3,0)**
Pascal Language: Programming in Pascal; use of LAN, editor, debugger, structures, pointers, revisions, objects, inheritance, methods and encapsulation. (same as COP 2210, 2211, 2212)

**COP 2220C AS-COMP 1(2,1)**
C Programming Language: PR: Knowledge of a procedural high-level programming language. Lecture and programming experience in C.

**COP 2221C AS-COMP 1(2,1)**
Intermediate C Language: PR: COP 2220C and COP 3341C, or equivalent knowledge. Lectures and experience using the standard C language subroutine libraries and selections from public domain and internet code archives.

**COP 2222C AS-COMP 1(2,1)**
Advanced C Language: PR: COP 2221C and COP 3341C, or equivalent knowledge. Lectures and programming experience in C++.

**COP 2223 AS-COMP 3(3,0)**
C Language: PR: Knowledge of a high level language. Programming in C; standard C language subroutine libraries; lectures and experience using C. (same as COP 2220C/2221C/2222C sequence).

**COP 2230C AS-COMP 1(2,1)**
ADA Programming Language: PR: Knowledge of a procedural high-level programming language. Lecture and programming experience in ADA.

**COP 2253C AS-COMP 3(2,1)**
Java: Programming in Java; use of the LAN, editor and debugger. Basic program structure and syntax; simple and structured data types.

**COP 2500C AS-COMP 4(3,1)**
Concepts in Computer Science: CR: Knowledge of a higher level programming language. Fundamental concepts in program design, data structures, algorithms, analysis and a survey of topics in CS. Not open to Computer Science majors.

**COP 2800C AS-COMP 1(2,1)**
Java I: PR: CGS 1060 or equivalent. Java applets, classes, methods, arrays, objects, object-oriented programming, program control, Java graphics.

**COP 2805C AS-COMP 1(2,1)**
Java II: PR: COP 2800C. Intermediate-level Java graphics, graphical user interface components, exception handling, multithreading, multimedia, files, streams, networking and data structures.

**COP 3341C AS-COMP 1(2,1)**
UNIX: PR: Knowledge of the C programming language. Lecture and programming experience in UNIX.

**COP 3342C AS-COMP 1(2,1)**
Intermediate UNIX: PR: COP 3341C or equivalent knowledge. Introduction to the procedures and techniques used to plan, configure, install, monitor, maintain, and tune UNIX operating systems and applications for optimum performance.

**COP 3345C AS-COMP 1(2,1)**
Advanced UNIX: PR: COP 3342C or equivalent knowledge. Introduction to procedures and practices used to establish client server applications over Local Area Networks and to extend these applications to run over Wide Area Networks. Emphasis placed upon using TCP/IP protocols. Discussions include emerging technologies such as Frame Relay and ATM.

**COP 3402C AS-COMP 3(2,1)**

**COP 3502C AS-COMP 3(3,0-1)**
Computer Science I: PR: MAC 1105 & MAC 1114. CR: Knowledge of higher level programming language. Problem solving techniques, order analysis and notation, abstract data types, and revisions; ethical, moral and social issues in computing.

**COP 3502H AS-COMP 3(3,0)**
Honors Computer Science I: PR: MAC 1105 or MAC 1114, and a higher level programming language. Problem solving techniques, order analysis and notation, abstract data types, and recursion; ethical, moral and social issues in computing.

**COP 3503C AS-COMP 3(3,0-1)**
Computer Science II: PR: COP 3502. CR: COT 3100C. Continuation of Computer
COP 4521 AS-COMP 3(3,0)
Projects in Parallel and Distribution Processing: PR: COP 4520. Research and projects related to emerging architectures, computational models, languages and environments for parallel and distributed computation.

COP 4600 AS-COMP 3(3,0)
Operating Systems: PR: COP 3402C and COP 3530C. The function and organization of operating systems, process management, virtual memory, and file management.

COP 4710 AS-COMP 3(3,0)
Database Systems: PR: COP 3530C. Storage and access structures, database models and languages, related database design, and implementation techniques for database management systems.

COP 5021 AS-COMP 3(3,0)

COP 5570 AS-COMP 3(3,0)
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.

COT 3960 AS-COMP 0(1,0)
CS Foundation Exam: PR: COP 3502C AND COP 3100C. Foundation examination for computer science majors. Required before taking COP 3530C, and COP 3402C and other 4000 level courses. Graded S/U.

COT 4110 AS-COMP 3(3,0)

COT 4210 AS-COMP 3(3,0)
Discrete Computational Structures: PR: Admission to major or C.I., and COP 3100, MAC 3312. Review of discrete structures, introduction to automation theory, computational complexity, analysis of algorithms, computability theory, and formal languages.

COT 4500 AS-COMP 3(3,0)

COT 4810 AS-COMP 3(3,0)
Topics in Computer Science: PR: COP 3530C AND COP 3402C. A range of topics from the field of Computer science; application of oral and written communication skills; social, ethical and moral issues of computing.

COT 5310 AS-COMP 3(3,0)
Formal Languages and Automata Theory: PR: COP 4020 and COP 4210. Classes of formal grammars and their relation to automata, normal forms, closure properties, decision problems. LR(K) grammars.

COT 5405 AS-COMP 3(3,0)

COT 5507 AS-COMP 3(3,0)
Computational Methods/Applications: PR: COP 4500. Computational solution techniques for algebraic equations, ODE and PDE Models of applications selected from science, engineering, applied mathematics, and computer science.
COT 5510 AS-CMP 3(3,0)
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,
troduction to nonlinear optimization and
linearization.

COT 5520 AS-CMP 3(3,0)
Computational Geometry: CR: COT
5405. Geometric searching, point location,
convex hulls, proximity problems, Voronoi
diagrams, spanning trees, triangulation,
intersection arrangement applications.

CPO 3034 AS-POLS 3(3,0)
Politics of Developing Areas:
Comparative analysis of theories, problems
and politics of development in Third World
nations.

CPO 3103 AS-POLS 3(3,0)
Comparative Politics: PR: POS 2041 or
C.I. Government and politics in selected
nations, with emphasis upon comparative
analysis of contemporary problems,
politics, political culture, behavior, and
institutions.

CPO 3014 AS-POLS 3(3,0)
Politics of Western Europe: PR: POS
2041 or C.I. An examination of the political
and economic dynamics of Western Europe
in the post-1945 era.

CPO 3132 AS-POLS 3(3,0)
Canadian Studies: A multi-disciplinary
approach to the study of Canada, its people,
culture, government, and economy.

CPO 3403 AS-POLS 3(3,0)
Politics of the Middle East: PR: POS 2041
or C.I. An examination of the dynamics of
Middle East politics, including both
regional and international dimensions.

CPO 3614 AS-POLS 3(3,0)
Politics of Eastern Europe: PR: POS 2041
or C.I. An examination of the political and
economic dynamics of Eastern Europe in
the post-1945 era.

CPO 4062 AS-POLS 3(3,0)
Comparative Judicial Process: Study of
courts and judges in cross national context.
Focus upon judicial recruitment, decisional
patterns, and policy outcomes.

CPO 4123 AS-POLS 3(3,0)
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 AS-POLS 3(3,0)
Government & Politics of Canada:
Examines the origins and development of
Canadian government. Focuses on the
functioning of federalism, nationalism
polities, foreign policy, and relations with
the United States.

CPO 4303 AS-POLS 3(3,0)
Comparative Latin American Politics:
Comparative analysis of politics, society
and culture in Latin America and selected
countries of the region.

CPO 4643 AS-POLS 3(3,0)
Government and Politics of Russia:
Study of the origins, institutions, and
functioning of the Russian system,
including the lingering influence of the old
order on domestic and foreign policy.

CRT 4931 EN-ENT 3(3,0)
Current Topical in Technology: PR: C.I.
Study of recent state-of-the-art computer
related topics from recognized electronic
and computer oriented technical journals
and texts. Requires written and verbal
communication.

CRW 1001 AS-ENG 3(3,0)
Imaginative Writing for Non-English
Majors: An introduction to imaginative
writing for non-English majors. Students
will explore a variety of traditional and
non-traditional forms of imaginative
writing.

CRW 2100 AS-ENG 3(3,0)
Fiction Writing: PR: CRW 3013. English
majors in creative writing specialize in
fiction writing; advanced group analysis
and criticism of work produced by
individual students.

CRW 2300 AS-ENG 3(3,0)
Theory and Practice of Poetry Writing:
PR: CRW 3013, English or English major,
Junior standing, or C.I. English majors in
creative writing specialize in the theory
and practice of verse; group analysis and
criticism.

CRW 3013 AS-ENG 3(3,0)
Creative Writing for English Majors:
PR: ENC 1102 and English or English
Education major, Junior standing, or C.I.
The theory and techniques of literary
genera; practice and critique of original
writing by peers; critical reading of
established authors.

CRW 3120 AS-ENG 3(3,0)
Fiction Writing Workshop: PR: CRW
2100, CRW 3013 and Junior standing. An
intermediate level fiction writing workshop
for English majors; group analysis and
criticism; close reading of contemporary
fiction and fiction theory.

CRW 3211 AS-ENG 3(3,0)
Creative Nonfiction Writing: PR: CRW
3013 and English or English Ed major or
C.I. Writers present original nonfiction
writing for class response and individual
conferences. Close reading of key works of
creative nonfiction with discussion of
definitions of the genre.

CRW 3310 AS-ENG 3(3,0)
Poetry Writing Workshop: PR: CRW
3013, CRW 2300 and Junior standing. An
intermediate level poetry workshop for
English majors. Group analysis and
criticism; close reading of contemporary
poetry and poetic theory.

CRW 3311 AS-ENG 3(3,0)
Structure of Verse: PR: ENC 1102.
Intensive study of the structural
characteristics of English, poetry, metrical
systems, rhyme, scanion, and poetic
rhetorical devices.

CRW 3410 AS-ENG 3(3,0)
Writing Scripts: PR: CRW 3013 or C.I.
Theory and practice of writing scripts for
film and TV.

CRW 3540 AS-ENG 3(3,0)
Literary Magazines: PR: CRW 3013.
Examination of fiction and poetry trends in
current literary magazines, identifying
editorial policies in publication of
contemporary literature.

CRW 4114 AS-ENG 3(3,0)
History of Prose Style: PR: ENC 1102. A
review of English prose style from 1611 to
1960.

CRW 4122 AS-ENG 3(3,0)
Advanced Fiction Writing Workshop:
PR: CRW 3120. Intensive writing practice
in fiction. Peer critique and group
discussion of original manuscripts. May be
repeated once for credit.

CRW 4123 AS-ENG 3(3,0)
Science Fiction Writing: Study of science
fiction literature and writing of original
science fiction stories. Workshop format
with critique of writing assignments.

CRW 4224 AS-ENG 3(3,0)
Advanced Nonfiction Workshop: PR:
Advanced Poetry Writing Workshop: PR: CRW 2300. Intensive writing practice in poetry. Peer critique and group discussion of original manuscripts. May be repeated once for credit.

Graduate Writers' Workshop: Student writers present their own work, receiving detailed analysis of its strengths and weaknesses from their fellow writers and from the teacher.

Teaching Creative Writing: PR: C.I. Creative writing practice. May be repeated for credit.


Hydrology: PR: STA 3032; CWR 3201. Hydrological cycle, probabilistic forecasting, rainfall excess meteorology, groundwater, storm-water runoff, flood routing and design applications.

Hydraulics: PR: CWR 3201 Continuation of CWR 3201 with emphasis on piping networks, pumps, and hydraulic systems. Laboratories with civil and environmental engineering applications.

Water Resources Design: PR: CWR 4101C; CWR 4203C. Project course for the design of storm water and sewer transmission systems using local and state regulations.


Water Resources Engineering: PR: CWR 4101C, CWR 4203C. Systems identification and solution to complex water allocation problems, and other hydraulic engineering designs and operations using economic analysis and operations research techniques.

Theatre Modern Dance: PR: DAA 2200C & DAA 3201 or C.I. Exploration of form, style, and technique in creative movement. Includes practical class work and history lectures.


Theatre Tap Dance: Exploration of form, style, and technique in the basic fundamental movements of tap dance. May be repeated for credit.

Theatre Dance: PR: DAA 2200, DAA 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.

Theatre Jazz Dance: PR: DAA 2200C, TPP 2110, B.F.A. performance/musical Theatre major. Introduction of the basic movements of American Jazz Dance, including practical class work and Jazz Dance history.

Theatre Jazz Dance II: PR: DAA 2570C, B.F.A. musical Theatre major. In-depth study of Jazz Dance as a major style of dance, using theory and practice in jazz technique.

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.

Dance and Rhythms: The development of skill proficiency and instructional strategies in rhythms and dance techniques, and fundamental movement patterns for grades K-12.


Psychology of Exceptional Children: PR: PSY 2013. Psychological problems of exceptional children, including diagnosis, associated emotional problems, effects of institutionalization, special class placement, attitudes, and appropriate intervention methods.

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 functioning.

Developmental Psychology: PR: Graduate admission or C.I. Psychological aspects of development including intellectual, social, and personality factors.

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.


Applied Behavior Analysis with Children and Youth: PR: DEP 5057 and EXP 5445. Advanced survey of principles, procedures, and techniques of applied behavior analysis, with special attention to applications with children and youth.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>EAS 3010</td>
<td>EN-MMAE 1(0,3) Fundamentals of Aerospace Flight: PR: Sophomore standing. The history of human flight. Introduction to atmospheric flight and space flight. Guest speakers/field trips to aerospace facilities; laboratory experience.</td>
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<tr>
<td>EAS 3101</td>
<td>EN-MMAE 3(3,0) Fundamentals of Dynamics: PR: EML 3701. Fundamentals of inviscid, incompressible flow over aerodynamic shapes. Theories include potential flow concepts and classical methods as they apply to airfoils, finite wings, etc.</td>
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<tr>
<td>EAS 3810C</td>
<td>EN-MMAE 2(1,3) Design of Aerospace Experiments: PR: EAS 3800C and EML 3701. Extension of EAS 3800C. Design of experiments in aeronautic/aerospace systems with emphasis on project team activity.</td>
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<tr>
<td>EAS 4134</td>
<td>EN-MMAE 3(3,0) High-Speed Aerodynamics: PR: EAS 3101. Continuation of EAS 3101. Normal and oblique shock waves, nozzles and wind tunnels, methods of analyzing compressible flow about airfoils, wings, and bodies. Viscous boundary layers and applications to the design process.</td>
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<tr>
<td>EAS 4200</td>
<td>EN-MMAE 3(3,0) Flight Structures: PR: EML 3034 and EML 3601. Load analysis and fundamental design of structural components of aircraft and space vehicles. Classical and modern computer techniques using fatigue analysis and finite element methods.</td>
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<td>EAS 4210</td>
<td>EN-MMAE 3(3,0) Space Structural Dynamics: PR: EAS 4200 and EML 3312C. Analytical mechanics and linear system theory. Modern approach to control of lumped parameter systems. Review of space structure applications. Use of finite element methods.</td>
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<tr>
<td>EAS 4300</td>
<td>EN-MMAE 3(3,0) Aerothermodynamics of Propulsion Systems: PR: EAS 4134 or EML 4703. Fundamental analysis and design considerations of propulsion systems. Turbojets, ramjets and rockets.</td>
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<tr>
<td>EAS 4400</td>
<td>EN-MMAE 3(3,0) Spacecraft Attitude Dynamics: PR: EML 3312C. Kinematics and dynamics of rigid and multibody spacecraft rotational motion. Attitude control with momentum exchange actuators and thrusters.</td>
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<tr>
<td>EAS 4505</td>
<td>EN-MMAE 3(3,0) Orbital Mechanics: PR: EGN 3321, MAP 2302. Two-body problem, orbital equations, orbital transfer, earth satellite operation.</td>
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<tr>
<td>EAS 4700C</td>
<td>EN-MMAE 3(1,6) Aerospace Design I: PR: EAS 3810C. Application of the design process to the team solution of a state-of-the-art problem. Airplanes and space vehicles, systems and devices are considered.</td>
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<tr>
<td>EAS 4710C</td>
<td>EN-MMAE 3(1,6) Aerospace Design II: PR: EAS 4700C. Continuation of the design process in the team building and testing of a prototype/model of an airplane, spacecraft, system or device.</td>
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<tr>
<td>EAS 5302</td>
<td>EN-MMAE 3(3,0) Direct Energy Conversion: PR: EML 3101 and EML 4142. Direct methods of energy conversion; particular emphasis on fuel cells, thermoelectrics, thermionics, solar energy, photovoltaics and magnetohydrodynamics. Analysis and systems design.</td>
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<tr>
<td>EAS 5315</td>
<td>EN-MMAE 3(3,0) Rocket Propulsion: PR: EAS 4134 or EML 4703. Analysis and performance of rocket motors; selection and thermochemistry of chemical propellants: liquid and solid propellant rockets.</td>
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<tr>
<td>ECM 5135</td>
<td>EN-ECE 3(3,0) Engineering Math Analysis I: PR: MAP 2302. Topics in advanced engineering mathematics, including systems of differential equations, phase plane, linear algebra, and vector differential calculus.</td>
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<tr>
<td>ECM 5741C</td>
<td>EN-ECE 3(2,3) Microcomputer-based Monitoring and Control Systems: PR: EEL 3342; EEL 4767C or C.I. Machine language programming; software development aids; systems design; interfacing considerations.</td>
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<tr>
<td>ECO 2013</td>
<td>BA-ECON 3(3,0) 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.</td>
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<tr>
<td>ECO 2013H</td>
<td>BA-ECON 3(3,0) Honors Principles of Economics I: PR: Open to Honor Students only. Same as ECO 2013 with honors-level content.</td>
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<tr>
<td>ECO 2023</td>
<td>BA-ECON 3(3,0) 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.</td>
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<tr>
<td>ECO 3101</td>
<td>BA-ECON 3(3,0) Intermediate Price Theory: PR: ECO 2013 and ECO 2023. Theoretical study of the behavior of households, firms, and the markets in which they operate with issues and applications.</td>
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<tr>
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<td>Credits</td>
<td>Prerequisites</td>
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<tr>
<td>ECO 3223</td>
<td>BA-ECON 3(3,0) Money and Banking: PR: ECO 2013.</td>
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<td>Nature of money, commercial banking system, and</td>
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<td>monetary theory, and their relationship to the</td>
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<td>level of economic activity and activities of</td>
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<td>the Federal Reserve and U.S. Treasury.</td>
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<td>ECO 3401</td>
<td>BA-ECON 3(3,0) Quantitative Business Tools I: PR:</td>
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<td>ECO 2013, ECO 2023, MAC 1105.</td>
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<td>Introduction to mathematical and statistical</td>
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<td>analysis of economics and business problems.</td>
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<td>ECO 3411</td>
<td>BA-ECON 3(3,0) Quantitative Business Tools II: PR:</td>
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<td>ECO 2013, ECO 2023, and ECO 3401.</td>
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<td>The use of statistical methods as scientific</td>
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<td>tools in the analysis of economics and business</td>
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<td>ECO 3622</td>
<td>BA-ECON 3(3,0) American Economic History: PR: ECO</td>
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<td>2013 and 2023. Survey of the history of American</td>
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<td>economic development. Involves application of</td>
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<td>economic analytical tools to American history.</td>
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<td>ECO 3703</td>
<td>BA-ECON 3(3,0) International Economics: PR: ECO</td>
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<td>2013 and ECO 2023. Fundamental principles of</td>
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<td>international trade and foreign exchange,</td>
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<td>including the balance of payments and problems</td>
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<td>of foreign economic policy.</td>
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<td>ECO 3723</td>
<td>BA-ECON 3(3,0) International Commercial Policy:</td>
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<td>PR: ECO 2013 and ECO 2023. Presents the</td>
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<td>fundamentals of international commercial policy,</td>
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<td>with special emphasis on U.S. trade policy since</td>
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<td>ECO 4302</td>
<td>BA-ECON 3(3,0) Economics of the Environment: PR:</td>
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<td>ECO 2013, ECO 2023, OR C.I. Provide fundamental</td>
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<td>insights into the interdependence between</td>
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<td>energy use, environmental quality, and the</td>
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<td>economy at both the microeconomic and</td>
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<td>macroeconomic level.</td>
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<td>ECO 4303</td>
<td>BA-ECON 3(3,0) History of Economic Thought: PR:</td>
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<td>ECO 2013 and ECO 2023. A study of the principal</td>
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<td>ideas of the major contributors to the</td>
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<td>development of economic thought.</td>
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transformation of the Japanese economy with a special focus on the role of human resource development.

**ECS 4303** BA-ECON 3(3,0)
**Economics of European Integration**: PR: ECO 2013 and ECO 2023. Presents the development of the European Community, with emphasis on the characteristics of the Single European Act (EC '92).

**EDF 3942** ED-IP 3-6(0,16)
**Internship I(Elementary)**: PR: EDG 4323, RED 3012, MAE 3810 AND 3811 or MAE 3112. Student teaching assignment in an elementary school under the supervision of a certified classroom teacher.

**EDF 3943** ED-IP 3-6(0,16)
**Internship I(K-12)**: PR: Exceptional Education Majors; EDG 4323; RED 3012; MAE 3112. Student teaching under the supervision of a certified teacher. Half in elementary, half in secondary.

**EDF 4943** ED-IP 7-12(0,35)
**Internship II(Elementary)**: PR: EDE 3942 or EDE 3943. Student teaching in an elementary school under the supervision of a certified classroom teacher. Scheduled concurrent seminars.

**EDF 1075** ED-ED F 3(3,0)
**Introduction to Educational Internship**: Introduction to educational internship with selected partnership institutions.

**EDF 2005** ED-ED F 3(3,0)
**Introduction to Education**: A survey course including an orientation to education careers, ethics, and the historical, philosophical and sociological foundations of education. This course has a field component.

**EDF 2283** ED-ED F 3(3,0)
**Introduction to Applications of Technology in Education**: Classroom applications of instructional media including computers.

**EDF 3120** ED-ED F 3(3,0)
**Observing Child Growth and Development**: PR: Admission to the program. Provides a comprehensive introduction to the principles and basic theories of child growth and development from pre-natal development through age eight.

**EDF 3214** ED-ED F 3 (3,0)
**Early Childhood Education Learning Environment & Strategies**: PR: Admission to the program. Examines developmentally appropriate education materials, strategies, and environments for young children. Explores an integrated approach to curriculum planning and scheduling which emphasizes active learning.

**EDF 3601** ED-ED F 3(3,0)
**Professional Ethics in Education**: Pedagogical knowledge, awareness of educational process and the analytical skills necessary for responsible public involvement in educational policy making.

**EDF 3690** ED-ED F 3(3,0)
**Myths and Realities in Education**: Myths and realities in educational research will be analyzed, and public policy will be analyzed and reviewed.

**EDF 3740** ED-ED F 3(3,0)
**Applications of Technology in Education**: Classroom applications of instructional media. Includes experiences with equipment, commercial and teacher-made media, and their uses.

**EDF 4603** ED-ED F 3(3,0)
**Analysis of Critical Issues in Education**: PR: EDF 4214 or C.I. Focuses on a critical analysis of contemporary educational issues which directly impact schooling in a democracy

**EDF 5245** ED-ED F 3(3,0)
**Preparation and Management of Classroom Instruction**: PR: C.I. Study of strategies for instructional planning and classroom management that result in optimum learning.

**EDF 5259** ED-ED F 3(3,0)
**Classroom Management and Teaching**: PR: C.I. Study of teaching behaviors and strategies for classroom management that result in a minimum of behavior problems and sound instructional planning.

**EDG 1005** ED-ED F 1(1,1)
**Foundations of Leadership**: PR: LEAD Scholar. Seminar for LEAD Scholars in the College of Education providing a foundation of leadership, scholarship, and service regarding disciplines in the college.

**EDG 2701** ED-ED F 3(3,0)
**Teaching Diverse Populations**: An introduction to cultural factors and their impact on education and life changes. Explores stereotyping, prejudice and changing classroom demographics. Includes directed field experience.

**EDG 4323** ED-ED F 3(3,0)
**Professional Teaching Practices**: PR: EDF 2283, Junior Standing or C.I. Analysis of teaching strategies for K-12 settings, including higher order thinking, alternative assessment and adaption of instruction for diverse student populations.

**EDG 4324** ED-ED F 3(3,0)
**Teaching Strategies II**: PR: EDF 4323 and EDF 4214. Varieties of learning and teaching styles, appropriate methods of teaching thinking skills, problem solving, reading, and writing across the curriculum.

**EDG 4941** ED-ED F 1-8(0,1-8)
**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.

**EDG 5325** ED-ED F 3(3,0)
**Techniques for the Developing Professional in Education**: PR: C.I. Analysis, study, development, and use of techniques for enhanced instruction in the educational setting.

**EDG 5337** ED-ED F 3(3,0)
**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.

**EDG 5745** ED-ED F 3(3,0)
**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.

**EDG 5941** ED-ED F 2-8(0,11)
**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.

**EDM 5235** ED-ED F 3(3,0)
Teaching in the Middle School: Methods of middle school teaching; team planning and teaching; developmental and learning patterns of the emerging adolescent; use of alternative teaching strategies.

**EDS 5356** ED-ED S 3(2,1)
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.

**EEC 2001** ED-IP 3(3,0)
Introduction to Early Childhood Education: An overview of early childhood education and services for young children and their families. Includes historical roots, societal changes, program differentiation and future trends.

**EEC 3268** ED-IP 3(3,0)
Play Development: Explores play development, facilitation, intervention and assessment. Designing play environments is emphasized.

**EEC 3301** ED-IP 3(3,0)
Active Learning Teaching Strategies: Studies an integrated developmental-interactionist approach to curriculum planning and design. Equipment selection, room arrangements, daily schedules and active learning teaching strategies are emphasized.

**EEC 3610** ED-IP 3(3,0)
Social and Emotional Development of Young Children: Provides an in-depth understanding of the social and emotional development of the young child. Examines the implication for curriculum development.

**EEC 3613** ED-IP 3(3,0)
Observation and Assessment of Young Children: PR: Admission to the program. Appropriate methods for diagnosing, assessing, and evaluating young children, including children with diverse cultural and ethnic backgrounds. Appropriate interventions, remediations, and enrichment.

**EEC 3940** ED-IP 1-2(0,1-2)
Integration Internships: Field based placement in which the students will have supervised practice integrating course content areas.

**EEC 4271** ED-IP 3(3,0)
Early Intervention: Provides an overview of development assessment, and intervention with at-risk and handicapped infants and toddlers.

**EEC 4402** ED-IP 3(3,0)
Cultural and Family Systems: Explores the institution of family in its cultural context as a living dynamic system.

**EEC 4510** ED-IP 3(3,0)
Infant/Toddler Care and Education: Provides the knowledge and skills that will enable the student to become a competent worker with very young children and their families.

**EEC 4524** ED-IP 3(3,0)
Organization and Management in Early Childhood: Provides students with managerial and supervisory skills required to administer a developmentally appropriate early childhood program.

**EEC 4603** ED-IP 3(3,0)
Guidance of Young Children: PR: EEC 3610. Provides skills with techniques to guide the behavior of young children.

**EEC 4731** ED-IP 3(3,0)
Health, Safety, and Nutrition for Young Children: PR: EDF 3740. Health and safety issues in early childhood (0-8). Protection from injury and infection; promotion of healthy development; good nutrition, and appropriate health and fitness habits.

**EEC 4936** ED-IP 2(2,0)

**EEC 4943** ED-IP 12(0,12)
Student Teaching: Provides opportunities for student teachers to use the knowledge and skills they acquired in a supervised public school setting.

**EEC 5205** ED-IP 3(3,0)
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.

**EEC 5206** ED-IP 3(3,0)
Organization of Instruction in Early Childhood Education: PR: Regular Certificate or C.I. Organization in instruction relating to language arts, social sciences, mathematics, health and physical education, problems relating to reading readiness and cognition (K-3). Concurrent laboratory experiences.

**EEC 5208** ED-IP 3(3,0)
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.

**EED 3250** ED-E PE 3(3,0)
Behavioral Issues of the Emotionally Handicapped: An introduction to functional schema of the field to include behavior management techniques, theories, legal considerations, counseling skills, etiology, prevention and utilization of community services.

**EED 4011** ED-E PE 4(4,0)
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.

**EED 4210** ED-E PE 3(3,0)
Curriculum and Program Adaptation, E.H.: Development of highly specialized curriculum and identification, evaluation, modification, and use of curriculum materials and programs for students with emotional handicaps.

**EED 4243** ED-E PE 3(3,0)
Teaching the Emotionally Handicapped: Instructional strategies with emphasis on motivational strategies, development, implementation and evaluation of the IEP, modification of regular education instructional practices, crisis intervention and prevention.

**EEL 3122C** EN-ECE 4(3,3)

**EEL 3306** EN-ECE 3(3,0)
Semiconductor Devices I: PR: EGN 3373. Electronic devices including p-n junctions, bipolar transistors, field effect transistors and device models.
EEL 3307C EN-ECE 4(3,3)
Electronics I: PR: EEL 3306, EEL 3122C.

EEL 3342C EN-ECE 3(2,3)
Introduction to Digital Circuits and Systems: PR: PHY 2049 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.

EEL 3470 EN-ECE 3(3,0)
Electromagnetic Fields: PR: EEL 3122 and MAP 2302. Introduction to electric and magnetic fields and electromagnetic waves.

EEL 3552C EN-ECE 4(3,3)

EEL 3657 EN-ECE 3(3,0)

EEL 3801C EN-ECE 3(2,3)
Introduction to Computer Engineering: PR: Knowledge of a high level programming language. CR: EEL 3342C. Introduction to the field of computer engineering. The course covers the C Language, basic computer organization, and an introduction to assembly language programming.

EEL 4140C EN-ECE 4(3,3)
Analog Filter Design: PR: EEL 3307C, EEL 3122. Passive and active analog filter design. May be repeated for credit.

EEL 4205 EN-ECE 3(3,0)

EEL 4216 EN-ECE 3(3,0)
Fundamentals of Electric Power Systems: PR: EEL 3122 or C.I. Three-phase power representation and analysis, transformers, per unit system, symmetrical components, faults, transmission lines.

EEL 4309C EN-ECE 4(3,3)
Electronics II: PR: EEL 3307C, EEL 3342C. Ideal Op-Amps and applications. Introduction to Logic Circuits; Bipolar, MOS and CMOS families; Flip-flops and memory cells, comparators and timing circuits: A/D and D/A converters.

EEL 4314 EN-ECE 3(3,0)

EEL 4436C EN-ECE 4(3,3)
Microwave Engineering: PR: EEL 3470. Transmission line theory, Smith charts, S-parameters, simple impedance matching circuits, wave guides, resonators, basic microwave measurements. May be repeated for credit.

EEL 4440 EN-ECE 3(3,0)
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.

EEL 4512C EN-ECE 4(3,3)
Communication Systems: PR: STA 3032, EEL 3552C and EEL 3307C. Information transmission, modulation, and noise; design and comparison systems in the presence of noise.

EEL 4515C EN-ECE 4(3,3)

EEL 4612 EN-ECE 3(3,0)
Introduction to Modern and Robust Control: PR: EEL 3657. Classical control theory including differential equations and Laplace transform techniques, stability analysis, and classical frequency domain design.

EEL 4635C EN-ECE 4(3,3)
Computer Control Systems: PR: EEL 3657. Discrete-time systems, the z-transform, and single loop computer control systems. Digital simulation in the analysis and design of processes with embedded computers. No graduate credit for both EEL 5630 and this course.

EEL 4750 EN-ECE 3(3,0)

EEL 4765C EN-ECE 4(3,3)

EEL 4767C EN-ECE 4(3,3)

EEL 4768C EN-ECE 4(3,3)
Computer System Design II: PR: EEL 4766C. Continuation of EEL 4767C. Control and datapath design using a hardware description language, microprogrammed architectures, instruction and arithmetic pipelines, cache and virtual memory and RISC.

EEL 4781 EN-ECE 3(3,0)

EEL 4783C EN-ECE 3(2,3)
Computer-Aided Engineering Design: PR: ECM 4884 and EEL 4768C or C.I. Review of currently available CAE tools for digital hardware and software design applications.

EEL 4791 EN-ECE 3(2,4)
Telemetry and Space Computer Systems: PR: EEL 3552 AND EEL 3801, EEL 3657, EEL 3307, EEL 3470. Telemetry and computer sub-systems are discussed as they are implemented in the space-launch system "inertial upper stages".

EEL 4811 EN-ECE 3(3,0)
Parallel Processing and Artificial Neural Networks: PR: EEL 4767C and EEL 3801C. Overall of parallel processing approaches and architectures with emphasis towards concurrent neural network simulation.

EEL 4832 EN-ECE 3(3,0)
Engineering Applications of Computer Methods: PR: MAP 2302, STA 3032, EGN 3420. Engineering applications of numerical methods, including solution of
Numerical integration algorithms including engineering project including complete 4851 and EEL 4767. Introduction to meaningful problems. Constraints such as management, systems utilities, and multiprogramming, resource allocation and team effort and final report.

EEL 4851C EN-ECE 4(3,3) Engineering Data Structures: PR: EEL 33801C. Design of data structures and algorithms, with emphasis on performance analysis, memory organization, stacks, queues, linked lists, trees, graphs, searches, and sorts. Introduction to object-oriented structures.

EEL 4872 EN-ECE 3(3,0) Engineering Applications of Intelligent Systems: PR: EEL 4851C. Intelligent models, computer vision, natural language understanding, pattern analysis, knowledge-based systems, symbolic programming, and advanced architectures.

EEL 4882 EN-ECE 3(3,0) Engineering Systems Software: PR: EEL 4851 and EEL 4767. Introduction to operating systems concepts and facilities for engineering applications, including multiprogramming, resource allocation and management, systems utilities, and operating system implementation.

EEL 4884C EN-ECE 4(3,3) Engineering Software Design: PR: EEL 4851C. Software systems development life cycle, function and object-oriented methodologies, CASE; Analysis, design, and development of a large software project.


EEL 4914 EN-ECE 3(2,1) Senior Design I: PR: EEL 3307, EEL 3657, and EEL 3552. Applications of engineering design to realistic and meaningful problems. Constraints such as economic factors, safety, reliability, aesthetics, ethics, social impact and engineering organizations are considered.

EEL 4915L EN-ECE 3(0,3) Senior Design II: PR: EEL 4012. Execution of electrical and computer engineering project including complete project design review, construction, testing and demonstration. Emphasis on design, prototyping, cost, functionality, presentation, team effort and final report.

EEL 5173 EN-ECE 3(3,0) Linear Systems Theory: PR: EEL 3657. Models and properties of linear systems, transformation, controllability and observability, control and observer designs, MFD, and realization theory.


EEL 5332C EN-ECE 3(2,1) Thin Film Technology: PR: EEL 3306 or equivalent. Presents the various thin film deposition techniques for the fabrication of microelectronic, semiconductor, and optical devices.

EEL 5352 EN-ECE 3(3,0) Semiconductor Material and Device Characterization: PR: EEL 3306 or C.I. Semiconductor material characterization resistivity, mobility, doping carrier lifetime, device properties, threshold voltage, interface charge of MOS devices, optical and surface characterization of films.

EEL 5353 EN-ECE 3(3,0) Semiconductor Device Modeling and Simulation: PR: EEL 3307. Large signal and small signal model development for semiconductor diodes, BJTs, and MOSFETs. Parameter extraction, numerical algorithm, and SPICE simulation are included.

EEL 5355C EN-ECE 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-ECE 3(3,0) CMOS Analog and Digital IC Design: PR: EEL 3306 and EEL 4309. The objective of this course is to present the principles and techniques of the design of analog and digital circuits that are to be implemented in a CMOS technology.


EEL 5432 EN-ECE 3(3,0) Satellite Remote Sensing: PR: EEL 3470 or PHY 4324. Fundamentals of satellite remote sensing, orbits and geometry, radiative transfer theory, microwave and infrared sensing techniques, ocean, ice and atmosphere geophysical measurements.

EEL 5434 EN-ECE 3(3,0) Microwave Circuits and Devices: PR: EEL 4436 or EEL 5555C. Planar transmission lines; passive microwave circuits; active circuit design using Gunn, IMPATT, FETS, RTDS, etc.: microwave integrated circuits.

EEL 5441 EN-ECE 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, diffraction, interference, polarization, coherence, and guided waves.

EEL 5448 EN-ECE 3(3,0) Fundamentals of Optoelectronic Devices: PR: Graduate standing or C.I. Operation, methods of fabrication, applications, and limitations of various optoelectronic devices including quantum well semiconductor devices.

EEL 5450C EN-ECE 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-ECE 3(1,4) Electro-Optics Laboratory: PR: EEL 4440 or EEL 5441 or C.I. Study of laboratory techniques for optical measurements and performance of measurements on electro-optic devices to determine operational characteristics.


EEL 5462C EN-ECE 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-ECE 3(3,0) Digital Signal Processing Applications: PR: EEL 4750. The design and practical consideration for implementing Digital Signal Processing Algorithms including
Fast Fourier Transform techniques, and some useful applications.

EEL 5517 EN-ECE 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-ECE 3(3,0) Random Processes I: PR: EEL 3552C and STA 3032. Elements of probability theory, random variables, and stochastic processes.


EEL 5555C EN-ECE 3(2,2) RF and Microwave Communications: RF and microwave active circuits microstrip amplifier, oscillator, and mixer design and fabrication. Receiver design, noise, familiarization with network and spectrum analyzers.


EEL 5630 EN-ECE 3(3,0) Digital Control Systems: PR: EEL 3657. Real-time digital control system analysis and design, Z-transforms, sampling and reconstruction, time and frequency response, stability analysis, digital controller design.

EEL 5704 EN-ECE 3(3,0) Computer Aided Logical Design: PR: EEL 4767C. Design, analysis and synthesis of sequential logic circuits and systems. Data path and controller design using a hardware description language.


EEL 5741C EN-ECE 3(2,3) Microcomputer-based Monitoring and Control Systems: PR: EEL 3342, EEL 4767C, or C.I. Machine language programming; software development aids; systems design; interfacing considerations.


EEL 5771C EN-ECE 3(2,3) Engineering Applications of Computer Graphics: PR: EGN 3420 or C.I. Computer graphics in engineering applications. Laboratory assignments.

EEL 5820 EN-ECE 3(3,0) Image Processing: PR: MAP 2302, EGN 3420, EEL 4750 or C.I. Two-dimensional signal processing techniques; pictorial image representation; spatial filtering; image enhancement and encoding; segmentation and feature extraction; introduction to image understanding techniques.

EEL 5825 EN-ECE 3(3,0) Pattern Recognition: PR: MAP 2302, EGN 3420. Graph-theoretic and syntactic methods of pattern analysis. Decision functions; optimum decision criteria; training algorithms; feature extraction; unsupervised learning; data reduction and potential functions.

EEL 5874 EN-ECE 3(3,0) Expert Systems and Knowledge Engineering: PR: EEL 4872 or C.I. Introduction to expert systems in engineering. Expert systems tools and interpreting techniques. This course is hands-on and project oriented.

EEL 5881 EN-ECE 3(3,0) Software Engineering I: PR: EGN 3420, EEL 4851 or C.I. Design, implementation, and testing of computer software for Engineering applications.

EEL 5891 EN-ECE 3(3,0) Continuous System Simulation I: PR: EEL 3657 or C.I. Use of state-space techniques, numerical integration, and CSSL programs. Laboratory assignments.

EES 4111C EN-CHE 3(2,3) Biological Process Control: PR: EES 4202C or C.I. and CR: ENV 4561. Engineering design, measurements and analysis of biological systems in environmental engineering for water management, bio-energy products, wastewater treatment, and others.

EES 4202C EN-CHE 3(2,3) 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 5415C EN-CHE 3(3,0) Potable Water Treatment: PR: EES 4202C and 4111C. Engineering application of potable water chemistry involving coagulation, softening, filtration, corrosion, disinfection quality and drinking water.

EES 5605 EN-CHE 3(3,0) Outdoor Noise Control: PR: C.I. Community noise evaluation and control, legislative standards, instrumentation and measurement, abatement methods, and noise modeling.

EET 2025C EN-ENT 4(3,2) Electrical Circuits: PR: DC Circuits or EET 3085C, and MAC 1114, or C.I. Frequency domain and steady state analysis of electric circuits: RCL circuits, timed circuits, resonance and "Q," filters, magnetically coupled circuits, transformers, 3-phase circuits, power relationships.


Synchronization techniques. Interference, test and evaluation.

Project definition planning, development, anticipated graduation semester or C.I.

Oral presentation and final written report.

Techniques, system components.

Analysis of networks and control considerations, using root locus, Nichols. 2025. Analysis of electrical power systems

Linear Integrated Circuits: Applications of operational amplifiers, comparators, phase-locked loops, timers, regulators, other integrated circuits. Includes amplifiers, active filters, oscillators, differentiators and integrators.

Power Systems: PR: EET 3085 and EET 2025. Analysis of electrical power systems and energy conversion. 3-phase load, per-unit quantities, circuit constants, rotating machines, 3-phase transformers, transmission lines, power flow, stability and fault calculations.


Senior Design Project: PR: Electronics Engineering Technology senior entering anticipated graduation semester or C.I. Individual or group project involving project definition planning, development, test and evaluation. Progress reports, final oral presentation and final written report required.

Introduction to Special Education: Orientation to the education of children and adolescents with special needs in the schools. The course includes characteristics, trends, mainstreaming, and other issues.

Language Development and Communication Disorders: PR: Junior standing. Interdisciplinary approach to language development, identification and remediation of communication and language disorders.

Assessment of Exceptional Students: Formal and informal assessment techniques for screening, placement, program planning, program evaluation, and monitoring of progress of exceptional students.


Young Children With Special Needs: Provides an overview of the unique field of early childhood special education, its mission, and approaches to helping young children and their families.

Parents as Educators: Develop parental awareness of their role in child development and school success. Attention given to social context of parenting and parents as advocates for children.


Introduction to Behavior Management: Study of management techniques based on applied behavioral analysis principles for modifying inappropriate behaviors and maintaining appropriate behaviors of exceptional students.

Parent/professional Collaboration: The special educator's role in working with families, regular educators, and other professionals in a collaborative relationship.

Planning Curriculum for Pre-kindergarten Children with Disabilities: Focus on curriculum planning, developmentally appropriate practices and implementation of individualized instruction for pre-kindergarten children with disabilities.

Communication with Parents and Agencies: Presentation of methods of interacting with community agencies, supporting and collaborating with families, developing a case management system, and facilitating program transition.

Guiding Human Relationships: PR: Senior standing or C.I. Characteristics, definitions, educational problems, and appropriate educational programs for the exceptional children in schools.

Communication with Parents and Agencies: Presentation of methods of interacting with community agencies, supporting and collaborating with families, developing a case management system, and facilitating program transition.

EIGN111CEN-MMAE2(1,3)
Engineering ComputerGraphics: PR:
Trigonometry. Spatial visualization,
sketching and graphical presentation as a
form of computerized engineering
communication. Engineering drawing,
descriptive geometry and graphical solution
techniques using computer software.

EIGN3210EN-ECE3(3,0)
Engineering Analysis and Computation:
PR: MAC2311. Engineering analysis and
computation with structured constructs.
Subscripted variables, subprograms,
input/output. Batch processing and time
sharing. Engineering applications will be
emphasized.

EIGN3310EN-CEE3(3,0)
Engineering Analysis-Statics: PR: PHY
2048; CR: MAC2312. Fundamental
concepts of mechanics, including resultants
of force systems, free-body diagrams,
equilibrium of rigid bodies, and analyses of
structures.

EIGN3310HEN-MMAE3(3,0)
Engineering Analysis-Statics (Honors): PR:
PHY2048; CR: MAC2312 or MAC
2282. (Honors section for EIGN3310)
Advanced treatment of material and
additional topics. More challenging
assignments. Project work. May be
repeated for credit.

EIGN3321EN-MMAE3(3,0)
Engineering Analysis-Dynamics: PR:
EIGN3310; CR: MAC2313. Kinematics
and kinetics of particles and rigid bodies;
mass and acceleration, work and energy,
impulse and momentum.

EIGN3331EN-CEE3(3,0)
Mechanics of Materials: PR: EIGN3310;
CR: MAP2302. Concepts of stress, strain,
strength, deflection of axial force members,
shafts in torsion, beams in flexure;
combined stress, stability of columns, and
design of simple elements.

EIGN3343EN-MMAE3(3,0)
Thermodynamics: PR: MAP2302, CR:
EIGN3321. Work, heat, and energy
transformations. Relation of properties.
Laws, concepts, and modes of analysis
common to all applications of
thermodynamics in engineering.

EIGN3358EN-MMAE3(3,0)
Thermo-Fluids-Heat Transfer: PR: EIGN
3310, MAP2302. Introduction to first and
second laws of thermodynamics, continuum
fluid mechanics, and heat transfer for
electrical, industrial, and computer
engineering majors.

EIGN3365EN-MMAE3(3,0)
Structure and Properties of Materials:
PR: CHS1440 and MAC2312. Atomic
structure and bonding, crystal structure and
imperfections, solidification, phase
transformations, phase diagrams, heat
treatment, mechanical & electrical
properties, materials characterization
techniques.

EIGN3373EN-ECE4(4,0)
Principles of Electrical Engineering: PR:
PHY2049; CR: MAP2302. Fundamental
laws of electrical circuits and circuit
analysis; fundamentals of electronics and
power systems.

EIGN3420EN-ECE3(3,0)
Engineering Analysis: PR: High-level
language or equivalent (FORTRAN
preferred); MAC2312. Engineering
analysis and computation using
FORTRAN; engineering applications of
numerical methods including curve
fitting, matrix operations, root finding,
integration and plotting.

EIGN3613EN-IEMS2(2,0)
Engineering Economic Analysis: PR:
ECO2013. Economic evaluation of
engineering alternatives and design.
Time value of money and economic impact
of taxes, risk, depreciation.

EIGN3704EN-CIE2(2,0)
Engineering and the Environment: PR:
CHS1440 and MAC2312. Process
engineering for air, energy, water, and land
environment and the role of engineering in
control of these environments.

EIGN3843EN-ENGR3(3,0)
Systems Modeling: PR: CGS1060 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.

EIGN4033EN-ENGR3(3,0)
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.

EIGN4624EN-IEMS3(3,0)
Engineering Administration: PR: 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.

EIGN4706CEN-MMAE3(2,4)
Small Satellite Payloads and Integration:
PR: EML3303 OR EAS3800 OR EEL
3801 OR ESI4523. Evaluate overall impact
of integration and design concepts on
various satellite component subsystems
and their payloads into a small satellite
system design leading to a final configuration.

EIGN4707CEN-ENGR3(2,4)
Processing Space-Lauch Systems: PR:
For ECE: EEL3552 OR EEL4767; For
IEMS: ESI4523; For MAE: EAS3800.
Assembly and test techniques for preparing
and check-out of the space-launch system
"Inertial Upper Stage." May be repeated for
credit.

EIGN4813EN-ENT3(3,0)
Science in History: Examination of the
reciprocal relations of science and society
from ancient to recent times.

EIGN4814EN-ENT3(3,0)
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.

EIGN4816EN-ENT1(1,0)
Turning Points in Engineering: Seminar
covering major historical developments in
engineering.

EIGN4818EN-ENT3(3,0)
Technology in North America: PR:
History/Humanities sequence or C.I.
Periods of significant technological change
in North America, with emphasis on 19th
and early 20th-century developments.

EIGN4823EN-ENT3(3,0)
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.

EIGN4824EN-ENT3(3,0)
Energy and Society: Investigation of
available energy forms; energy resources
EGN 4825 EN-ENT 3(3,0)
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.

EGN 4830 EN-ENT 3(3,0)
Telecommunications: Telecommunications and its role in contemporary local, national, and international society.

EGN 4832 EN-ENT 3(3,0)
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.

EGN 4844 EN-ENT 3(3,0)
Man and Machine: The influence and interrelationship of invention and technical progress on the evolution of social forms and institutions.

EGN 4931H EN-ENGR 3(3,0)
Engineering Honors Seminar: PR: Senior standing and C.I. Introduces a select group of students in engineering or other fields of science to the methodology commonly employed in research. Students will carry out independent research which will prepare them for graduate study.

EGN 4933 EN-ENGR 1(1,0)
Professional Engineering Practice: PR: Senior standing or C.I. Seminars dealing with current and future global issues within the engineering profession.

EGN 5035 EN-ENGR 3(3,0)
Topics in Technological Development: PR: C.I. Selected topics in the technological development of western civilization including the weight-driven clock, steam engine, electric light, etc.

EGN 5720 EN-IEMS 3(2,3)
Internal Combustion Engine Analysis and Optimization: PR: EGN 3343 or EGN 3358 or C.I. Internal combustion engine operating principles. Topics covered include engine design and operating parameters, combustion, thermodynamics, induction flow, and basic mathematical models.

EGN 5840 EN-ENGR 3(3,0)
Small Rocket Applications for Teachers: PR: Admission to Martin Marietta/UCF Academy. Earth and space environments, rocket propulsion, meteorological and environmental measurements, payload launch procedures, orbits and trajectories, safety, model rocket experiments, field trips, student science experiments.

EGN 5855C EN-IEMS 3(2,2)
Metrology: PR: EIN 4391C or C.I. Advanced topics in inspection and measurement with applications in engineering and manufacturing.

EGN 5858C EN-IEMS 3(2,2)
Introduction to Rapid Prototyping: PR: Basic knowledge and/or experience in CAD/CAM technology or C.I. Topics fundamental to rapid prototyping and automated fabrication technologies. Actual design and fabrication of a part using in-house laboratory facilities.

EIN 3304 EN-IEMS 2(2,0)
Introduction to Industrial Engineering and Management Systems: Issues important to the operation of an industrial or service facility.

EIN 3314C EN-IEMS 3(2,2)

EIN 3354 EN-IEMS 3(3,0)
Principles of Cost Engineering: PR: EGN 3613. This course is to provide engineers from all disciplines the background for the cost estimation of engineering systems throughout the product life cycle.

EIN 4116C EN-IEMS 3(2,2)

EIN 4118C EN-IEMS 3(2,3)
Industrial Engineering Applications of Computers: PR: EGN 3210 or high level programming language. Survey of microcomputer methods in industrial engineering practice. Topics include: spreadsheets, databases, expert systems, and project management. Lab exercises.

EIN 4214 EN-IEMS 3(3,0)
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.

EIN 4243C EN-IEMS 3(2,2)
Human Engineering: PR: EIN 3314C; Senior standing. Man/machine systems; design and conduct of human engineering studies.

EIN 4305C EN-IEMS 3(2,2)
Industrial Engineering Applications in The Service Industries: PR: EIN 3314C, ESI 4312, ESI 4234 or C.I. Application of industrial engineering principles to improve the quality and productivity of service industries such as restaurants, banks, hotels, health care, etc.

EIN 4333C EN-IEMS 3(2,3)
Industrial Control Systems: PR: ESI 4312. Decision rules in industrial environment including Forecasting, Production Planning, Scheduling, Inventory Control, and Project Monitoring. Laboratory assignments.

EIN 4364C EN-IEMS 3(2,2)
Industrial Facilities Planning and Design: PR: EIN 3314C, EIN 3354, EIN 4391C. CR:EIN 4333C. Comprehensive design of industrial production systems, including interrelationships of plant location, process design, and materials handling. Laboratory assignments.

EIN 4391C EN-IEMS 3(2,2)
Manufacturing Engineering: PR: EGN 3365. Introduction to manufacturing engineering, with emphasis on current and emerging technologies in metalworking and electronics.

EIN 4400 EN-IEMS 3(3,0)
Principles of Concurrent Engineering: PR: EGN 3613 or C.I. Elements of concurrent engineering and its application. Topics include quality function deployment and design for manufacturing and assembly.

EIN 4411C EN-IEMS 3(2,2)
Computer-Aided-Manufacturing: PR: EIN 4391C. Computer-Aided-Manufacturing (CAM) including computer numerical control (CNC), robotics, parts classification (GT) and manufacturing resource planning (MRP).
EIN 4891C EN-IEMS 3(2,3)
Industrial Engineering Senior Design Project: PR: EIN 4116C, Senior standing. Capstone design course; application of IEMS techniques to real-world design applications.

EIN 5108 EN-IEMS 3(3,0)
The Environment of Technical Organizations: PR: Graduate status or C.I.; EGN 4624 recommended. Presentation and investigation into the principles required to transform technologists into managers focusing on engineers, scientists, and other professionals providing services in technically-oriented organizations.

EIN 5117 EN-IEMS 3(3,0)
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.

EIN 5140 EN-IEMS 3(3,0)
Project Engineering: PR: Graduate standing or C.I. Role of engineer in project management with emphasis on project life cycle, quantitative and qualitative methods of cost, schedule, and performance control.

EIN 5247 EN-IEMS 3(3,0)
Experimental Design and Taguchi Methods: PR: STA 3032 or ESI 4234. Introduction to Taguchi Concepts and Methodologies, use of design of experiments for quality design and improvement.

EIN 5248C EN-IEMS 3(2,2)
Ergonomics: PR: C.I. Applications of anthropometry, functional anatomy, mechanics, and physiology of musculoskeletal system concepts in the engineering design of industrial tools, equipment, and workstations.

EIN 5251 EN-IEMS 3(3,0)
Human-Computer Interaction: Usability Evaluation: Usability paradigms/principles; cognitive walkthroughs; heuristic, review-based, model-based, empirical and storyboarding evaluation; techniques; query techniques; laboratory techniques; and field study approaches.

EIN 5255 EN-IEMS 3(3,0)
Interactive Simulation: PR: Post-Baccalaureate status or C.I. Introduction to significant topics relative to the development and use of simulators for knowledge transfer in the technical environment.

EIN 5356 EN-IEMS 3(3,0)
Cost Engineering: Cost estimation and control of engineering systems throughout the product life cycle.

EIN 5368C EN-IEMS 3(2,2)

EIN 5381 EN-IEMS 3(3,0)
Engineering Logist: Study of the logistics life cycle involving planning, analysis and design, testing, production, distribution, and support.

EIN 5388 EN-IEMS 3(3,0)
Forecasting: PR: STA 5156. Industrial applications of forecasting methods with emphasis on microcomputer-based packages.

EIN 5392C EN-IEMS 3(2,2)
Manufacturing Systems Engineering: PR: EIN 4391C or C.I. The integration of manufacturing technologies and information processing concepts into a system for controlling the manufacturing enterprise.

EIN 5415C EN-IEMS 3(2,2)
Tool Engineering and Manufacturing Analysis: PR: EIN 4411. Tool materials and design, tolerance technology, theory of metal cutting, and machineability.

EIN 5602C EN-IEMS 3(2,2)
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.

EIN 5607C EN-IEMS 3(2,2)
Computer Control of Manufacturing Systems: PR: EIN 4391C, and EIN 4411C or EML 4535C, or C.I. Automated systems for manufacturing, numerical control (NC) machines, NC programming, robot control and programming, machine and system control.

EIN 5936 EN-IEMS 1(1,0)
Seminar in Industrial Engineering: Doctoral Research: PR: C.I. Essential topics for doctoral research including research areas, skills, funding, proposals, ethics, mentors, seminars, societies, conferences, presentations, interviewing, grants, and publishing.

EIN 5937 EN-IEMS 3(3,0)
Taguchi's Quality by Design: Taguchi methods for design of experiments and quality improvement.

ELD 4011 ED-E PE 3(3,0)
Intro to Specific Learning Disabilities: Nature and needs of students with learning disabilities to include history, theories, characteristics, definitions, assessments, issues, and application of effective teaching practices.

ELD 4242 ED-E PE 3(3,0)
Program Planning for Specific Learning Disabilities: PR: Senior standing. Development of highly specialized techniques, curriculum materials, to be used with students with special learning disabilities.

EMA 3000 EN-MMAE 3(3,0)

EMA 3012C EN-MMAE 2(1,3)

EMA 3124 EN-MMAE 3(3,0)

EMA 4223 EN-MMAE 3(3,0)

EMA 4413 EN-MMAE 3(3,0)

EMA 4501 EN-MMAE 3(2,2)
Scanning Electron Microscopy: PR: EGN 3365 or C.I. A review of electron optics, beam/specimen interactions, image formation, x-ray analysis, specimen preparation, microelectronic applications,
and crystallography in the SEM.


EMA 4701C EN-MMAE 3(2,4) Materials Performance in Space Applications: PR: EGN 3365. Laboratory failure analysis of materials within space-related environments.

EMA 5060 EN-MMAE 3(3,0) Polymer Science and Engineering: PR: EGN 3365. Structure and properties of polymers, preparation and processing of polymers, mechanical properties, use in manufacturing and high tech applications.


EMA 5106 EN-MMAE 3(3,0) Metallurgical Thermodynamics: PR: EGN 3343 and EGN 3365. Laws of thermodynamics, phase equilibria, reactions between condensed and gaseous phases, reaction equilibria in condensed solution and phase diagrams.

EMA 5108 EN-MMAE 3(3,0) Surface Science: PR: PHY 2049 and C.I. Methods of chemical and physical analysis of surfaces, with emphasis on ultra-high vacuum spectroscopies utilizing electron, ion and photon probes.

EMA 5140 EN-MMAE 3(3,0) Introduction to Ceramic Materials: PR: EGN 3365. Uses, structure, physical and chemical properties, and processing of ceramic materials. Discussions will include recent developments for high technology applications.


EMA 5504 EN-MMAE 3(2,2) Modern Characterization of Materials: PR: EMA 5104 or C.I. Techniques and operation of instrumentation (light, scanning, transmission, and auger microscopy) for the characterization of structure, defects, composition, and surfaces.

EMA 5505 EN-MMAE 3(2,2) Scanning Electron Microscopy: PR: EMA 5014 or C.I. A review of electron optics, beam/specimen interactions, image formation, x-ray analysis, specimen preparation, microelectronic applications and crystallography in the SEM.


EMA 5610 EN-MMAE 3(3,0) Laser Materials Processing: PR: EGN 3343 or EMA 5106 or C.I. Laser beam optics; laser-material interactions; laser heating, melting, vaporization. Plasma formation; laser surface treatment, welding, machining; laser material synthesis. Thin film deposition, crystal growth.

EMA 5705 EN-MMAE 3(3,0) High Temperature Materials: PR: EMA 5104. Desired material properties for high temperature applications, physical metallurgy of such materials, corrosion, hot corrosion and oxidation properties, aero- and land-based gas turbine requirements.

EMA 1040 ED-ED S 3(3,0) Technology for Educators: Introduction to technology for educators, including classroom management tools, multimedia, communication networks, interactivity, educational software and legal, ethical and social issues.

EMA 5051 ED-ED S 3(3,0) 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.

EMA 5052 ED-ED S 3(3,0) Electronic Resources for Education: PR: EME 5051 or EME 6918 or C.I. Study and application of electronic resources available for education including techniques for locating, evaluating, and integrating them into the classroom.

EMA 5054 ED-ED S 3(3,0) Instructional Systems 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.

EMA 5056 ED-ED S 3(3,0) 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.

EMA 5057 ED-ED S 3(3,0) 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.

EMA 5208 ED-ED S 3(3,0) Production Techniques for Instructional Settings: PR: EME 5051. Skills in producing instructional materials. Emphasis on graphic, audio, video, and photographic skills and the application of instructional and communication theories.

EMA 5225 ED-ED S 3(3,0) 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.

EMA 5408 ED-ED S 3(3,0) Computer Applications in Instructional Technology: Techniques and skills for the use of computers for productivity and instruction by the instructional technologist.

EMA 5810 ED-ED S 1(1,0) Teaching and Learning with Technology: Overview of technologies for teaching and for learning. Practical strategies for using technology in the classroom. (May be repeated 3 times for credit.)

EML 3001C EN-MMAE 1(1,2) Machine Shop Practice: PR: EGS 1011 or C.I. Set up and operation of mill and lathe, cutting tools, holding devices, cutting speeds and feed rates. Measurement devices. Hands-on experience.
EML 3034 EN-MMAE 3(3,0)

EML 3101 EN-MMAE 3(3,0)
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 3262C EN-MMAE 3(2,2)
Kinematics of Mechanisms: PR: EGN 3321. Graphical, mathematical, and computer-aided kinematics, analysis, and synthesis of basic mechanisms.

EML 3303C EN-MMAE 3(2,3)

EML 3312C EN-MMAE 3(2,3)

EML 3500 EN-MMAE 3(3,0)

EML 3601 EN-MMAE 3(3,0)
Solid Mechanics: PR: EGN 3310; CR: MAP 2302. Concepts of stress, strain, deflection; axial force, torsion, bending; combined stress, Mohr's circle, failure theories; design concepts, application to machines and vehicles.

EML 3701 EN-MMAE 3(3,0)

EML 3804C EN-MMAE 3(2,3)

EML 4005 EN-MMAE 3(3,0)
Design in Nature and Engineering: PR: EGN 3343 and EML 3601. Design for function and invention, in both engineering and nature: economy, form, beauty, energy, mechanism, structure, evolution in nature.

EML 4142 EN-MMAE 3(3,0)

EML 4220 EN-MMAE 3(3,0)

EML 4260 EN-MMAE 3(3,0)
Dynamics of Machinery: PR: EML 3362C and EML 4220. Critical speeds and response of flexible rotor systems, whirl, gyroscopic effects; balancing of rotating and reciprocating masses; cam dynamics.

EML 4264 EN-MMAE 3(3,0)
Vehicle Dynamics: PR: EML 3262C and EML 4220. Basic mechanics governing vehicle dynamics, performance and handling; acceleration, braking, ride, cornering, suspension, steering, rollover.

EML 4304C EN-MMAE 3(1,4)
Thermo-Fluids Measurements: PR: EML 3303C and EML 4142. Measurements in thermo-fluid systems with emphasis on design of experiments.

EML 4411 EN-MMAE 3(3,0)
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 EN-MMAE 3(1,6)
Engineering Design I: PR: EML 3500, EML 3701 and EML 3303C. 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 EN-MMAE 3(1,6)
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 4525C EN-MMAE 3(2,3)
CAD/CAM: PR: EGN 3343, EML 3034, and EML 3601; CR EAS 4200 or EML 3500. CAD/CAM/FEM computational technology. Basic concepts. Concurrent engineering approach to mechanical, thermal, and aerospace systems design and analysis. Use of in-house software.

EML 4600 EN-MMAE 3(3,0)

EML 4703 EN-MMAE 3(3,0)

EML 5025C EN-MMAE 3(2,2)
Engineering Design Practice: PR: C.I. The course is designed to familiarize students with basic CAD/CAM solid modeling techniques in a project oriented environment. Students will construct parts, models, drawings, and assemblies. Use of in-house software.

EML 5060 EN-MMAE 3(3,0)

EML 5066 EN-MMAE 3(3,0)

EML 5105 EN-MMAE 3(3,0)
Gas Kinetics and Statistical
Thermodynamics: PR: EAS 4134 or EML 4703. Molecular and statistical viewpoint of gases and thermodynamics; Boltzmann collision integral, partition functions, non-equilibrium flows. Applications in thermo-fluid systems.


EML 5211 EN-MMAE 3(3.0) Continuum Mechanics: PR: EML 3500 or EML 4703 or EAS 4200 or C.I. Introduction to tensors; deformation and strain; stress; balance laws, applications in Newtonian fluid dynamics and isotropic linear elasticity.

EML 5224 EN-MMAE 3(3.0) Acoustics: PR: EML 4220. CR: EML 5060. 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.


EML 5245 EN-MMAE 3(3.0) Tribology: PR: EGN 3365, EGN 3331 and EML 3701. Principles of fluid film lubrication (liquid and gas, journal and thrust bearings), contact mechanics (rolling element bearings), design of bearings and load bearing surfaces, friction and wear of materials, tribotesting.


EML 5311 EN-MMAE 3(3.0) System Control: PR: EML 3312C; CR: EML 5060. Modern control theory for linear and non-linear systems; controllability and observability. Linear state feedback and state estimators, compensator design.

EML 5402 EN-MMAE 3(3.0) Turbomachinery: PR: EML 3011, EML 4703 or EAS 4134. Application of the principles of fluid mechanics, thermodynamics, and aerodynamics to the design and analysis of steam and gas turbines, compressors, and pumps.

EML 5532C EN-MMAE 2(2.3) Computer-Aided Design for Manufacture: PR: EGN 4535C. Builds on introductory material covered in EML 4535C. Topics include computer modeling for the synthesis, simulation, design and manufacture of mechanical, thermal, and aerospace systems.


EMR 4011 ED-E PE 3(3.0) Intro to Mental Retardation: Nature and needs of mentally handicapped students with emphasis on etiology, prevention, identification, and application of effective practices and recognition of trends and standards.

EMR 4372 ED-E PE 3(3.0) Curriculum Method and Materials for Retarded Persons: PR: Senior standing. Development of highly specialized techniques, curriculum and materials to be used with students with mental retardation.

ENC 1101 AS-ENG 3(3.0) Composition I: Expository writing with emphasis on effective communication and critical thinking. Emphasizing the writing process writing topics are based on selected readings and on student experiences. Course is graded with "A," "B," "C," "NC" and "F."

ENC 1101H AS-ENG 3(3.0) Honors Freshman Composition I: PR: Score of 60+ on TSWE of SAT or C.I. Same as ENC 1101, with honors-level content.

ENC 1102 AS-ENG 3(3.0) Composition II: PR: ENC 1101 with a grade of "C" or better. Focus on extensive research in analytical and argumentative writing based on a variety of readings from the humanities. Emphasis on developing critical thinking and diversity of perspective. Course is graded with "A," "B," "C," "NC" and "F."

ENC 1102H AS-ENG 3(3.0) Honors Freshman Composition II: PR: ENC 1101H with a grade of "C" or better 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. Course is graded with "A," "B," "C," "NC" and "F."

ENC 2127 AS-ENG 3(3.0) Grammar and Composition: A systematic study of grammar and mechanics to improve editing for clarity and accuracy in writing.

ENC 3210 AS-ENG 3(3.0) Writing for the Business Professional: PR: ENC 1102, Junior standing or C.I. Emphasis on clear expository writing of memoranda, reports, and articles in the student's declared field of business.

ENC 3211 AS-ENG 3(3.0) Theory and Practice of Technical Writing: PR: ENC 1102, Junior standing, or C.I. Provides definition, history, scope, practices, and theoretical bases of technical
writing and its relationship to general English studies.

ENC 3241 AS-ENG 3(3,0) Writing for the Technical Professional: PR: ENC 1102, Jr standing or C.I. Instruction and practice in expository prose used in technical writing, layout and design of data, and translation of technical documents for the lay audience.

ENC 3242 AS-ENG 3(3,0) Scientific Report Writing: PR: ENC 1102 & Jr standing or C.I. The principles of science report writing as used in pure and applied science contexts.

ENC 3283 AS-ENG 3(3,0) Science and the Lay Reader: PR: ENC 3310, ENC 3311 or ENC 3241 or C.I. Analysis of lay scientific magazine articles and practice in scientific writing for the lay audience.

ENC 3310 AS-ENG 3(3,0) Magazine Writing I: PR: ENC 1102. Intensive practice in description, exposition and argumentation; control of tone, mood, viewpoint, and level of diction. Applicable to article, essay, and short story writing.

ENC 3311 AS-ENG 3(3,0) Advanced Expository Writing: PR: ENC 1102. Practice of expository writing directed to general reader.

ENC 3905 AS-ENG 3(3,0) Directed experience in Writing: PR: ENC 1102, C.I. Individualized topics of study and/or research in writing with personalized faculty direction. May be repeated for credit.

ENC 3942 AS-ENG 3(3,0) Journal Writing Practicum: An interdisciplinary practicum in journal writing as a literary genre and a means of self-expansion.

ENC 415 AS-ENG 3(3,0) Techniques of Technical Publications: PR: C.I. Study of new publishing technology, stressing composition and printing; word processing, automated text processing; methods of reproduction. Introduction of graphics; style, format, layout, and boardwork. Should be taken concurrently with ENC 4294.

ENC 4215 AS-ENG 3(3,0) Visual Elements in Documentation: 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 4275 AS-ENG 3(3,0) Writing/Consulting: theory & practice: PR: C.I. Theory and practice of assessing and responding to writing from the standpoint of a collaborator, as opposed to evaluator.


ENC 4293 AS-ENG 3(3,0) Technical Documentation I: PR: ENC 3211 or ENC 3241. Practice in translating highly technical information to organized documentation: hardware, software, military specifications. Theory of designing and organizing technical manuals. Preparation of proposals. Interview skills.

ENC 4294 AS-ENG 3(3,0) 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 AS-ENG 3(3,0) 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.

ENC 4312 AS-ENG 3(3,0) Theory & Practice Persuasive Writing: PR: ENC 1102. A study of the theory and practice of persuasion, including logical emotional and ethical appeals.

ENC 4365 AS-ENG 3(3,0) Writing for the Computer Industry: PR: ENC 1102 and Junior standing, or C.I. This course addresses the special demands of writing for the computer industry.

ENC 5214 AS-ENG 3(3,0) Production and Publication Methods: Theory and practice of production and publication methods for technical writers.

ENC 5219 AS-ENG 3(3,0) Graphics in Technical Writing: A study of the creation and editing of graphics in technical documents.
ENL 4262 AS-ENG 3(3,0)


ENL 4273 AS-ENG 3(3,0)


ENL 4311 AS-ENG 3(3,0)

Chaucer: PR: ENC 1102. The Canterbury Tales, Troilus and Criseyde, and other works.

ENL 4320 AS-ENG 3(3,0)

18th Century Studies: PR: ENC 1102. Reading, analysis, and discussion of literature in English: 1660-1880. May be repeated for credit.

ENL 4333 AS-ENG 3(3,0)

Shakespeare Studies: PR: ENC 1102. Reading, analysis, and discussion of Shakespeare's plays. May be repeated for credit.

ENL 4341 AS-ENG 3(3,0)

Milton and His Age: PR: ENC 1102. Paradise Lost, Paradise Regained, Samson Agonistes, shorter poems and selected prose.

ENL 5237 AS-ENG 3(3,0)

Eighteenth Century Studies: Reading, analysis, and discussion of literature in English: 1660-1880.

ENL 5250 AS-ENG 3(3,0)

The Victorian Age: Poetry: PR: Graduate standing or C.I. Poets of the Victorian period, including Tennyson, the Brownings, Arnold, Hopkins, Hardy, the Rossettis, Emily Bronte, and others.

ENL 5256 AS-ENG 3(3,0)

Victorian Literature: PR: Graduate Standing or C.I. A study of the major prose works and selected poetry of British Victorian writers.

ENL 5269 AS-ENG 3(3,0)

Nineteenth-Century Essays: PR: Graduate standing or C.I. English non-fiction prose of the 19th century.

ENL 5347 AS-ENG 3(3,0)


ENS 1441 AS-ENG 3(3,0)

Advanced ESL Writing: PR: TOEFL Score of 500+ and completion of ENC 0020 or equivalent. Advanced work in writing for non-native speakers to overcome problems encountered in mastering academic English, not remedial composition.

ENV 3001 EN-CEE 3(3,0)

Introduction to Environmental Engineering: PR: CHM 2046 and MAC 2312. Introduction to concepts and terminology of environmental engineering. Stresses material and energy balances. Covers air, water and land pollution. May be repeated for credit.

ENV 4112C EN-CEE 3(2,2)


ENV 4120 EN-CEE 3(3,0)

Air Pollution Control: PR: EGN 3704 or ENV 3001 and CWR 3201. Air resources engineering design, and operation of air pollution control systems.

ENV 4121C EN-CEE 3(2,3)

Air Pollution: PR: EGN 3704, CWR 3201. Sources, causes, and effects of air pollution. Engineering design, analysis, and modeling for the control of air pollution.

ENV 4122C EN-CEE 3(2,2)

Air Pollution Control Design: PR: ENV 4121C. Project course on design of air pollution control equipment and systems.

ENV 4300C EN-CEE 3(2,2)

Solid Waste Facility Design: PR: ENV 4341. Project course on design of a municipal solid waste landfill.

ENV 4341 EN-CEE 3(3,0)

Solid Waste Management: PR: EGN 3704 or C.I. Engineering design, planning, and analysis problems associated with storage, collection, processing, and disposal of solid and hazardous wastes.

ENV 4432 EN-CEE 3(3,0)

Potable Water Treatment: PR: ENV 3001 and CWR 3201. Detailed investigation of principles of design and operation of potable water treatment facilities. May be repeated for credit.

ENV 4531 EN-CEE 3(3,0)

Wastewater Treatment Processes: PR: ENV 3001 and CWR 3201. Detailed investigation of principles of design and operation of wastewater treatment facilities. May be repeated for credit.
Drinking water treatment using Fe, Mn, As, and disposal of hazardous wastes. 

Drinking Water Treatment: existing other processes. ion exchange, precipitation, sorption, and stabilization, including stabilization and ultimate disposal.

ENV 4505 EN-CEE 3(3,0)
Sludge Management Operations in Environmental Engineering: PR: ENV 4561. Theory and design of sludge management operations and processes in environmental engineering, including stabilization and ultimate disposal.

ENV 4004C AS-BIOL 4(2,6)

EPH 5335 ED-IP 3(3,0)
Physical and Sociological Implications of Handicapping Conditions: 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.

ESE 3940 ED-IP 3-16(0,3-1)
Internship I - Secondary: PR: EDG 4323. Student teaching in a secondary school under the supervision of a certified classroom teacher.

ESE 4943 ED-IP 7-12(0,35)
Internship II - Secondary: PR: ESE 3940 or EDE 3942. Student teaching in a secondary school under the direction of a certified classroom teacher. Scheduled concurrent seminars.

ESE 5214 ED-IP 3(3,0)
Secondary School Curriculum Improvement I: PR: Regular Certificate or C.I. Secondary School self studies for curriculum projects, accreditation reports, or staff development.

ESI 4221 EN-IEMS 3(3,0)

ESI 4234 EN-IEMS 3(3,0)
Quality Engineering: PR: STA 3032. Basic concepts and techniques of quality control; applications of statistics in industrial research; design of quality assurance systems; reliability engineering.

ESI 4312 EN-IEMS 3(3,0)

ESI 4321 EN-IEMS 3(3,0)
Quantitative Techniques in Industrial Engineering: PR: ESI 4312. Extension of ESI 4312, with primary emphasis on Operations Research and statistical applications to industrial engineering problems.

ESI 4523C EN-IEMS 3(2,3)
Systems Simulation: PR: STA 3032, EGN 3210 or high level programming language. Methods and procedures for simulating large-scale systems with digital computers. High level programming and simulation languages are used.

ESI 5236 EN-IEMS 3(3,0)
Reliability Engineering: PR: ESI 4234 or equivalent, or C.I. Reliability theory and modeling approaches. Topics include: failure data analysis, maintainability, reliability standards (DOD), software reliability, reliability in design, and electronic systems reliability.

ESI 5315 EN-IEMS 3(3,0)
Research Foundations for IE and OR Modeling: PR: MAP 2032, STA 5156 or equivalent; ESI 4312; and C.I. Research foundations for IE/OR modeling, including construct relative analysis of published research, methods of proof, research foundations in decision theory, optimization, and related areas.

ESI 5316 EN-IEMS 3(3,0)
Operations Research: PR: STA 3032. Methods of operations research, including formulation for models and derivation of solutions; linear programming, network models queuing theory, simulation, and nonlinear optimization techniques.

ESI 5318 EN-IEMS 3(3,0)
Military Applications of Operations Research: PR: ESI 4312 or ESI 5316. Course covers application of operations research models to military planning and operations. Use of optimization, simulation, probability, and statistical modeling to evaluate force alternatives.

ESI 5359 EN-IEMS 3(3,0)
Risk Assessment and Management: PR: STA 5156 or STA 3032. Problems and complexities involved in risk assessment and management. Selected methodologies are illustrated through realistic applications in engineering and the sciences.
ETD 3350C EN-ENT 3(2,2)
Applied CADD: PR: Engineering Drawing and some CADD background. This course in computer-aided drafting/design provides the student with the opportunity to approach detailed and intricate drafting/design problems from a computer perspective.

ETG 2530C EN-ENT 4(3,2)
Strength of Materials: PR: ETG 3541. Relationship between external forces and action of members of a structure. Topics include stress, shear, moment, deflections, columns, connections, and Mohr's circle.

ETG 3541 EN-ENT 4(4,0)

ETG 4950C EN-ENT 3(1,4)
Senior Design Project: PR: ETG 3541, EST 4502C, ETG 2530C or C.I. Engineering Technology senior within 18 semester hours of graduation. Supervised individual or group projects involving project definition, planning, development, testing, and evaluation. Progress reports and a final oral presentation and formal written report are required.

ETI 2110 EN-ENT 3(3,0)

ETI 3421 EN-ENT 3(3,0)

ETI 3440 EN-ENT 3(3,2)
Product Design: Principles of layout and dimensions for production. Consideration of design factors, standards, specifications, and codes, with emphasis on productability.

ETI 3651C EN-ENT 3(2,2)
Computer Applications: PR: Computer programming. Application of high-level program packages to solve problems in industrial practices.

ETI 3671 EN-ENT 2(2,0)

ETI 3690 EN-ENT 3(3,0)
Technical Sales: PR: Junior standing or C.I. Application of technical knowledge to sales and service. Relationship of technical sales organization to production, customers, and competitors.

ETI 4186 EN-ENT 3(3,0)
Applied Reliability: PR: ETI 2110. Practical application of reliability concepts and analysis applicable to the design, production and logistics phases of systems and system components.

ETI 4205 EN-ENT 3(3,0)
Applied Logistics: PR: ETI 2110 or C.I. Introduction to logistics. Emphasis on practical applications. Includes systems engineering, cost/systems effectiveness, reliability, maintainability, system functional analysis, logistic support analysis, life cycle cost analysis.

ETI 4635 EN-ENT 3(3,0)
Technology Administration: PR: ETI 3671 and Junior standing. Techniques of applying management principles to professional positions held by Engineering Technologists. Management functions of planning, organizing, motivating, and controlling, production, sales, and service.

ETI 4640 EN-ENT 3(3,0)
Process Planning and Work Measurement: PR: MAC 1105 and COP 2200 or equivalent. Scheduling techniques (PERT), (CPM), are presented. Time Study Methods, Work Sampling and MTM are covered.

ETI 4661C EN-ENT 3(2,2)
Applied Facilities Planning and Design: PR: ETI 3421, engineering drawing and senior standing. The design of manufacturing facilities and material handling systems.

ETI 4700 EN-ENT 3(3,0)
Occupational Safety: PR: Junior standing. Accident prevention and the operation of an industrial safety program. Basic requirements of the Occupational Safety and Health Act standards.

ETM 4220 EN-ENT 4(4,0)
ETM 4232C EN-ENT 4(3,2)
Applied Heat Transfer: PR: ETG 3541 or equivalent, MAC 2253 or MAC 2311. An introduction to the basic concepts and applications of conduction, convection and radiation heat transfer. Basic energy balances and their applications are emphasized. Study state and transient phenomena are evaluated, including numerical solutions.

ETM 4331C EN-ENT 4(3,2)
Applied Fluid Mechanics: PR: MAC 2253 or MAC 2311; PHY 2053C or equivalent. An introduction to the basic concepts of hydrostatics and hydrodynamics covering fluid statics, flow of ideal fluids, continuity of mass, impulse and momentum principles, conservation of energy, flow of fluid in pipes, etc.

ETM 4403C EN-ENT 3(2,2)
Applied Kinematics: PR: ETG 3541 and Engineering Drawing. Analysis and design of machine elements and mechanisms involving velocities and accelerations of components, linkages, gears, and cams.

ETM 4512C EN-ENT 3(2,2)

ETM 4755 EN-ENT 4(4,0)
Applied Air Conditioning: PR: ETM 4331C. Analysis of body comfort, psychometrics, heating and cooling load, specification of air conditioning systems, air distribution systems and system piping requirements.

EUH 2000 AS-HIST 3(3,0)
Western Civilization I: A survey of western civilization from ancient to 1648.

EUH 2000H AS-HIST 3(3,0)
Honors Western Civilization I: Same as EUH 2000 with honors-level content.

EUH 2001 AS-HIST 3(3,0)
Western Civilization II: PR: EUH 2000 or C.I. A survey of western civilization from 1648 to present. May be taken before EUH 2000.

EUH 2001H AS-HIST 3(3,0)
Honors Western Civilization II: Same as EUH 2001 with honors-level content.

EUH 3122 AS-HIST 3(3,0)
Medieval Society and Civilization: PR: EUH 2000 and 2001 or C.I.

EUH 3142 AS-HIST 3(3,0)
Renaissance and Reformation: PR: EUH 2000 and 2001 or C.I. Influence of Renaissance humanism on arts, letters, and politics; Luther and Protestantism; the Catholic Counter-Reformation and the Thirty Years' War.

EUH 3235 AS-HIST 3(3,0)
Romanticism and Realism: PR: EUH 2000 and 2001 or C.I. Napoleon and nationalism; new ideas; conservatism; liberalism, romanticism, republicanism and socialism; urbanization, technology and mass culture, religious decline; Realpolitik, racism, imperialism, and militarism.

EUH 3242 AS-HIST 3(3,0)
Modern Europe and the First World War: A survey of the impact of the democratic institutions, education, transportation, housing, health, mass communications, entertainment, women, and warfare.

EUH 3281 AS-HIST 3(3,0)
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 3315 AS-HIST 3(3,0)
History of Modern Spain: PR: Modern European History (16th-20th century). The evolution of Modern Spain through its key institutions, cultural as well as social movements, and impact of political and intellectual trends, 1700-Present.

EUH 3411 AS-HIST 3(3,0)

EUH 3431 AS-HIST 3(3,0)
History of Modern Italy: PR: EUH 2001. The history of modern Italy from the origins of national unification through the post-World War II era.

EUH 3451 AS-HIST 3(3,0)
History of Modern France: PR: EUH 2001, EUH 3242 or C.I. The course traces the evolution of France through the study of French political thought, institutional development, social movements, and international roles from 1700 - present.

EUH 3561 AS-HIST 3(3,0)
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 4284 AS-HIST 3(3,0)
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 4465 AS-HIST 3(3,0)
Hitler's Third Reich: PR: EUH 2000 and 2001 or C.I. German nationalism and militarism; World War I and Versailles Treaty; the Weimar Republic and the rise of the Nazis; Second World War, division and recovery.

EUH 4500 AS-HIST 3(3,0)
English History to 1485: PR: EUH 2000 and 2001 or C.I.

EUH 4501 AS-HIST 3(3,0)
English History: 1485-1815: PR: EUH 2000 and 2001 or C.I.

EUH 4502 AS-HIST 3(3,0)
British History: 1815-Present: PR: EUH 2000 and 2001 or C.I.

EUH 4571 AS-HIST 3(3,0)
History of Russia to 1801: PR: EUH 2000 and 2001 or C.I. Kievan State; Mongol Yoke; Development of Muscovite Expansionism and Absolutism; Time of Troubles; Westernization of Russia under Peter I and Catherine; Role of Orthodox Church.

EUH 4574 AS-HIST 3(3,0)
History of Russia: 1801-1917: PR: EUH 2000 and 2001 or C.I. Alexander I; Napoleonic Invasion, Revolutionary Movement; Russian Policy toward Central Asia and China; Great Reforms; Russo-Japanese War; Revolution of 1905; Constitutional Period; Triple Entente.

EUH 4576 AS-HIST 3(3,0)
the New Russia.

EUH 4582 AS-HIST 3(3,0) 
20th Century Russian Diplomatic History: PR: C.I. Russian diplomatic history from the signing of the Entente Cordiale to the aftermath of the Cold War.

EUH 4610 AS-HIST 3(3,0) 
Women in European Society: From Medieval to Modern: PR: Junior standing or C.I. This course examines the changing situation of women in Europe from the Middle Ages to the twentieth century.

EUH 4620 AS-HIST 3(3,0) 
European Great Powers: 1815-1914: PR: EUH 2000 and 2001 or C.I. Congress of Vienna, Metternich's system Crimean War, unifications of Italy & Germany, the Bismarckian era, the alliance systems, and the outbreak of World War I.

EUH 4621 AS-HIST 3(3,0) 

EUH 5247 AS-HIST 3(3,0) 
Colloquium in Europe Since World War II:

EUH 5285 AS-HIST 3(3,0) 
Colloquium in Europe from 1919-1939:

EUH 5315 AS-HIST 3(3,0) 
Colloquium in Soviet Russia:

EUH 5371 AS-HIST 3(3,0) 
Colloquium in Spanish History:

EUH 5546 AS-HIST 3(3,0) 
Colloquium: British History: PR: Graduate status. Selected topics in British history. May be repeated for credit when content is different. There is no standard syllabus because content is different with each offering.

EUH 5579 AS-HIST 3(3,0) 
Colloquium in Soviet Russia: PR: Senior standing or C.I. Reading and class discussion of the literature on selected topics in Russian history, 1911-present.

EUH 5595 AS-HIST 3(3,0) 
Colloquium in Czarist Russia: PR: Senior standing or graduate status. Selected topics on the literature of Russia under the Czars prior to 1917.

EUH 5608 AS-HIST 3(3,0) 
Colloquium: European Intellectual History: PR: Senior standing or C.I. Reading and class discussion of the literature on selected topics of European intellectual history.

EUH 5368 ED-IP 3(3,0) 
Advanced Teaching Techniques for Vocational Education: PR: EVT 3365 or C.I. Study, practice, and achievement of techniques including cooperative learning, simulation, instructional modeling and evaluation of instructional effectiveness.

EUH 5385 ED-IP 2-4(2-4,0) 
Cooperative Programs in Vocational Education: 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.

EUH 5551 AS-HIST 2-3(2-3,0) 
Applied Clinical Teaching Techniques in Vocational Education: 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.

EUH 5581 ED-IP 2-4(2-4,0) 
Management of Vocational Programs: 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.

EXP 3204 C AS-PSYCH 4(3,2) 

EXP 3304 AS-PSYCH 3(3,0) 

EXP 3404 AS-PSYCH 3(3,0) 
complex human learning, and problem solving.

EXP 4218L AS-PSYCH 2(0,4)
Experimental Laboratory in Human Memory and Cognition: PR: or CR: EXP 3513. A laboratory course providing in-depth coverage of experimental research on human memory and cognition.

EXP 5208 AS-PSYCH 3(3,0)
Sensation and Perception: PR: C.I. A study involving human information processing with regard to physical and psychological variables in sensory and perceptual phenomena.

EXP 5256 AS-PSYCH 3(3,0)
Human Factors I: Survey of human factors literature. Introduction to topics including human capabilities and human interfaces with human-machine systems.

EXP 5257 AS-PSYCH 3(3,0)
Human Factors II: PR: EXP 5256 (HFI). The second in the series of basic human factors courses involving an in-depth examination of issues.

EXP 5258 AS-PSYCH 3(3,0)

EXP 5445 AS-PSYCH 3(3,0)
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.

FIL 2400 AS-FILM 3(2,2)
History of Motion Pictures: The history of motion pictures as art and industry; from 1895 to the present.

FIL 3006 AS-FILM 3(3,0)
Art of the Cinema: An analysis of basic elements of cinematic style including film direction, editing, cinematography, art direction and sound.

FIL 3102 AS-FILM 3(3,0)
Writing for Film and TV: PR: ENC 1102, Junior Standing. Theories and process of screen writing for motion pictures and television. Students learn how to create stories and scripts for the entertainment marketplace.

FIL 3106C AS-FILM 3(2,3)
Introduction to Scriptwriting: PR: Majors only, Admission to Film program. Rudiments of scriptwriting, including visual storytelling, story structure, character, dialogue, and introduction to scriptwriting software.

FIL 3200C AS-FILM 3(2,4)
Introduction to Film Production: PR: Majors only. Introduction to production utilizing film equipment. Basic technical and aesthetic aspects of production.

FIL 3282 AS-ART 3(2,3)
Introduction to Cel Animation: PR: Majors only. Introduction to traditional cel animation. Drawing skills required.

FIL 3286C AS-ART 3(2,4)
Introduction to Computer Animation: PR: Majors only. Focus on 3D computer modeling and animation systems. Hands-on exercise on the type of high-end animation systems used in the film industry. May be repeated for credit.

FIL 3287C AS-ART 3(2,4)
Intermediate Computer Animation: PR: FIL 3286C. Focus on 3D computer graphic techniques utilizing microcomputer systems. Techniques include basic paint systems, color cycling and 2D animation.

FIL 3300 AS-FILM 3(3,0)
Film Documentary: PR: Majors only. The uses and analysis of the non-fiction film.

FIL 3309 AS-FILM 3(3,1)
Women in Film: PR: Junior standing. A critical examination of how cinematic images of women affect cultural perceptions and an overview of historically significant women filmmakers and related sociopolitical issues.

FIL 3401 AS-FILM 3(3,0)
Film History to 1945: PR: Major in Motion Picture Technology. Examines film history in a depth of detail and with rigor that is appropriate for majors in the subject. This course covers cinema history from 1895 to 1945.

FIL 3402 AS-FILM 3(3,0)
Film History from 1945 to Present: PR: Major in Motion Picture Technology. Film history in a depth of detail and with rigor that is appropriate for majors in the subject. This course covers from 1945 to the present.

FIL 3410 AS-ART 3(3,0)
History of Animated Films: Survey from early animators to the development of the cartoon industry. Television animation included.

FIL 3503 AS-FILM 3(3,1)
Film Theory and Criticism I: PR: Film majors and minors only, FIL 2400. Major film theories to the Second World War Period.

FIL 3507 AS-FILM 3(3,1)
Film Theory and Criticism II: PR: Film majors and minors only. FIL 2400 and FIL 3503. Major film theories, post-Second World War to the present.

FIL 3520 AS-LANG 3(3,0)
Italian Film: This course attempts to stimulate and/or increase the interest of students in Italian cinema as an art form with the director playing the key role. Films by most outstanding Italian movie directors will be analyzed from a social, economic, and historical point of view.

FIL 3521 AS-LANG 3(3,0)
French Film: The study of French cinema as an art form and the key role of the director. Films are analyzed from structural, social, economical, and historical perspectives with attention to their relationship with French literature. Taught in English.

FIL 3522 AS-LANG 3(3,0)
German Film: PR: C.I. Exploration of the form and context of German film during different time periods in relation to other aspects of culture and to sociopolitical structures at the time.

FIL 3922 AS-FILM 1(1,1)
Film Colloquium: PR: Majors only. Admission to the film program. A series of lectures, films and forums designed for students in the film program. The class is team taught by film faculty and guest speakers from the film industry. S/U Grade ONLY. Course may be repeated.

FIL 4103 AS-FILM 3(3,0)
Adaptation: PR: FIL 3106. This class explores the process of adapting scripts from other sources. Students will investigate the legalities of adaptation, analyze existing models, and write adaptations.

FIL 4111C AS-FILM 3(2,3)
Intermediate Scriptwriting: PR: FIL 3106C. Writing workshop, examination of mythic storytelling, and ethics of
scriptwriting.

FIL 4112C AS-FILM 3(2,3) Advanced Scriptwriting: PR: Majors only, FIL 3106C. Advanced writing workshops, principles and methods of adaptation and reader's coverage.

FIL 4113C AS-FILM 3(2,3) Scriptwriting Workshop: PR: Majors only, FIL 3106C. Writing workshop for experienced scriptwriters, cold readings, preparing calling card script, marketing scripts and funding sources.

FIL 4114 AS-FILM 3(3,0) Screenwriting Workshop: PR: FIL 3102, FIL 4121 or C.I. Students revise, refine, and complete a full-length script. Open only to non-majors. May be repeated for credit.

FIL 4121 AS-FILM 3(2,3) Comedy Writing: PR: None. Film majors or C.I. Intensive workshop in comedy writing for film and television. Work on story pitches, outlines, and complete scripts for 30-minute television series.

FIL 4202C AS-FILM 3(2,4) Intermediate Film Production: PR: Majors only, FIL 3200C. Advanced exploration of the aesthetic and technical facets of filmmaking.

FIL 4203C AS-FILM 3(2,4) Advanced Film Production: PR: Majors only, FIL 3200C, FIL 4202C. Intensive tutorial guidance, instruction and evaluation of final film projects from initial concept through production.

FIL 4207 AS-FILM 3(3,0) Episodic Film Production: PR: Film or Animation Majors. Students write, produce and direct monthly episodic film productions under faculty supervision.

FIL 4208 AS-FILM 3(3,0) Film Directing: PR: Majors only, FIL 4202C. Principles and practice in directing narrative and documentary motion pictures.

FIL 4210 AS-FILM 3(2,4) Cinematography: PR: Majors only, FIL 3200C. Advanced principles and practices of cinematography.

FIL 4211 AS-FILM 3(1,3) Post-Production Workshop: PR: Majors only, FIL 4202C. This class will provide students with a thorough understanding of the process of producing in film and posting on state of the art equipment.

FIL 4212 AS-FILM 3(0,4) Audio Post-Production: PR: FIL 3207, FIL 4201. Post-production sound for films and video, including voice over music, music, sound effects, sound design, and automated dialogue replacement. Exercises will be edited and mixed on a computer work station.

FIL 4223 AS-FILM 3(3,0) Art Direction for Film: PR: Majors only, FIL 3200C, FIL 4202C. Analysis of visual structure of film. Specific problems in art direction.

FIL 4262C AS-FILM 4(3,2) Special Problems in Film Design: A series of exercises in craft, techniques, and design for film production, including animation.

FIL 4283C AS-ART 3(2,4) Intermediate Cel Animation: PR: Majors only, FIL 3282C. Production from storyboard to composite print. May be repeated for credit.

FIL 4288C AS-ART 3(2,4) Advanced Computer Animation: PR: Majors only, FIL 3286C and FIL 3287C. Advanced 3D modeling and animation techniques. Working in small production teams, students will create short animated segments using a high-end 3D animation system. May be repeated for credit.

FIL 4289C AS-ART 3(2,4) Computer Animation Workshop: PR: Majors only, FIL 3286C, FIL 3287, FIL 4288C, or C.I. A production level course in computer animation that emphasizes all phases of the commercial production process, including storyboard, budgets, client relations, and post-production.

FIL 4293C AS-ART 3(2,4) Advanced Cel Animation: PR: Majors only, FIL 4283C. Production from storyboard to composite print from pre-recorded sound track. May be repeated for credit.

FIL 4294C AS-ART 3(2,4) Cel Animation Workshop: PR: Majors only, FIL 4283C. Production from storyboard to composite print from pre-recorded sound track. May be repeated for credit.

FIL 4504 AS-FILM 3(2,2) Motion Picture Genre/Aesthetics: PR: Majors only, FIL 3503. Analysis and evaluation of films; major genres, directors, styles, or periods considered in depth.

FIL 4602 AS-FILM 3(3,0) Film Business: PR: FIL 3207, FIL 4201. Restricted to Film majors. This is a seminar course taught by a professional in the film industry which deals with issues relating to the organization and production of motion pictures.

FIL 4604 AS-FILM 3(3,0) The Film Producer: PR: Majors only, FIL 4208. The role of the producer is examined in the context of theatrical film.

FIL 4607 AS-FILM 3(3,0) Film Production Management: PR: Majors only, FIL 3200C. Reproduction, budgeting, script breakdown, construction of production boards, scheduling, location scouting, and crew procurement.

FIL 4942 AS-ART 3(2,3) Animation Workshop: PR: Majors only, FIL 4283C. An intensive study of various film animation techniques under the tutelage of professional animators.

FIN 3140 BA-FIN 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-FIN 3(3,0) Financial Markets: PR: FIN 3403. The role of short and long-term financial markets and financial institutions in capital formation and allocation. Theories and mathematics of interest rates.

FIN 3403 BA-FIN 3(3,0) Business Finance: PR: ACG 2021, ACG 2071, (or ACG 2023), ECO 2013 and ECO 2023. 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-FIN 3(3,0) Intermediate Corporate Finance: PR: FIN 3403. In-depth study of the principles of corporate finance. Investment, financing, and capital decisions are examined.


FIN 4313 BA-FIN 3(3,0) Management of Financial Institutions: PR: FIN 3303 and FIN 3403. Analysis of
management policies of financial institutions, including assets liability, and capital management. The economics and regulatory influence on competition is considered.

FIN 4324 BA-FIN 3(3,0) Commercial Bank Management: PR: FIN 3303. Analysis of the intersections of commercial banking policies and an analysis of current approaches to managing specific bank products.

FIN 4424 BA-FIN 3(3,0) Advanced Topics in Financial Management: PR: FIN 3404 and FIN 4453. Advanced study in financial management. Topics include capital budgeting, financial structure, and capital decisions. Case studies used extensively.

FIN 4453 BA-FIN 3(3,0) Financial Models: PR: FIN 3403, FIN 3404. Mathematical models applied specifically to financial problems, including those models suitable for representation and solutions on computers.

FIN 4503 BA-FIN 3(3,0) Speculative Financial Markets: PR: FIN 3303 and FIN 3504. Study of options, futures, forward, and other speculative markets. Investments traded in these markets are examined analytically. Pricing and hedging models are considered.

FIN 4514 BA-FIN 3(3,0) Portfolio Analysis and Management: PR: FIN 3303 and FIN 3504. Portfolio and capital market theory in the determination of rational investment policies. Risk analysis, portfolio analysis, and evaluation techniques.

FIN 4604 BA-FIN 3(3,0) International Financial Management: PR: FIN 3303, FIN 3404 and FIN 3504. Analysis of the foreign financial methods and investment, currency futures market, capital budgeting, cash management, examination of Eurocurrency market and international bond markets.

FIN 4941 BA-FIN 3(0,3) Finance Internship: PR: Finance Major; consent of department chair. Supervised finance-related work experience in a pre-approved sponsoring organization. See department for information/application.

FIN 5405 BA-FIN 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-IP 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 4314 ED-IP 2(2,0) Foreign Language Methods K-6: Provides the theory and methods of teaching foreign languages in the elementary school (FLES) for pre- and in-service teachers.

FLE 4360 ED-IP 4(3,2) Foreign Language Instructional Programs: PR: EDG 4323. Objectives for curriculum and methods and materials for teaching foreign language in middle grades and high school.

FLE 5870 AS-LANG 3(3,0) Methods of Teaching Spanish: PR: Graduate Standing or C.I. Topics to be examined include language proficiency and achievement, theoretical perspectives in methodology, and test design/evaluation as applicable for teaching Spanish language and culture.

FLE 5875 AS-LANG 3(3,0) Computer Application in Teaching the Spanish Language: PR: Graduate Standing or C.I. Survey, analysis, and evaluation of computer software and Internet materials for graduate students of Spanish.

FOL 3730 AS-LANG 3(3,0) Romance Philology: The study of the major Romance Languages and their origins as they developed from Classical and Medieval Latin to their linguistic influences such as Arabic and Provençal.

FRE 1005 AS-LANG 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 librettis.

FRE 1120 AS-LANG 4(4,1) Elementary French Language and Civilization I: Introduces the student to French culture through the major language skills: listening, speaking, reading and writing. Open only to students with no experience in the language.

FRE 1121 AS-LANG 4(4,1) Elementary French Language and Civilization II: PR: FRE 1120 or experience with this language. Continuation of FRE 1120.

FRE 2200 AS-LANG 3(3,1) Intermediate French Language and Civilization I: PR: FRE 1121 or equivalent. Development of language skills and cultural knowledge at the intermediate level.

FRE 2201 AS-LANG 3(3,1) Intermediate French Language and Civilization II: PR: FRE 2200 or equivalent. Continuation of FRE 2200 with emphasis on French civilization.

FRE 2240 AS-LANG 3(3,0) Intensive French Conversation: PR: One year of French or equivalent. Practical use of the language, leading toward fluency and correctness in speaking.


FRE 3300 AS-LANG 3(3,0) French Grammar: PR: FRE 2201. An in-depth review of the structures of French for students who intend to take French literature courses.

FRE 3410 AS-LANG 2(2,0) Advanced Oral French: PR: 2 years college level French or equivalent. Intensive practice of French conversation using video and filmstrips as stimulus of individual and group discussions.

FRE 3420 AS-LANG 3(3,0) French Composition: PR: FRE 2201 or equivalent. Development of skills in composition.

FRE 3423 AS-LANG 2(2,0) Advanced French Grammar: PR: 2 years of college level French or equivalent. Intensive oral drills and exercises make students practice and review the grammatical structures which are necessary for correct and cultural French speech.

FRE 3440 AS-LANG 3(3,0) Business French I: PR: Three semesters of French language. Introduces vocabulary and terminology in various French business activities, as well as standards, procedures, and practices of the French business world.
FRE 3441 AS-LANG 3(3,0)  
Business French II: PR: FRE 3440 or C.I.  
Introduction to French business language and practices.

FRE 3760 AS-LANG 3(3,0)  
Advanced French Oral Communication:  
PR: FRE 2201 or equivalent. Vocabulary building with systematic training in diction and location. Speeches and oral presentations as well as production and delivery of real-life dialogues.

FRE 3780 AS-LANG 2(2,0)  
Advanced French Phonetics and Diction:  
PR: 2 years of college level French or equivalent. Intensive exercises in French phonetics and diction with both prose and poetry with particular emphasis on difficulties for speakers of English.

FRE 4421 AS-LANG 3(3,0)  
Advanced French Conversation:  
Advanced conversation on directed topics from various disciplines; literature, art, psychology, philosophy, music, business, and the sciences.

FRE 4422 AS-LANG 3(3,0)  
Advanced French Composition: PR: FRE 3420. Readings and written imitations of modern literary styles in the form of themes, sketches, poems, and original stories.

FRE 4500 AS-LANG 3(3,0)  
French Civilization and Culture: PR: FRE 3420. A survey analyzing development of key elements of French life: its historical, artistic, intellectual, scientific, and spiritual contributions to the world via readings, lectures, films, and other media. Conducted in French.

FRE 4503 AS-LANG 2(2,0)  
Quebecois Civilization: PR: 2 years of college level French or equivalent. An introduction to the main epochs and events in the history of the French civilization in North America with particular emphasis on Quebec.

FRE 4780 AS-LANG 3(3,0)  
French Phonetics and Diction: French phonology, with emphasis on phonic groupings.

FRW 3100 AS-LANG 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-LANG 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-LANG 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-LANG 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 3770 AS-LANG 3(3,0)  
Francophone Literature: PR: Proficiency in French at the third year level. The literature of the Francophone world. Students will read, analyze and discuss literary works written in French.

FRW 4281 AS-LANG 3(3,0)  
20th Century French Novels: PR: FRW 3100 or FRW 3101 or equivalent. Contemporary French Novel. Will focus on post-war authors, both traditional and avant-garde, such as Bazin, Beckett, Butor, Camus, Mauriac, Malraux and Sarrate.

FRW 4310 AS-LANG 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-LANG 3(3,0)  
20th Century French Drama: PR: FRW 3100 or FRW 3101 or equivalent, or C.I. Concentration on traditional and avant-garde theater after WWII, such as the works of Beckett, Camus, Claudel, Ciaudoux, Ionesco, and Sartre; different literary approaches will also be used.

FRW 4440 AS-LANG 3(3,0)  

FRW 4532 AS-LANG 3(3,0)  

FRW 4552 AS-LANG 3(3,0)  
nineteenth Century French Literature:

FRW 4820 AS-LANG 3(3,0)  
Stylistics: PR: FRE 3420 or equivalent. An intense study of textual criticism. An examination of the relationship between language and literature; explications and linguistic analysis of literary texts.

FSS 3120 BA-HOSP 3(3,0)  
Quantity Food Purchasing: PR: HFT 4250C or C.I. The purchasing procedures, specifications, and controls of food products in the hospitality industry.

FSS 3232C BA-HOSP 3(1,3)  
Intermediate Techniques of Food Production: PR: HFT 4250C. An advanced food production course which provides the student the opportunity to develop skills in pantry, gardemanger, garnishing, and convenience foods and services. Laboratory class.

FSS 3301 BA-HOSP 3(3,0)  

FSS 4135 BA-HOSP 3(3,0)  
Contract Food Service Management: PR: Junior standing. The organizational and management characteristics of the noncommercial contract and recreational food service industry. Management of food services in venues such as corporations, health care, schools, arenas, concessions, and vending.

FSS 4284C BA-HOSP 3(3,1)  
Catering and Banquet Organization: PR: HFT 4250C. 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.

GEB 1091C BA-BUS 2(1,1)  
Foundations of Leadership: PR: LEAD Scholars Program. Seminar for LEAD Scholars in the College of Business providing a foundation of leadership, scholarship, and service regarding disciplines in the college.
Remote Sensing of the Environment: World Political Geography: Analysis of nations, including area, location, political physical, economic, and urban analysis.

GEO 1200 EN-CLEE 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-CLEE 1(0,2) Physical Geography Laboratory: CR: GEO 1200. Analysis of climatic and meteorology methods topographic and geological maps, landforms, and landscape interpretation.

GEO 2370 EN-CLEE 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 2370H EN-CLEE 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-POLS 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.

GEO 4131C EN-CLEE 3(2,2) Remote Sensing of the Environment: PR: GEO 1200 or C.I. Interpretation and application of remote sensor imagery to physical, economic, and urban analysis.

GER 1005 AS-LANG 1(0,1) German Diction: This course is especially designed for music and voice students, with an emphasis on musical terms, German songs, and opera libretti.

GER 1120 AS-LANG 4(4,1) Elementary German Language and Civilization I: Introduces the student to German culture through the major language skills: listening, speaking, reading and writing. Open only to students with no experience in this language.

GER 1121 AS-LANG 4(4,1) Elementary German Language and Civilization II: PR: GER 1120 or equivalent. Continuation of GER 1120.

GER 1130H AS-LANG 4(4,1) Honors Elementary German Language and Civilization I: Introduces the student to German culture through the major language skills: listening, speaking, reading and writing. Open only to students with no experience in this language. Honors level content.

GER 1131H AS-LANG 4(4,1) Honors Elementary German Language and Civilization II: PR: GER 1120H or equivalent. Same as GER 1121 with honors-level content.

GER 2200 AS-LANG 3(3,1) Intermediate German Language and Civilization I: PR: GER 1121 or equivalent. Development of language skills and cultural knowledge at the intermediate level.

GER 2201 AS-LANG 3(3,1) Intermediate German Language and Civilization II: PR: GER 2200 or equivalent. Continuation of GER 2200 with emphasis on German civilization.

GER 2210 AS-LANG 3(3,0) Intensive German Conversation: PR: GER 1121 or C.I. Practical use of the language, leading toward fluency and correctness in speaking.

GER 2240 AS-LANG 3(3,0) German Conversation: PR: GER 2240 or equivalent. Development of skills in conversation and comprehension through practice.

GER 2270 AS-LANG 6(6,0) Intermediate German Study Abroad: PR: GER 1121 or equivalent. Intermediate German language and culture taught in the native environment.

GER 2271 AS-LANG 2(2,0) Modern German Civilization Abroad I: PR: One year of College-level German. Key elements of German life: its artistic, intellectual, scientific, and spiritual contributions to the world via guest lecturers, readings, films, and other media. In German.

GER 3272 AS-LANG 2(2,0) Modern German Civilization Abroad II: PR: GER 2201 or equivalent. Key elements of German life: its artistic, intellectual, scientific, and spiritual contributions to the world via guest lecturers, readings, films, and other media. In German.

GER 3440 AS-LANG 3(3,0) Business German I: PR: GER 2200. Introduction to German business language and practices.

GER 3441 AS-LANG 3(3,0) Business German II: PR: GER 3440. Continuation of Business German I.

GER 3470 AS-LANG 6(6,0) Advanced German Study Abroad: PR: GER 2201. Advanced German grammar in the context of conversation and composition taught in the native environment.

GER 3760 AS-LANG 3(3,0) Advanced German Oral Communication: PR: GER 2201 or equivalent. Vocabulary building with systematic training in diction and locution. Speeches and oral presentations as well as production and delivery of real-life dialogues.

GER 3780 AS-LANG 3(3,0) German Phonetics and Diction: PR: GER 2240. The fundamental principles of German pronunciation.

GER 4510 AS-LANG 3(3,0) Life and Culture in Nazi Germany: PR: C.I. Confrontation with the development of national socialist ideas and their realization in everyday life and culture. Given in German.

GER 4520 AS-LANG 3(3,0) Modern Germany: PR: Given in German. An introduction to the history of postwar Germany from the two Germanies to unification and today's Germany.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Department</th>
<th>Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEW 3100</td>
<td>AS-LANG</td>
<td>Survey of German Literature I: PR: GER 2201 or equivalent. Main literary currents and works from the Middle Ages through 19th Century Romanticism.</td>
<td>3(3,0)</td>
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</tr>
<tr>
<td>GEW 3101</td>
<td>AS-LANG</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>3(3,0)</td>
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</tr>
<tr>
<td>GEW 3370</td>
<td>AS-LANG</td>
<td>Short Story: PR: GER 2201 or equivalent. German short prose works of the 19th and 20th centuries.</td>
<td>3(3,0)</td>
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</tr>
<tr>
<td>GEW 3480</td>
<td>AS-LANG</td>
<td>German Post-War Literature: PR: GER 2201. This course examines the works of German, Austrian and Swiss writers after World War II.</td>
<td>3(3,0)</td>
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</tr>
<tr>
<td>GEW 4482</td>
<td>AS-LANG</td>
<td>German Children's Literature: PR: GER 2200. A look into the history of German children's literature with a concentration on works after World War II.</td>
<td>3(3,0)</td>
<td></td>
</tr>
<tr>
<td>GEW 4531</td>
<td>AS-LANG</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>3(3,0)</td>
<td></td>
</tr>
<tr>
<td>GLY 1030</td>
<td>AS-CHEM</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, tidal waves, volcanism.</td>
<td>3(3,0)</td>
<td></td>
</tr>
<tr>
<td>GRE 1120H</td>
<td>AS-LANG</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>4(4,0)</td>
<td></td>
</tr>
<tr>
<td>GRE 1121H</td>
<td>AS-LANG</td>
<td>Elementary Modern Hebrew Language and Culture II: PR: HBR 1120 or equivalent. Continuation of HBR 1120.</td>
<td>4(4,0)</td>
<td></td>
</tr>
<tr>
<td>HBR 1120</td>
<td>AS-JUD</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>4(4,0)</td>
<td></td>
</tr>
<tr>
<td>HBR 1121</td>
<td>AS-JUD</td>
<td>Elementary Modern Hebrew Language and Culture II: PR: HBR 1120 or equivalent. Continuation of HBR 1120.</td>
<td>4(4,0)</td>
<td></td>
</tr>
<tr>
<td>HBR 2200</td>
<td>AS-JUD</td>
<td>Intermediate Modern Hebrew I: PR: HBR 1121 or equivalent. Designed to continue the study of Modern Hebrew; increase proficiency in conversation, reading and writing skills, and further expose students to Israeli culture.</td>
<td>3(3,0)</td>
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<tr>
<td>HBR 2201</td>
<td>AS-JUD</td>
<td>Intermediate Modern Hebrew II: PR: HBR 2200. Continuation of HBR 2200.</td>
<td>3(3,0)</td>
<td></td>
</tr>
<tr>
<td>HFT 1000</td>
<td>BA-HOSP</td>
<td>Introduction to the Hospitality and Tourism Industry: An orientation to the hotel, restaurant, and travel industry, and its history, structure, and operating procedures.</td>
<td>3(3,0)</td>
<td></td>
</tr>
<tr>
<td>HFT 3323</td>
<td>BA-HOSP</td>
<td>Hospitality Enterprises I: PR: Financial Accounting, Managerial Accounting, Computer Competency, Junior Standing.</td>
<td>3(3,0)</td>
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<tr>
<td>HFT 3540</td>
<td>BA-HOSP</td>
<td>Guest Services Management I: CR: Junior standing. The study of making decisions from the guest's point of view in the hospitality industry.</td>
<td>3(3,0)</td>
<td></td>
</tr>
<tr>
<td>HFT 3540</td>
<td>BA-HOSP</td>
<td>Guest Services Management I: CR: Junior standing. The study of making decisions from the guest's point of view in the hospitality industry.</td>
<td>3(3,0)</td>
<td></td>
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<tr>
<td>HFT 3600</td>
<td>BA-HOSP</td>
<td>Legal Environment in the Hospitality and Tourism Industry: PR: C.I. Principles of law as related to the Hospitality/Tourism Industry.</td>
<td>3(3,0)</td>
<td></td>
</tr>
<tr>
<td>HFT 3785</td>
<td>BA-HOSP</td>
<td>Management of Gaming Enterprises: PR: Junior level standing. an in-depth study of gaming-based organizations including cruise ships, Indian reservation casinos, and others. The history and development of gaming organizations, the economies, social, and cultural impact of gaming and managerial challenges and opportunities in the industry.</td>
<td>3(3,0)</td>
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<tr>
<td>HFT 3949</td>
<td>BA-HOSP</td>
<td>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.</td>
<td>1-5(0,1-5)</td>
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<tr>
<td>HFT 4210</td>
<td>BA-HOSP</td>
<td>Hospitality Enterprises Management II: PR: C.I. Planning and implementing strategies for managing the human resource in the hospitality/tourism industry.</td>
<td>3(3,0)</td>
<td></td>
</tr>
<tr>
<td>HFT 4250C</td>
<td>BA-HOSP</td>
<td>Hospitality Operations: PR: Junior Standing or C.I. An integration of lodging and food service operations providing students with a comprehensive knowledge of these related content areas; food service lab component.</td>
<td>3(3,1)</td>
<td></td>
</tr>
<tr>
<td>HFT 4298</td>
<td>BA-HOSP</td>
<td>Hospitality Business Consulting: PR: Senior standing or HFT 4752, HFT 4714, HFT 4240C, and HFT 3223, or C.I. A systematic approach to Hospitality Management. Students apply their cumulative knowledge in an active learning environment in a small hospitality operation.</td>
<td>3(3,0)</td>
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<tr>
<td>HFT 4473</td>
<td>BA-HOSP</td>
<td>Hotel Development Analysis: PR: Junior standing, HFT 3223 and C.I. Review of methodological operation, financial, and marketing aspects of analyses for hotel development projects.</td>
<td>3(3,0)</td>
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<tr>
<td>HFT 4503</td>
<td>BA-HOSP</td>
<td>Hospitality and Tourism Marketing: PR: MAR 3023. The application of marketing concepts to the Hospitality and Tourism Industry. Special emphasis on marketing planning and strategic marketing.</td>
<td>3(3,0)</td>
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<tr>
<td>HFT 4717</td>
<td>BA-HOSP</td>
<td>Hospitality Operations II: PR: Junior Standing. A survey of tourism, travel agency, airline, convention and trade show operations from both the U.S. and international perspective.</td>
<td>3(3,0)</td>
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<tr>
<td>HFT 4722</td>
<td>BA-HOSP</td>
<td>Travel Agency Management: PR: Junior Standing. The trends operation management procedures and practices of travel agents. Emphasis on tools utilized in</td>
<td>3(3,0)</td>
<td></td>
</tr>
</tbody>
</table>
agency operations.

HFT 4735 BA-HOSP 3(3,0)

HFT 4752 BA-HOSP 3(3,0)
Guest Services Management II: PR: HFT 3540 or C.I. Using decision theory and analytical techniques to create and maintain quality guest services. The emphasis is on strategic implications of quality service management.

HFT 4753 BA-HOSP 3(3,0)
Convention and Conference Services: PR: HFT 4717 or C.I. 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 BA-HOSP 3(3,0)
Exhibit and Trade Show Operations: PR: HFT 4717 or C.I. Provides an in-depth study of exhibit and trade show operations. Focuses on both supply and demand pertaining to exhibits and trade shows.

HFT 4755 BA-HOSP 3(3,0)
Theme Park and Attraction Management: PR: HFT 4714. An in-depth study of the theme park and attraction industry, focusing on resources, ride operations, merchandising, food services, and architectural design

HFT 4762 BA-HOSP 3(3,0)

HFT 4861 BA-HOSP 3(3,0)
Beverage Management: PR: Junior standing. The origin, production, storing, marketing, and control of beverages in the hospitality industry.

HFT 4949 BA-HOSP 1-5(0,1-5)
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 3462 AS-HIST 3(3,0)

HIS 4150 AS-HIST 3(3,0)
History and Historians: PR: C.I. A study of European and/or American historiography. May be repeated once for credit.

HIS 4944 AS-HIST 3(3,0)
Internship in Public History: PR: C.I. The Public History Internship is a one-semester course in which undergraduate history majors explore and gain experience in public history professions.

HIS 4970 AS-HIST 3(3,0)
Senior Thesis: Original research paper available to advanced history majors, topics to be selected in consultation with a directing professor.

HIS 5158 AS-HIST 3(3,0)
Classic and Contemporary Historical Thought: PR: Graduate Standing. Course will explore work of important historians influenced by social theory to gain an understanding of their main concepts.

HLP 2701 ED-IP 3(3,0)
Peer Education Training: PR: Sophomore standing and C.I. Strategies for teaching life skills and health education information for secondary students and college age peers

HLP 4722 ED-IP 3(2,1)
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.

HSA 3122 HPA-H&PT 3(3,0)
U.S. Health Care Systems: PR: Major or minor in College of Health or C.I. A survey of the economics, social, and political aspects of the health care system in the United States.

HSA 3170 HPA-H&PT 3(3,0)
Health Care Finance: Budgeting; resources for funding current and long-term assets; cost and cost behavior; prospective payment; DRGs as reimbursement base.

HSA 3210 HPA-H&PT 3(3,0)
Long Term Care Administration: Current financing mechanisms and proposed solution, and the impact of government regulation or the operation of long-term care facilities.

HSA 4109 HPA-H&PT 3(3,0)
Principles of Managed Care: PR: HSA 3170. Course will introduce the contractual, financial, and practice pattern components of managed care.

HSA 4120 HPA-H&PT 3(3,0)
Community and Public Health Sciences: 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 4180 HPA-H&PT 3(3,0)

HSA 4193 HPA-H&PT 3(3,0)
Health Care Automation: PR: CGS 2100 or equivalent. Analysis and design of computerized systems for health data and health administration.

HSA 4220 HPA-H&PT 3(3,0)
Long Term Patient Management: Concepts and process of patient care planning and management in a long term care facility; individual and team roles of medicine, paramedical and supportive personnel, patient and family consideration; long term care facility coordinating.

HSA 4502 HPA-H&PT 3(3,0)

HSA 4701 HPA-H&PT 6(6,0)
Introduction to Research in the Health Professions: PR: Senior or post-bac standing. The logic of research and the architecture of basic and applied investigations that are internally and externally reliable and valuable will be stressed.

HSA 5198 HPA-H&PT 3(3,0)
Information Systems and Computer Applications in Medicine: PR: CGS 2100 or equivalent. Overview of health information systems, with an emphasis on computer applications. Discussion of software and hardware requirements.

HSC 1931C HPA-H&PT 2(1,1)
Foundations of Leadership: PR: LEAD Scholars Program. Seminar for LEAD Scholars in the College of Health & Public Affairs providing a foundation of leadership, scholarship, and service...
regarding disciplines in the college.

HSC 2000 HPA-H&PT 2(2,0) 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 HPA-H&PT 3(2,2) Medical Self Assessment: Development of clinical skills and understanding of one's health to encourage active participation of individuals in their own health care.

HSC 3402C HPA-H&PT 3(2,3) CPR& First Aid: To train individuals to accepted and recognized medical standards in emergency first aid and CPR to include medical, environmental and trauma related emergencies.

HSC 3531 HPA-H&PT 3(3,0) Medical Terminology: A study of the language of medicine and allied health specialties, including work construction, definitions, and application of terms.

HSC 3593C HPA-H&PT 3(2,2) HIV Disease: A Human Concern: Analysis of the spectrum of HIV disease. Topics include: epidemiology & immunology; basic facts, prevention; legal, economic, and ethical issues; psychosocial aspects; substance abuse; sexuality and decision-making.

HSC 3640 HPA-H&PT 3(3,0) Health Law: Principles of law as applied to the health field, with special reference to health practices.

HSC 4008 HPA-H&PT 3(3,0) Professional Development in Health Professions: PR: RET 3026 or C.I. Career development planning, professional leadership approaches to problem solving, regulatory and professional requirements, and the impact of disease and technology on the health care industry.

HSC 4243 HPA-H&PT 3(3,0) Analysis of Instruction in Health Professions: Development of teaching aids, audiovisuals, learning packets. Course development, questioning strategies, evaluation of didactic and clinical performance.

HSC 4500 HPA-H&PT 3(3,0) Epidemiology: PR: STA 2014 or equivalent. A study of the distribution and determination of diseases and injuries in human population.

HSC 4550 HPA-H&PT 3(3,0) Pathophysiologic Mechanisms: PR: ZOO 3733C and PCB 3703C, or C.I. A study of pathologic lesions and pathophysiologic mechanisms in causation and evolution of the various disease state.

HSC 4564 HPA-H&PT 3(3,0) Health Care Needs of the Elderly: Overview of the physical and emotional needs of the elderly, including the institutional health care available.

HSC 4651 HPA-H&PT 3(3,0) 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.

HSC 5595 HPA-H&PT 3(3,0) AIDS: A Human Concern: Focus on epidemiology, transmission, prevention, legal and health care issues, economic impact, psychosocial aspects, sexuality, substance abuse, ethics, hotlines, referral services and the decision making process.

HUM 2211 AS-PHIL 3(3,0) Humanistic Tradition I: An interdisciplinary, multicultural study of the arts and sciences contributed by diverse human traditions to world civilization. Focus is on ancient civilizations and the cultural heritage stemming from them. Primary sources (in translation) are emphasized.

HUM 2211H AS-PHIL 3(3,0) Honors Humanistic Tradition I: This course shares the interdisciplinary, multicultural focus on ancient civilizations and their cultural heritages of HUM 2211; it differs principally in the depth and breadth of study.

HUM 2230 AS-PHIL 3(3,0) Humanistic Tradition II: An interdisciplinary, multicultural study of the arts and sciences contributed by diverse human traditions to world civilization. Focus is on modern civilizations and their contributions to the Global Village. Primary sources (in translation) are emphasized.

HUM 2230H AS-PHIL 3(3,0) Honors Humanistic Tradition II: This course shares the interdisciplinary, multicultural focus on modern civilizations and their cultural contributions to the

Global Village of HUM 2230; it differs principally in the depth and breadth of study.

HUM 3320 AS-PHIL 3(3,0) Contemporary Multicultural Studies: PR: HUM 2230, Junior standing, or C.I. Studies the confluence of diverse cultures making up North America in the Information Age, focusing on complete primary sources in philosophy, literature, visual arts and music.

HUM 3401 AS-PHIL 3(3,0) Asian Humanities: An interdisciplinary survey of the cultures of India, China, and Japan, concentrating on their traditional art, literature, religion, philosophy, and music.

HUM 3417 AS-PHIL 3(3,0) Hindu Thought and Culture: A survey of the development of Hindu thought and culture from vedic times to the modern age, with emphasis on religion, literature, philosophy, art and music.

HUM 3418 AS-PHIL 3(3,0) Islamic Thought and Culture: A survey of the development of Islamic thought and culture, concentrating on religion, jurisprudence, philosophy, science and art.

HUM 3431 AS-PHIL 3(3,0) 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.

HUM 3553 AS-PHIL 3(3,0) Moses, Jesus and Muhammad: Deals with the main themes of Judaism, Christianity, and Islam as found in the teachings of Moses, Jesus, and Muhammad.

HUM 4301 AS-PHIL 3(3,0) 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.

HUM 4303 AS-PHIL 3(3,0) 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.

HUM 2002 HPA-NURS 3(3,0) 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.

HUN 3011  HPA-NURS  3(3,0)
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.

HUN 5937  HPA-NURS  3(3,0)
Nutrition and Exercise Physiology: This course correlates human nutrition with exercise physiology. Nutritional concepts are related to human performance and fitness.

IDH 1921  UCF-HON  1(2,0)
Honors Symposium: Readings, lectures and discussions covering aspects of scholarship, artistic, and other creative efforts.

IDS 1040C  AS-LS  2(1,1)
Foundations of Leadership: PR: LEAD Scholars Program. Seminar for LEAD Scholars in the College of Arts & Sciences providing a foundation of leadership, scholarship, and service regarding disciplines in the college.

INP 3004  AS-PSYCH  3(3,0)
Industrial/Organizational Psychology: PR: PSY 2013 or C.I. Psychological theories and principles applicable to problems in industrial organizations.

INP 3141C  AS-PSYCH  1-3(0,3-9)
Advanced Applied Psychology: PR: PSY 2013 and C.I. Course will explore application of psychological knowledge to clinical, experimental, industrial, or educational settings. Supervised laboratory experience is required. May be repeated for credit.

INP 3803  AS-PSYCH  3(3,0)

INP 3951  AS-PSYCH  3(0,10)
Industrial/Organizational Field Work: PR: C.I. An opportunity for advanced undergraduate psychology majors to become involved in the application of I/O psychology to local organizations.

INP 4313  AS-PSYCH  3(3,0)
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.

INP 5825  AS-PSYCH  3(3,0)
Human-computer Interface (HCI) design: A team approach: PR: Graduate standing or C.I. Interdisciplinary approach to human-computer interface design, including behavior, engineering, computer science, and instructional aspects. Tools and techniques for team development and the evaluation of software for usability

INR 2002  AS-POLS  3(3,0)
International Relations-Theory and Practice: Analysis of the fundamental principles and factors affecting interstate relations and their application to contemporary global developments.

INR 3253  AS-POLS  3(3,0)
International Politics of Africa: PR: Junior standing or C.I. The broad structures and processes of international politics and foreign policy in Africa, with particular attention on U.S.-African relations.

INR 4035  AS-POLS  3(3,0)
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.

INR 4102  AS-POLS  3(3,0)
American Foreign Policy: Development of American foreign policy, with emphasis on the role and policies of the United States in the contemporary world.

INR 4114  AS-POLS  3(3,0)
American Security Policy: PR: POS 2041, Junior standing, or C.I. Study of the evolution of American security policy since World War II, including consideration of the social and political costs involved and means of control.

INR 4115  AS-POLS  3(3,0)
Strategic Weapons and Arms Control: Control of strategic weapons and their impact. Technological and policy aspects, including nuclear proliferation.

INR 4224  AS-POLS  3(3,0)
Contemporary International Politics of Asia: Examinations of the foreign policies of major and secondary powers in Asia, with particular attention to China and Japan.

INR 4225  AS-POLS  3(3,0)
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.

INR 4243  AS-POLS  3(3,0)
International Politics of Latin America: Study of contemporary U.S.-Latin American relations, interAmerican politics and organization, and the role of Latin America in the world.

INR 4335  AS-POLS  3(3,0)
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 liberation and coups.

INR 4401  AS-POLS  3(3,0)
International Law I: PR: Junior standing or C.I. The nature, evolution, and sources of international law and such subareas as recognition of states and governments, expropriation, nationality, and aliens.

INR 4402  AS-POLS  3(3,0)
International Law II: PR: INR 4401 or C.I. Examination of various sub-areas of international law, including maritime law, laws of the sea and seabed, air law, outer space, neutrality, and laws of war.

INR 4404  AS-POLS  3(3,0)
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.

INR 4502  AS-POLS  3(3,0)
International Organizations: The study of the structure and workings of international organizations of cooperation, including the UN, its affiliates, and various regional organizations.

ISM 3005  BA-MAN  3(3,0)
MIS Techniques: Introduction to computer use required of users and developers of management information systems.

ISM 3011  BA-MAN  3(3,0)
Management Information Systems: PR: MAN 3025. An introduction to the
management and use of information technology in organizations.

**ISM 4090 BA-MAN 3(3,0)**  

**ISM 4113 BA-MAN 3(3,0)**  

**ISM 4130 BA-MAN 3(3,0)**  

**ISM 4133 BA-MAN 6(6,0)**  
Information Systems Analysis, Design, and Implementation: PR: ISM 3005, ISM 4212. Same as ISM 4113 and ISM 4130. Comprehensive coverage of analysis, design, and implementation of information systems.

**ISM 4212 BA-MAN 3(3,0)**  

**ISM 4220 BA-MAN 3(3,0)**  

**ISM 4300 BA-MAN 3(3,0)**  
Technology Management: PR: MAN 3025, Junior Standing. The strategy and theory of the design, development, adoption, and management of new information technologies.

**ISM 4941 BA-MAN 3(3,0)**  
Internship in MIS: PR: ISM 3005, ISM 4212, and ISM 3011 or ISM 4300. Provides student with supervised, management information system-related work experience in a sponsoring organization. See department for information; application required.

**ISM 5021 BA-MAN 3(3,0)**  
Introduction to Management Information Systems: PR: Acceptance into the graduate program. Designed to provide the student with the fundamentals of business data processing and management information systems used by organizations in a modern society.

**ISS 4155 AS-COMM 3(3,0)**  
Science Fiction and the Social Sciences: A multimedia examination of note-worthy science fiction from the Social Science perspective.

**ITA 1005 AS-LANG 1(1,0)**  
Italian Diction: This course is especially designed for music and voice students, with an emphasis on musical terms, Italian songs, and opera libretti.

**ITA 1120 AS-LANG 4(4,1)**  
Elementary Italian Language and Civilization I: Introduces the student to Italian culture through the major language skills: listening, speaking, reading and writing. Open only to students with no experience in this language.

**ITA 1121 AS-LANG 4(4,1)**  
Elementary Italian Language and Civilization II: PR: ITA 1120 or equivalent. Continuation of ITA 1120.

**ITA 2200 AS-LANG 3(3,0)**  
Intermediate Italian Language and Civilization I: PR: ITA 1121 or equivalent. Designed to continue development of language skills at intermediate level, plus a review of grammar, study of syntax, idiomatic expression, extensive readings, and further study of Italian culture.

**ITA 2201 AS-LANG 3(3,0)**  
Intermediate Italian Language and Civilization II: PR: ITA 2200 or equivalent. Designed to continue development of language skills at intermediate level, plus a review of grammar and study of syntax, with emphasis on Italian civilization.

**ITA 2210 AS-LANG 3(3,0)**  
Intensive Italian Conversation: PR: One year of Italian or equivalent. Practical use of the language leading toward fluency and correctness in speaking.

**ITA 2240 AS-LANG 3(3,0)**  
Italian Conversation: PR: ITA 2201 or equivalent. Development of skills in conversation and comprehension with an introduction to Italian culture.

**ITA 3420 AS-LANG 3(3,0)**  
Italian Composition: PR: ITA 2201 or equivalent. Development of skills in composition, with an introduction to Italian culture.

**ITA 3472 AS-LANG 3(3,0)**  
Renaissance Art Abroad: PR: Junior standing. A study of Renaissance art from Giotto to Michelangelo.

**ITA 3760 AS-LANG 3(3,0)**  
Advanced Italian Oral Communication: PR: ITA 2201 or equivalent. Vocabulary building with systematic training in dictation and pronunciation. Speeches and oral presentations as well as production and delivery of real-life dialogues.

**ITA 4500 AS-LANG 3(3,0)**  
Italian Civilization: PR: ITA 2201. A historical approach to Italian civilization, with particular emphasis on art history.

**ITA 4820 AS-LANG 3(3,0)**  
Italian Syntax Abroad: PR: ITA 3420. A study of Italian Syntax for advanced students of Italian.

**ITW 3100 AS-LANG 3(3,0)**  
Survey of Italian Literature I: PR: ITA 2201. Main currents and writers in Italian literature from the 12th through the 15th centuries.

**ITW 3101 AS-LANG 3(3,0)**  
Survey of Italian Literature II: PR: ITA 2201. Main currents and writers in Italian literature from the 15th century to the present.

**ITW 3373 AS-LANG 3(3,0)**  
The Modern Italian Short Story: PR: ITA 2201. A study of the most representative modern Italian short stories.

**ITW 3600 AS-LANG 3(3,0)**  
Dante's Inferno: PR: ITA 1120 or junior standing. An in-depth study of Dante's Inferno. In English.

**JOU 2100 AS-COMM 3(3,1)**  
News Reporting: PR: Majors only, Grammar Proficiency Examination and department keyboard 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.

**JOU 3004 AS-COMM 3(3,0)**  
History of American Journalism: Development of mass media, leading innovators, and the media's role in the nation's history.

**JOU 3101 AS-COMM 3(3,0)**  
Advanced Reporting: PR: Majors only,
Grammar Proficiency Examination and departmental keyboard examination and JOU 2100. Advanced information-gathering and development of news writing skills.

JOU 3201 AS-COMM 3(3,0)  
Editing I: PR: Grammar Proficiency Examination and JOU 2100. Editing copy, writing headlines, managing newsroom operations.

JOU 3202 AS-COMM 3(3,0)  

JOU 3510 AS-COMM 3(3,0)  
Magazine Publishing: PR: JOU 2100 or C.I. The magazine industry, emphasizing business operations and current topics.

JOU 4104 AS-COMM 3(3,0)  

JOU 4300 AS-COMM 3(3,0)  
Feature Writing: PR: A minimum grade of "C" in JOU 2100 or PUR 3100. Writing feature articles for newspapers and magazines.

JOU 4306 AS-COMM 3(1,2)  
Critical Writing: PR: Majors only, Grammar Proficiency Examination, departmental keyboard exam, and a minimum grade of "C" in JOU 2100. Writing reviews of movies, plays, television programs, concerts, books, and other cultural works.

JOU 4308 AS-COMM 3(3,0)  
Freelance Writing: PR: C.I. A study of the techniques and procedures of freelance writing, including the preparation of several manuscripts.

JOU 4300C AS-COMM 3(1,3)  
New Media Studies: PR: JOU 2100, PUR 3100 or RTV 3304. The development, impact and problems of using the Internet as a journalistic tool. Students will write and design news for the Web.

JOU 4511 AS-COMM 3(3,0)  
Magazine Editing and Production: PR: C.I. The magazine industry, including writing and editing skills, and editorial, business, and production requirements.

JPN 1120 AS-LANG 4(4,1)  
Elementary Japanese Language and Civilization I: Introduces the student to Japanese culture through the major language skills: listening, speaking, reading and writing. Open only to students with no experience in the language.

JPN 1121 AS-LANG 4(4,1)  
Elementary Japanese Language and Civilization II: PR: JPN 1120 or equivalent. Continuation of JPN 1120.

JPN 2200 AS-LANG 3(3,1)  
Intermediate Japanese Language and Civilization I: PR: JPN 1121 or equivalent. This course aims to aid in acquiring and refining the acquisition of the four skills in modern Japanese: speaking, listening, reading, and writing. The emphasis is on accurate communication in Japanese. The culture of Japan will also be studied.

JPN 2201 AS-LANG 3(3,1)  
Intermediate Japanese Language and Civilization II: PR: JPN 2200 or equivalent. Continuation of JPN 2200 with emphasis on Japanese civilization.

JST 3100 AS-JUD 3(3,0)  

JST 3144 AS-JUD 3(3,0)  
Dead Sea Scrolls: PR: Junior standing or C.I. The Dead Sea Scrolls, their literary and historical context, and significance.

JST 3401 AS-JUD 3(3,0)  
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.

JST 3402 AS-JUD 3(3,0)  
The Jewish People II: The life and history of the Jews in the medieval and modern worlds.

JST 3550 AS-JUD 3(3,0)  
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).

JST 3701 AS-JUD 3(3,0)  
History of the Holocaust: A comprehensive study of the Holocaust from 1933-1945, discussing the persecution of German Jews and the annihilation of the Jews in Europe.

JST 3751 AS-JUD 3(3,0)  
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.

JST 3810 AS-JUD 3(3,0)  
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.

JST 3820 AS-JUD 3(3,0)  
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.

LAE 3414 ED-IP 3(3,0)  
Literature for Children: PR: 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.

LAE 3504 ED-IP 3(3,0)  
Language Acquisition: Examines development of oral language (birth - third grade) and the beginnings of literacy acquisition (birth - age three). Addresses common communicative disorders and intervention methods.

LAE 4314 ED-IP 3(3,0)  
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.

LAE 4342 ED-IP 3(3,0)  
Teaching Language and Compositon: PR: EDG 4323. Techniques and methods in teaching of dialects, semantics, the various grammars. A survey of composition and rhetorical methods of selected authors.

LAE 4360 ED-IP 4(3,2)  
English Instructional Analysis: PR: EDG 4323. Course objectives for a school curriculum and methods and materials which have special application for teaching
English at the middle grades and high school.

**LAE 4361** ED-IP 3(3,0)
Literacy Strategies for Middle and Secondary School: PR: Meet College of Education Admission requirements, or C.I. Examination of theory, strategies, resources and implementation options for effective middle and secondary reading and writing programs, to assist preservice teachers to understand the adolescent reader and writer.

**LAE 4464** ED-IP 3(3,0)
Survey of Adolescent Literature: This course is designed to explore adolescent literature from both an educational and a historical perspective.

**LAE 5195** ED-IP 3(3,0)
CFWP Teacher Consultant: PR: C.I. This course is designed for Fellows of the CFWP Summer Institute who will plan, practice, and present writing inservice components to public schools.

**LAE 5295** ED-IP 1-3(1-3,0)
Writing Workshop I: PR: C.I. Students will engage in exploration and practice of effective writing strategies. May include teaching small groups of students. May be repeated for credit.

**LAE 5319** ED-IP 3(3,0)
Methods of Elementary School Language Arts: PR: EDG 4323. Principles, procedures, organization and current practices in reading, writing, listening, and talking.

**LAE 5337** ED-IP 3(3,0)
Literacy Strategies for Middle and Secondary Teaching: PR: Graduate standing or C.I. Designed to assist teachers and graduate students in understanding the adolescent learner. This course will examine theory, strategies, research, resources and implementation options for effective middle and secondary literacy programs.

**LAE 5367** AS-ENG 3(3,0)
English Composition and Literature for Teachers of Advanced Placement: PR: Graduate standing and C.I. A two-week summer institute for secondary school teachers preparing to teach Advanced Placement courses.

**LAE 5372** AS-ENG 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 5415** ED-IP 3(3,0)
Children's Literature in Elementary Education: Survey of children's literature: criteria for selection according to literary elements and child development needs. Methods for presenting to children; integrating literature with elementary curricula.

**LAE 5465** ED-IP 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.

**LAE 5495** ED-IP 3(3,0)
Assessing Writing: PR: C.I. Students will explore a variety of strategies for assessing students' writing including holistic scoring, primary trait scoring, and portfolio assessment.

**LAH 3130** AS-HIST 3(3,0)

**LAH 3200** AS-HIST 3(3,0)

**LAH 3400** AS-HIST 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-HIST 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-Columbian times to the present.

**LAH 5713** AS-HIST 3(3,0)
Colloquium in U.S.-Latin American Relations: PR: Senior Standing and C.I. The course will analyze U.S.-Latin American relations from an historical perspective. It will be presented through readings and discussion of selected materials.

**LAT 1120** AS-LANG 4(4,1)
Elementary Latin Language and Civilization I: Introduces the student to Latin culture through the major language skills: listening, speaking, reading and writing. Open only to students with no experience in this language.

**LAT 1120H** AS-LANG 4(4,1)
Honors Elementary Latin Language and Civilization I: Same as LAT 1120 with honors-level content.

**LAT 1121** AS-LANG 4(4,1)
Elementary Latin Language and Civilization II: PR: LAT 1120 or equivalent. Continuation of LAT 1120.

**LAT 1121H** AS-LANG 4(4,1)
Honors Elementary Latin Language and Civilization II: PR: LAT 1120H or equivalent. Same as LAT 1121 with honors-level content.

**LIN 2404** AS-ENG 3(3,0)
Vocabulary and the English Language: Includes study of new words and their etymology and usage, the history and evolution of English, and skills and techniques for building vocabulary.

**LIN 3010** AS-ENG 3(3,0)

**LIN 3640** AS-PSYCH 3(3,0)
Psychology of Oral Communication: Psychological principles involved in the communicative process, with application to individuals and groups.

**LIN 4100** AS-ENG 3(3,0)

**LIN 4612** AS-ENG 3(3,0)

**LIN 4643** AS-ENG 3(3,0)
Cross Cultural Communication: PR: ENC 1102, Junior standing. Studies of the styles of spoken, written, and nonverbal communication of selected cultural groups, including men and women, Afro- and Anglo-Americans, Germans and French, Hispanics, Arabs, and Japanese.

**LIN 4660** AS-ENG 3(3,0)
Linguistics and Literature: PR: LIN 3010. Investigation of language study as an aid to understanding literature. Topics
include analysis of figurative language, languages as characterization, cohesion, sentence and discourse structure.

LIN 4680 AS-ENG 3(3,0)
Modern English Grammar: PR: ENC 1102 and Sophomore standing. Emphasis upon the analysis and comparison of traditional, structural, and transformational grammar.

LIN 4710C HPA-COMD 4(3,1)
Foundations of Language: This course explores contributions to language from disciplines of Biology, Neurology, Psychology, and Sociology. Students will have practical experience in analyzing children's language samples.

LIN 4801 AS-ENG 3(3,0)
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.

LIN 5137 AS-ENG 3(3,0)
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.

LIN 5705 HPA-COMD 3(3,0)
Psycholinguistics: PR: Graduate status or C.I. Foundations of language in affective consciousness and the human nervous system. Pragmatic analysis of word meaning and its precise scientific measurement. Implications for communicative disorders.

LIS 4301 ED-IP 3(3,0)
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.

LIT 2000 AS-ENG 3(3,0)
Introduction to Literary Interpretation: PR: ENC 1102. Interpretation of fiction, drama, verse, conflict, characterization, point of view, rhetorical and poetic devices, figurative language, verse forms; application of critical approaches to selected works.

LIT 2110 AS-ENG 3(3,0)
World Literature I: PR: ENC 1102. Poetry, prose, and drama selected from ancient Hebrew, Greek, and Oriental literature and from that of Renaissance Europe.

LIT 2120 AS-ENG 3(3,0)
World Literature II: PR: ENC 1102. Readings from Moliere, Voltaire, Goethe, Pushkin, Balzac, Tolstoy, Ibsen, Mann, Kafka, Camus, and others.

LIT 2120H AS-ENG 3(3,0)
World Literature II - Honors: Same as LIT 2120, with honors-level content.

LIT 3082 AS-ENG 3(3,0)
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.

LIT 3192 AS-ENG 3(3,0)
Caribbean Literature: PR: ENC 1102. Traces how Caribbean societies have achieved self-expression through documentary writing, prose fiction, and popular culture; in English.

LIT 3202 AS-ENG 3(3,0)
Death and Dying: PR: ENC 1102. Considering the topic of death and dying through a study of literature, the course includes facts, psychological impact, ideological responses to death and identity.

LIT 3313 AS-ENG 3(3,0)
Science Fiction: PR: ENC 1102. An investigation of science fiction as a literary form, together with selected readings.

LIT 3354 AS-ENG 3(3,0)
Ethnic Literature in America: PR: ENC 1102. Contributions of linguistic and ethnic groups of non-English origin to the literature of the United States.

LIT 3358 AS-ENG 3(3,0)
Women in Literature: PR: ENC 1102. Fiction, poetry, drama and non-fiction by selected women writers, such as Emily Dickinson, Jane Austen, George Eliot, Kate Chopin, Zora Neale Hurston, Toni Morrison, Adrienne Rich, Gwendolyn Brooks.

LIT 3482 AS-ENG 3(3,0)
Literature & Popular Culture: PR: ENC 1102. Analysis of media to determine popular values in the formation of popular cultural perceptions.

LIT 3905 AS-ENG 3(3,0)
Directed experience in Literature: PR: ENC 1102, C.I. Individualized topics of study and/or research in literature with personalized faculty direction. May be repeated for credit.

LIT 3911H AS-ENG 1(1,0)
Research Methods - Honors: PR: Honors Student Status or consent of Honors coordinator. Introduction to scholarship and practical research in literature and writing.

LIT 4043 AS-ENG 3(3,0)
Modern Drama As Literature: PR: ENC 1102. A study of important plays, playwrights, themes, movements, and styles in modern American, British, and European drama.

LIT 4184 AS-ENG 3(3,0)
Irish Literature: PR: ENC 1102, ENG 3014. Study of literature written in Ireland, within the context of Irish history, politics, culture and colonial experience.

LIT 4285H AS-ENG 3(3,0)
Faces of Evil: PR: ENC 1102. An Honors seminar on the literature and film depictions of hatred, racism, and other evil.

LIT 4303 AS-ENG 3(3,0)
Post-World War II Fiction: PR: ENC 1102. An investigation of various modes of reality in the works of significant postmodernist world authors, crossing cultural boundaries.

LIT 4374 AS-ENG 3(3,0)
Literature of the Bible: PR: ENC 1102 or ENG 3014 or C.I. Literary forms in the Bible - narrative, poetic, and dramatic - and their reflection in modern literature.

LIT 4396 AS-ENG 3(3,0)
Advanced Feminist Theories: PR: ENC 1102, WST 3010 or ENG 3014. An advanced exploration of feminist critical theories and practices.

LIT 4443 AS-ENG 3(3,0)
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.

LIT 4937H AS-ENG 3(3,0)
English Honors Seminar: PR: Honors Student Status or consent of Honors coordinator. In-depth study of language and/or literature with an emphasis on creative and critical abilities.

LIT 5028 AS-ENG 3(3,0)
Form and Theory of Short Story: PR: Graduate status or C.I. Evolving forms and theories of short fiction and the implications of form and theory.
LIT 5039 AS-ENG 3(3,0)
Studies in Contemporary Poetry: English language poetry from 1945 to the present. Emphasis will be on American poets, but others such as English or Australian will be included.

LIT 5097 AS-ENG 3(3,0)
Studies in Contemporary Fiction: PR: Senior standing or C.I. Fiction in the last 20 years in the United States and Britain. May be repeated for credit when content is different.

LIT 5250 AS-ENG 3(3,0)
The Victorian Age: Poetry: PR: Graduate standing or C.I. Poets of the Victorian period, including Tennyson, the Brownings, Arnold, Hopkins, Hardy, the Rossetti, Emily Bronte, and others.

LIT 5269 AS-ENG 3(3,0)
Nineteenth-Century Essays: PR: Graduate standing or C.I. English non-fiction prose of the 19th century.

LIT 5309 AS-ENG 3(3,0)
Popular Culture and Media: PR: Graduate standing or C.I. Study of contemporary media and the literature of popular culture.

LIT 5366 AS-ENG 3(3,0)
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.

MAA 4226 AS-MATH 4(4,0)

MAA 4227 AS-MATH 3(3,0)
Advanced Calculus II: PR: MAA 4226 or C.I. Continuation of MAA 4226.

MAA 5210 AS-MATH 4(4,0)
Topics in Advanced Calculus: PR: MAA 4226 or equivalent. Topics in multivariable calculus, including limits, continuity, integration, differentiation, Taylor's theorem, inverse and implicit function theorems.

MAA 5405 AS-MATH 3(3,0)

Applications in engineering and the physical sciences.

MAA 5416 AS-MATH 3(3,0)
Foundations of Analysis: PR: MAA 4226. Topological spaces, compactness results, connectedness, analytical and differentiable manifolds, topological groups, Lie groups, representation theory for classical groups, Green, Stokes and Gauss' theorems.

MAC 1105 AS-MATH 3(3,0)
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.

MAC 1144 AS-MATH 3(3,0)
College Trigonometry: PR: MAC 1102 or 2 years of high school algebra or C.I. The circle are length, circular functions, identities, inverse functions, applications to simple harmonic motion, function of angles, complete development of triangle solving.

MAC 2233 AS-MATH 3(3,0)
Concepts of Calculus: PR: MAC 1105 or C.I. The differential and integral calculus of functions with geometric and physical applications. For biologists and others required to have one semester of calculus.

MAC 2235 AS-MATH 3(3,0)
Applied Calculus I: PR: MAC 1105 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 2233 or MAC 2211.

MAC 2254 AS-MATH 3(3,0)
Applied Calculus II: PR: MAC 2253 or C.I. Continuation of MAC 2253.

MAC 2281 AS-MATH 4(4,0)
Calculus for Scientists & Engineers I: PR: MAC 1105 and MAC 1114. Same material, different order, as MAC 2211, MAC 2212, and MAC 2213. Only for Engineering, Chemistry, Physics, and Mathematics students. Not open to students with credit in any other calculus sequence.

MAC 2282 AS-MATH 4(4,0)
Calculus for Scientists & Engineers II: PR: MAC 2281. Same material, different order, as MAC 2311, MAC 2312, and MAC 2313. Only for Engineering, Chemistry, Physics, and Mathematics students. Not open to students with credit in MAC 2311, MAC 2312, and MAC 2313.

MAC 2283 AS-MATH 4(4,0)
Calculus for Scientists & Engineers III: PR: MAC 2282. Same material, different order, as MAC 2311, MAC 2312, and MAC 2313. Only for Engineering, Chemistry, Physics, and Mathematics students. Not open to students with credit in MAC 2311, MAC 2312, and MAC 2313.

MAC 2283H AS-MATH 4(4,0)
Calculus for Scientists & Engineers III (Honors): PR: MAC 2282H or MAC 2282 and consent of Honors Program. Same material as MAC 2283, taught at the Honors level. Only for Engineering, Chemistry, Physics, and Mathematics students. Not open to students with credit in any other calculus sequence.

MAC 2311 AS-MATH 4(4,0)
Calculus with Analytic Geometry I: PR: MAC 1105 and MAC 1114 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.

MAC 2311H AS-MATH 4(4,0)
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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 2312</td>
<td>AS-MATH</td>
<td>4(4,0)</td>
<td>Calculus with Analytic Geometry II: PR: MAC 2311 or C.I. Continuation of MAC 2311.</td>
</tr>
<tr>
<td>MAC 2312H</td>
<td>AS-MATH</td>
<td>4(4,0)</td>
<td>Calculus with Analytic Geometry II (Honors): Continuation of MAC 2311H.</td>
</tr>
<tr>
<td>MAC 2313</td>
<td>AS-MATH</td>
<td>4(4,0)</td>
<td>Calculus with Analytic Geometry III: PR: MAC 2312 or C.I. Continuation of MAC 2312.</td>
</tr>
<tr>
<td>MAC 2313H</td>
<td>AS-MATH</td>
<td>4(4,0)</td>
<td>Calculus with Analytic Geometry III (Honors): Continuation of MAC 2312H.</td>
</tr>
<tr>
<td>MAD 4203</td>
<td>AS-MATH</td>
<td>4(4,0)</td>
<td>Combinatorics and Graph Theory: PR: MAC 2312 and STA 2023. Counting principles, inclusion/exclusion principle, recurrence relations, generating functions, properties of graphs and diagraphs, trees, path problems, coloring planarity, connectiveness matchings and coverings, applications.</td>
</tr>
<tr>
<td>MAD 5205</td>
<td>AS-MATH</td>
<td>3(3,0)</td>
<td>Combinatorics and Graph Theory II: PR: MAD 4203 or C.I. Polya's theory of counting; Latin squares and rectangles; block designs; coding theory; probabilistic methods, hypergraphs; applications.</td>
</tr>
<tr>
<td>MAE 2801</td>
<td>ED-IP</td>
<td>4(3,1)</td>
<td>Elementary School Mathematics: PR: MAC 1105 or MGF 1203. Mathematics appropriate for the elementary school including the six basic sets of numbers, concepts, learning sequences, algorithms, problem-solving techniques, error patterns, number systems, and geometry.</td>
</tr>
<tr>
<td>MAE 4300</td>
<td>ED-IP</td>
<td>3(3,0)</td>
<td>Exploring Mathematics: Provides students with the knowledge and skills to design, implement, and facilitate the development of mathematics concepts and skill through an integrated developmentally appropriate curriculum.</td>
</tr>
<tr>
<td>MAE 4326</td>
<td>ED-IP</td>
<td>3(3,0)</td>
<td>How Children Learn Mathematics: PR: MAE 2801 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>
</tr>
<tr>
<td>MAE 4360</td>
<td>ED-IP</td>
<td>4(3,2)</td>
<td>Mathematics Instructional Analysis: PR: EDG 4323. Study of course objectives for the middle grades and high school curriculum and survey of methods and materials which have special application for teaching mathematics.</td>
</tr>
<tr>
<td>MAE 5318</td>
<td>ED-IP</td>
<td>3(3,0)</td>
<td>Current Methods in Elementary School Mathematics: PR: EDG 4323. Strategies of instruction of computation and concepts of number, geometry, and measurement; instructional materials. (Meets Elementary Education certification requirements.)</td>
</tr>
<tr>
<td>MAE 5356</td>
<td>ED-IP</td>
<td>3(3,0)</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>
</tr>
<tr>
<td>MAE 5935</td>
<td>AS-MATH</td>
<td>3(3,0)</td>
<td>Teaching Measurement in Schools: Metric system, methods of developing different measurement skills and concepts, and curriculum changes needed to accommodate measurement.</td>
</tr>
<tr>
<td>MAN 3025</td>
<td>BA-MAN</td>
<td>3(3,0)</td>
<td>Management of Organizations: PR: Junior Standing, ACG 2071 or ACG 2023, ECO 2013, ECO 2023. Introduction to the theory and practice of managing formal organizations, including planning, organization theory, human behavior and control.</td>
</tr>
<tr>
<td>MAN 3301</td>
<td>BA-MAN</td>
<td>3(3,0)</td>
<td>Management of Human Resources: PR: MAN 3025, Junior Standing. Provides students with a complete, comprehensive review of essential human resource management concepts and techniques. Applicable to all students of management.</td>
</tr>
<tr>
<td>MAN 3504</td>
<td>BA-MAN</td>
<td>3(3,0)</td>
<td>Quality &amp; Productivity Management: PR: GEB 3031 and MAN 3025. An examination of the principles and theories of quality and operations management in manufacturing and service organizations.</td>
</tr>
<tr>
<td>MAN 4029</td>
<td>BA-MAN</td>
<td>3(3,0)</td>
<td>Service Organization Management: PR: MAN 3025 and MAN 3504. Study of the special characteristics, problems, and methods for managing service-oriented organizations.</td>
</tr>
<tr>
<td>MAN 4101</td>
<td>BA-MAN</td>
<td>3(3,0)</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>
</tr>
<tr>
<td>MAN 4129</td>
<td>BA-MAN</td>
<td>3(3,0)</td>
<td>Managerial Skills in Organizations: PR: MAN 4240. The transference of management theories into practice. This course requires active student involvement in the development and practice of skills necessary to be a successful manager.</td>
</tr>
<tr>
<td>MAN 4240</td>
<td>BA-MAN</td>
<td>3(3,0)</td>
<td>Organizations: Theory and Behavior: PR: MAN 3025. A course providing a micro/macro approach to the study of organizations by integrating organizational theory and organizational behavioral science concepts.</td>
</tr>
<tr>
<td>MAN 4310</td>
<td>BA-MAN</td>
<td>3(3,0)</td>
<td>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.</td>
</tr>
<tr>
<td>MAN 4320</td>
<td>BA-MAN</td>
<td>3(3,0)</td>
<td>Human Resources Recruitment and Selection: PR: MAN 3301. A concentrated investigation of the methods appropriate to the development, implementation and administration of the staffing process in contemporary organizations.</td>
</tr>
<tr>
<td>MAN 4330</td>
<td>BA-MAN</td>
<td>3(3,0)</td>
<td>Compensation Administration: PR: MAN 3301. Presentation of compensation theory and current pay related issues and their application to the design and administration of pay systems in large and small organizations.</td>
</tr>
</tbody>
</table>
| MAN 4350    | BA-MAN | 3(3,0) | 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 BA-MAN 3(3,0) 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 4521 BA-MAN 3(3,0) 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 4572 BA-MAN 3(3,0) 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 BA-MAN 3(3,0) Computer-Based Operations Management: PR: ISM 3011. Application of production planning and control theories and Management Information Systems concepts to an integrated, computerized, real-world production environment.

MAN 4600 BA-MAN 3(3,0) International Management: PR: GEB 4361. The course examines issues involved in multinational management of business firms, with special emphasis on comparative management.

MAN 4701 BA-MAN 3(3,0) Business Ethics and Society: PR: MAN 3025. This course applies the ethics dimension to business decisions in today’s complex political, social, economic and technological environment.

MAN 4720 BA-MAN 3(3,0) Strategic Management: PR: Completion of Core Curriculum. Students assume a strategic view of organizations and integrate and apply material learned in their business courses to modern organizational problems and opportunities.

MAN 4802 BA-MAN 3(3,0) Entrepreneurship: PR: MAN 3025, FIN 3403, and MAR 3023. Study of entrepreneurship with emphasis on innovation, feasibility, planning, product and service concepts, and organizing financing and developing a new venture.

MAN 4941 BA-FIN 3(3,0) Management Internship: PR: Management major, application approval, consent of department chair. Provides student with supervised, management-related work experience in a sponsoring organization. See department for information; application required. NOTE: MAN 4941 may not be counted for restricted elective credit in management. Graded "S"/"U".

MAN 5050 BA-MAN 2(2,0) Management Concepts: PR: Acceptance in MBA program. Theory and practice of managing organizations to include planning, organizational theory, human behavior, and control.

MAN 5501 BA-BUS 2(2,0) 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 2302H AS-MATH 3(3,0) Differential Equations (Honors): PR: MAC 2313 or C.I. Methods of solution for first order equations. Linear equations. Numerical methods; Laplace transforms. Series solutions. Selected applications. Students will complete projects. For Honors students from all disciplines.

MAP 3401 EN-ENT 3(3,0) Problem Analysis: PR: MAC 2311 or MAR 2353 or equivalent. Application of calculus techniques used in solving selected problems in Engineering Technology.


MAP 4153 AS-MATH 3(3,0) Vector and Tensor Analysis: PR: MAC 2313 or C.I. Vector calculus. The theorems of Green, Gauss and Stokes. Introduction to tensors. Application in engineering and physical sciences.


MAP 4364 AS-MATH 3(3,0) 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 5336 AS-MATH 3(3,0) Ordinary Differential Equations and Applications: PR: MAP 2302 or C.I. Existence and uniqueness of solutions of differential equations, systems of ordinary differential equations, autonomous systems, phase plane analysis, stability, bifurcations.

MAP 5385 AS-MATH 3(3,0) Applied Numerical Mathematics: PR: MAP 2302 or C.I. Classical topics or numerical analysis and their applications, Romberg integration, Richardson extrapolation, Gaussian quadrature schemes.

MAP 5396 AS-MATH 3(3,0) Splines and Data Fitting: PR: MAS 3106, MAS 3105, MAP 2302, or C.I. Univariate splines and their application to data fitting. Applications to regression analysis, differential and integral equations. Algorithms to use different types of splines in computation.

MAP 5404 AS-MATH 3(3,0) Mathematical Foundations for Industrial Engineering and Operations: PR: MAP 2302, STA 5156 or equivalent, ESI 4312, or C.I. Methods of proof, set theory; basic elements of topology, real analysis, graph theory, and matrix analysis.

MAP 5407 AS-MATH 3(3,0) Applied Mathematics I: PR: MAP 2302 or C.I. Calculus of variations. Hamilton's
principle, Rayleigh-Ritz method, Sturm-Liouville theory, Green's functions for ordinary differential equations, introduction to integral equations

MAP 5426 AS-MATH 3(3,0)
Special Functions: PR: MAP 2302 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.

MAP 5435 AS-MATH 3(3,0)

MAP 5514 AS-MATH 3(3,0)
Linear and Nonlinear Waves I: PR: MAP 2302, MAP 4363, or C.I. Equations of motion in inviscous and viscous fluids, energy equation and energy flux, linear theory of gravity and capillary-gravity waves, variational principles for water waves.

MAP 5931 AS-MATH 1(1,0)
Research Seminar: Four instructors will introduce the students to a research area by presenting necessary background and presenting current investigations. Different branches of mathematics will be presented for a sense of diversity.

MAR 3023 BA-MAR 3(3,0)
Marketing: PR: Junior standing. Study of functions, institutions, and basic problems in marketing of goods and services in our domestic economy and abroad.

MAR 3323 BA-MAR 3(3,0)
Integrated Marketing Communications: PR: MAR 3023. Planning and execution of advertising, sales promotion, and public relations programs consistent with integrated marketing communications programs.

MAR 3391 BA-MAR 3(3,0)
Professional Selling: PR: MAR 3023. Written and verbal communications skills applied to marketing settings. A significant portion of the course is devoted to the study of professional selling.

MAR 3403 BA-MAR 3(3,0)
Sales Force Management: PR: MAR 3023 or C.I. An overview of the sales management process. Emphasis on sales program formulation and implementation.

MAR 3503 BA-MAR 3(3,0)

MAR 3613 BA-MAR 3(3,0)
Marketing Analysis and Research: PR: MAR 3023, CR: One of the following: ECO 3401, ECO 3411, STA 3023, STA 3032. Analytical tools and their application to marketing problems and decision making. Forecasting, financial analysis, and acquisition of primary data through market research are emphasized.

MAR 3641 BA-MAR 3(3,0)
Marketing Intelligence: PR: MAR 3023. Contemporary sources and applications of information concerning external forces impacting market decision making.

MAR 4156 BA-MAR 3(3,0)
International Marketing: PR: MAR 3023 or C.I. Investigates strategy, policy and the variables in international marketing decisions.

MAR 4231 BA-MAR 3(3,0)
Retailing Management: PR: MAR 3023 or C.I. Analysis of the field of retailing. Emphasis on planning for profit through management, inventory control, etc.

MAR 4711 BA-MAR 3(3,0)
Sports Marketing: PR: MAR 3023 or C.I. Study of marketing as it applies to the sports and leisure industry.

MAR 4712 BA-MAR 3(3,0)
Healthcare Marketing: PR: MAR 3023 or C.I. Study of marketing as it applies to healthcare manufacturers, intermediaries and providers.

MAR 4803 BA-MAR 3(3,0)
Marketing Management: PR: MAR 3503 and MAR 3613. Planning, organizing, implementing, monitoring and controlling marketing programs to effectively compete in dynamic and diverse business environments.

MAR 4804 BA-MAR 3(3,0)
Marketing Strategy: PR: MAR 4803, MAR 3641, MAR 3391. Marketing problems are explored, with emphasis on marketing formulation and integrative marketing decision-making.

MAR 4841 BA-MAR 3(3,0)
Services Marketing: PR: MAR 3023 or C.I. Examination of marketing in services industries, with particular emphasis on unique aspects of services marketing, the service marketing mix, and the implementation of services strategies.

MAR 4941 BA-MAR 3(3,0)
Marketing Internship: PR: Marketing major, application approval, consent of department chair. Provides student with supervised, market-related work experience in a sponsoring organization. See department for information; application required. Note: MAR 4941 may not be counted for restricted elective credit in marketing.

MAR 5055 BA-MAR 3(3,0)
Marketing Concepts: PR: Acceptance into the graduate program. Study of functions, institutions, and basic marketing of goods in the U.S. economy.

MAR 5941 BA-MAR 3(3,0)
Small Business Consulting: PR: Graduate status, all foundation classes, FIN 6406, MAR 6816. 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.

MAS 3105 AS-MATH 4(4,0)
Matrix and Linear Algebra: PR: MAC 2312 or C.I. Matrices, determinants, vector spaces in Rn, linear independence, basis, solutions of systems, range of linear transformations, eigenvectors, Jordan form, matrix functions, quadratic forms.

MAS 3106 AS-MATH 4(4,0)
Linear Algebra: PR: MHF 2300, MAS 3105, or C.I. Abstract vector spaces, linear transformations, isomorphisms, projections, inner products, the spectral theorem, Jordan Canonical Form. (Only offered spring semester).

MAS 3203 AS-MATH 3(3,0)
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.

MAS 4146 AS-MATH 3(3,0)

MAS 4301 AS-MATH 3(3,0)
Algebraic Structures: PR: MHF 2300 or C.I. An introduction to groups, rings and fields.
Develop microorganisms and their nutritional bacteria.

Environmental Microbiology: MCB 4414C HPA-M&M 3(3,0)
Pathogenic Microbiology: PR: MCB 3020C or BCH 4053. Nature of viruses and other intra-cellular parasites including structure, nomenclature propagation, isolation, propagation, and identification.

Pathogenic Microbiology: CR: MCB 3020C or C.I. Microorganisms producing disease in man and other animals; means of transmission; protection against disease.

Microbial Metabolism: PR: MCB 3020C or C.I. Microbial biochemistry of industrial processes including: economies, screening, scale up, quality control and applied genetics.


Environmental Microbiology: PR: PCB 3043 and MCB 3020C. Interrelationships between the biological activities of microorganisms and their terrestrial and aquatic environments.

Infectious Processes: PR: MCB 3020C or C.I. Discussion of current theories of the infectious process and the response of host cells and tissue to infection.

Molecular Biology of Disease: PR: Graduate standing or C.I. An in-depth study of the molecular biological mechanisms of diseases in experimental animal models and human populations.

Variable Current Topics in Molecular Biology: PR: Graduate standing or C.I. Selected current research topics from the primary literature reflecting recent advances in molecular biology. May be repeated for credit.


Molecular Biology of Disease: PR: Graduate standing or C.I. Microbial biochemistry of industrial processes including: economies, screening, scale up, quality control and applied genetics.

Molecular Biology of Disease: PR: Graduate standing or C.I. Microbial biochemistry of industrial processes including: economies, screening, scale up, quality control and applied genetics.

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.


Introduction to the Counseling Profession: PR: Completion of Phase II of Education Professional Preparation or C.I. Overview of the philosophy, organization, administration, and roles of counselors in various work settings.

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.

Orienteering and Survival: Course is designed to familiarize students on the various survival techniques and methods used in Orienteering.

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.

Leadership Development - II: Development of leadership abilities. Includes first aid training, communications, the threat, offensive/defensive operations, patrolling, and troop leading procedures.

The Small Unit Leader: Analysis of the leader's role in directing and coordinating efforts of small units in tactical operations. Includes land navigation, weapon systems, communications, defensive/defensive operations and patrolling.

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.

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Isolation and pathogenic bacteria and serological methods; interpretation of abnormal results, with correlation to disease.

**MLS 4506C HPA-M&M 2(1,3)**
**Immunodiagnoses:** PR: PCB 3233.
Theory and application of clinical serologic and immunologic diagnostic testing, stressing the utilization of monoclonal technology.

**MLS 4550 HPA-M&M 4(2,6)**
**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 HPA-M&M 4(3,3)**
**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, instrumentation, and quality control.

**MLS 4630C HPA-M&M 4(3,3)**
**Advanced Clinical Chemistry II:** PR: MLS 4625 and admission to professional phase of MLS or C.I. Theory and practice in clinical chemistry techniques; liver function testing, lipids, hormones, toxicology, and drug monitoring.

**MLS 4830C HPA-M&M 4(0,13)**
**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 HPA-M&M 4(0,13)**
**Clinical Practice II:** PR: Admission to the professional phase of the MLS program or C.I. Continuation of MLS 4830C.

**MLS 4832C HPA-M&M 4(0,13)**
**Clinical Practice III:** PR: Admission to the professional phase of the MLS program or C.I. Continuation of MLS 4831C.

**MLS 4833C HPA-M&M 4(0,13)**
**Clinical Practice IV:** PR: Admission to the professional phase of the MLS program or C.I. Continuation of MLS 4832C.

**MLS 4834C HPA-M&M 4(0,13)**
**Clinical Practice V:** PR: Admission to the professional phase of the MLS program or C.I. Continuation of MLS 4833C.
presentation; indexing; computer abstracting; accrediting and approving agencies; medical staff organization

MRE 3800L HPA-HIM 2(0,4)
Professional Practice Experience I: PR: Admission to the professional phase of the Health Information Management Program. Interdepartmental experience; master patient index; introduction to health information management departments in selected health care facilities.

MRE 3810L HPA-HIM 2(0,4)
Professional Practice Experience II: PR: MRE 3800, HSC 3531, MRE 3800. CR: MRE 3110. Health record assembly and analysis; release of medical information; numbering and filing systems; incomplete record control; retention and retrieval.

MRE 4202C HPA-HIM 4(3,2)
Coding Procedures I: PR: MRE 3432, HSC 3531, or C.I. Principles and mechanics of coding systems for inpatient health information retrieval; ICD-9-CM; DRGs; encoders.

MRE 4203C HPA-HIM 3(2,2)
Coding Procedures II: PR: MRE 4202 or C.I. Principles and mechanics of coding systems for outpatient health information retrieval; ICD-9-CM; HCPCS; APGs; encoders.

MRE 4218C HPA-HIM 3(2,2)
Health Information Management Systems: PR: HSA 4193, MRE 4202. Vitalization of information systems; management and patient care in the health care industry; systems analysis, system design and project management concepts.

MRE 4304 HPA-HIM 3(3,0)
Professional Development and Issues in Health Information Management: PR: MRE 3412C, MRE 4500. Analysis of management functions in health care setting; the HIM professional as an educator; problem-solving techniques; professional ethics; alternative careers.

MRE 4312C HPA-HIM 4(3,2)
Health Information Department Management: PR: MRE 3110; MAN 3025. Personnel administration; budgeting; forms analysis; work distribution and simplification; equipment selection; ergonomics and space planning.

MRE 4500 HPA-HIM 3(2,2)
Quality Management: PR: MRE 3110, MRE 4303. CR:MRE 4203. Principles and mechanics of quality improvement; utilization review; case management and risk management.

MRE 4830L HPA-HIM 2(0,4)
Professional Practice Experience III: PR: MRE 3300, MRE 3110, MRE 3800, MRE 4202. Inpatient coding; health and vital statistics; JCAHO accreditation; indexing; abstracting; medical staff organization and credentialing.

MRE 4832L HPA-HIM 2(0,4)
Professional Practice Experience IV: PR: MRE 4203; MRE 4312C; MRE 4500; MRE 4830L. Outpatient coding, quality management, utilization review, risk management, transcription, assignment to hospitals and other health care facilities/organizations.

MRE 4835 HPA-HIM 5(0,15)
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.

MTG 4212 AS-MATH 4(4,0)
Modern Geometries: PR: MAC 2311 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 AS-MATH 3(3,0)
Introduction to Topology: PR: MHF 2300 or C.I. Metric spaces, topological spaces, limit points, continuity, compactness, and connectedness.

MUC 1101 AS-MUSIC 1(1,1)
Composition I: PR: Open to qualified non-music majors with C.I. Creative work in small forms. May be repeated for credit.

MUC 3104 AS-MUSIC 2(1,0)
Composition II: PR: Music major, Junior standing, C.I. Continuation of Composition I. May be repeated for credit.

MUC 3311 AS-MUSIC 3(2,2)
MIDI Sequencing I: PR: Keyboard ability, Junior standing, and C.I. Utilization of synthesizers, drum machines, and computers with MIDI sequencing.

MUC 4347 AS-MUSIC 2(2,0)
Digital Notation: PR: MUC 3311. Work on projects utilizing computer notational software applications.

MUC 4441 AS-MUSIC 3(3,0)
MIDI Sequencing II: PR: MUC 3311, Junior standing, and C.I. Continuation of sequencing, sampling, and inactive digital music technology.

MUE 2110 ED-IP 3(3,0)
Early Childhood Music and Movement: An examination of the role of music and creative movement in the lives of young children.

MUE 2460 AS-MUSIC 1(0,2)
Brass Techniques: PR: MUED major, junior standing or C.I. Class instruction in brass playing and pedagogical techniques. May be repeated for credit.

MUE 2470 AS-MUSIC 1(0,2)
Percussion Techniques: PR: MUED major, junior standing or C.I. Class instruction in percussion playing and pedagogical techniques. May be repeated for credit.

MUE 3210 ED-IP 3(2,1)
Music in the Elementary School: Fundamental procedures for teaching elementary school music, stressing appropriate music materials and activities for different age groups; selected experience in music.

MUE 3440 AS-MUSIC 1(0,2)
String Techniques: PR: MUED major, junior standing or C.I. Class instruction in string playing and pedagogical techniques.

MUE 3450 AS-MUSIC 1(1,0)
Woodwind Techniques I: PR: MUED major, Junior standing or C.I. Class instruction in woodwind playing and pedagogical techniques.

MUE 3451 AS-MUSIC 1(1,0)
Woodwind Techniques II: PR: MUE 3450, MUED major, Junior standing or C.I. Continuation of Woodwind Techniques I, with emphasis on double reeds.

MUE 4311 ED-IP 2(2,0)
Elementary School Music Methods: PR: Junior standing, MUED major. Organization and administration of instruction for comprehensive music education, K-6; instructional planning, techniques, and materials for elementary music education.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Department</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUE 4330</td>
<td>ED-IP</td>
<td>Secondary School Music Methods: 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.</td>
<td>2(2,0)</td>
</tr>
<tr>
<td>MUE 4480</td>
<td>AS-MUSIC</td>
<td>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.</td>
<td>1(1,1)</td>
</tr>
<tr>
<td>MUE 5695</td>
<td>ED-IP</td>
<td>Trends in Arts Education: PR: Initial Certification or C.I. Investigation of current trends in arts education; development of strategies for utilizing understandings of arts education in the total curriculum of elementary students.</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>MUG 3104</td>
<td>AS-MUSIC</td>
<td>Basic Conducting: Fundamental techniques and practice in conducting.</td>
<td>2(1,1)</td>
</tr>
<tr>
<td>MUG 3202</td>
<td>AS-MUSIC</td>
<td>Choral Conducting and Materials: PR: MUG 3104. Fundamental principles of choral conducting and rehearsal techniques including an examination of materials.</td>
<td>3(3,2)</td>
</tr>
<tr>
<td>MUG 3302</td>
<td>AS-MUSIC</td>
<td>Instrumental Conducting and Materials: PR: MUG 3104. Fundamental principles of instrumental conducting and rehearsal techniques including an examination of materials.</td>
<td>3(3,2)</td>
</tr>
<tr>
<td>MUG 4103</td>
<td>AS-MUSIC</td>
<td>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.</td>
<td>2(1,1)</td>
</tr>
<tr>
<td>MUG 4211</td>
<td>AS-MUSIC</td>
<td>History and Literature I: PR: MUT 1112. In-depth study of the development of Western musical styles from antiquity to present.</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>MUG 4212</td>
<td>AS-MUSIC</td>
<td>History and Literature II: PR: MUT 1112. Continuation of MUG 4211.</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>MUG 4218</td>
<td>AS-MUSIC</td>
<td>Review of Music History: PR: C.I. A review of music history from Ancient Greece to the present.</td>
<td>1(1,0)</td>
</tr>
<tr>
<td>MUH 4341</td>
<td>AS-MUSIC</td>
<td>Seminar in Baroque Music: PR: Satisfactory music history placement examination. Study of selected music from Monteverdi through Bach and Handel. Emphasis on stylistic development and performance practice.</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>MUH 5210</td>
<td>AS-MUSIC</td>
<td>Enjoyment of Music: PR: Non-music majors only. Designed to develop an understanding of musical principles and techniques for listening to music.</td>
<td>3(2,1)</td>
</tr>
<tr>
<td>MUH 5316</td>
<td>AS-MUSIC</td>
<td>Evolution of Jazz: Survey of jazz literature and performance.</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>MUH 5340</td>
<td>AS-MUSIC</td>
<td>Piano 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.</td>
<td>2(1,1)</td>
</tr>
<tr>
<td>MUH 5340</td>
<td>AS-MUSIC</td>
<td>Piano Literature II: PR: MUL 3400. Continuation of MUL 3400.</td>
<td>2(1,1)</td>
</tr>
<tr>
<td>MUH 5341</td>
<td>AS-MUSIC</td>
<td>Woodwind Literature: PR: Junior standing, C.I., Music major. Survey of woodwind literature from the 16th century to the present.</td>
<td>2(2,0)</td>
</tr>
<tr>
<td>MUH 5342</td>
<td>AS-MUSIC</td>
<td>Brass Literature: PR: Music major (Brass), Junior standing, C.I. Survey of brass solo/ensemble literature from 16th century to present.</td>
<td>2(2,0)</td>
</tr>
<tr>
<td>MUH 5343</td>
<td>AS-MUSIC</td>
<td>Percussion Literature: PR: Music major (Percussion), Junior standing, C.I. Survey of music written for percussion instruments.</td>
<td>2(2,0)</td>
</tr>
<tr>
<td>MUH 5360</td>
<td>AS-MUSIC</td>
<td>American/English Song Literature: PR: C.I. Survey of songs written by American or English composers.</td>
<td>1(1,1)</td>
</tr>
<tr>
<td>MUH 5364</td>
<td>AS-MUSIC</td>
<td>German Song Literature: PR: Music major or C.I. Survey of German song literature.</td>
<td>1(1,1)</td>
</tr>
<tr>
<td>MUH 5365</td>
<td>AS-MUSIC</td>
<td>French Song Literature: PR: Music major or C.I. Survey of French song literature.</td>
<td>1(1,1)</td>
</tr>
<tr>
<td>MUN 2100</td>
<td>AS-MUSIC</td>
<td>Synthesizer Ensemble: PR: C.I. and keyboard ability. Rehearsal and performance of music for synthesizers. May be repeated for credit.</td>
<td>1(0,2)</td>
</tr>
<tr>
<td>MUN 2101</td>
<td>AS-MUSIC</td>
<td>Percussion/Mallet Ensemble: PR: C.I. Preparation and performance of music for percussion with mallets. May be repeated for credit.</td>
<td>1(1,0)</td>
</tr>
<tr>
<td>MUN 3113</td>
<td>AS-MUSIC</td>
<td>Marching Band: PR: Admission by audition. Preparation for appearance at football games and special occasions. May be repeated for credit.</td>
<td>2(0,8)</td>
</tr>
<tr>
<td>MUN 3123</td>
<td>AS-MUSIC</td>
<td>Concert Band: Open to all students with audition. Study and performance of music for large ensembles. May be repeated for credit.</td>
<td>1(0,3)</td>
</tr>
<tr>
<td>MUN 3143</td>
<td>AS-MUSIC</td>
<td>Wind Ensemble: Open to all students by audition. Study and performance of music for wind ensemble and band. May be repeated for credit.</td>
<td>1(0,4)</td>
</tr>
<tr>
<td>MUN 3283</td>
<td>AS-MUSIC</td>
<td>Vocal-Jazz Ensemble: PR: C.I. Open to all students. Study and performance of music for small ensembles. May be repeated for credit.</td>
<td>1(0,3)</td>
</tr>
<tr>
<td>MUN 3313</td>
<td>AS-MUSIC</td>
<td>Symphony Orchestra: PR: Audition. Open to all students by audition. Rehearsal and performance of works from the symphonic repertoire. May be repeated for credit.</td>
<td>1(0,5)</td>
</tr>
<tr>
<td>MUN 3314</td>
<td>AS-MUSIC</td>
<td>University Choir: PR: C.I. Open to all students by audition. Study and performance of large ensemble music. Possible tours. May be repeated for credit.</td>
<td>1(3,0)</td>
</tr>
<tr>
<td>MUN 3343</td>
<td>AS-MUSIC</td>
<td>Madrigal Singers: PR: C.I. Open to all students by audition. Extra rehearsals and Madrigal Dinners required. Tours. May be repeated for credit.</td>
<td>1(0,3)</td>
</tr>
<tr>
<td>MUN 3423</td>
<td>AS-MUSIC</td>
<td>Woodwind Ensemble: PR: C.I. Open to all students. Study and performance of music for small ensembles. May be repeated for credit.</td>
<td>1(0,2)</td>
</tr>
<tr>
<td>MUN 3430</td>
<td>AS-MUSIC</td>
<td>Trumpet Ensemble: PR: C.I. Rehearsal and performance of music for trumpet ensembles. May be repeated for credit.</td>
<td>1(1,0)</td>
</tr>
<tr>
<td>MUN 3433</td>
<td>AS-MUSIC</td>
<td>Brass Ensemble: PR: C.I. Open to all students. Study and performance of music for small ensembles. May be repeated for credit.</td>
<td>1(0,2)</td>
</tr>
</tbody>
</table>
MUN 3443 AS-MUSIC 1(0,2)
Percussion Ensemble: PR: C.I. Open to all students. Study and performance of music for small ensembles. May be repeated for credit.

MUN 3444 AS-MUSIC 1(1,0)
Mallet Ensemble: PR: C.I. Preparation and performance of music for mallet ensemble. May be repeated for credit.

MUN 3453 AS-MUSIC 1(0,3)
Piano Ensemble: PR: Open to Music Majors or C.I. Study and performance of music for small ensembles. May be repeated for credit.

MUN 3483 AS-MUSIC 1(0,2)
String Ensemble: PR: C.I. Open to all students. Study and performance of music for small ensembles. May be repeated for credit.

MUN 3494 AS-MUSIC 1(1,1)
Steel Drum Ensemble: PR: C.I. Rehearsal and performance of music arranged for steel drum band. May be repeated for credit.

MUN 3713 AS-MUSIC 1(0,4)
Jazz Lab: PR: C.I. Open to all students by audition. Study and performance of music for small ensembles. May be repeated for credit.

MUN 3714 AS-MUSIC 1(0,2)
Jazz Combo: PR: Junior standing and C.I. Rehearsal and performance of music for small jazz combo, emphasizing improvisation. May be repeated for credit.

MUN 3717 AS-MUSIC 1(0,3)
Jazz/Pop Ensemble: PR: C.I. Open to all students. Study and performance of music for small ensembles. May be repeated for credit.

MUN 4473 AS-MUSIC 1(0,2)
Early Music Ensemble: PR: C.I. Study and performance of pre-classical music. May be repeated for credit.

MUO 3503 AS-MUSIC 3(0,3)
Opera Workshop: PR: C.I. Study of expressive emotion in relation to musical theatre; staging and performance of prepared studies of popular music for vocal ensembles. May be repeated for credit.

MUS 1010 AS-MUSIC 0(9,2)
Music Forum: A series of special musical events required of music majors. Includes lectures and recitals by faculty, students, and guest artists.

MUS 2550C AS-MUSIC 3(2,2)

MUS 4293 AS-MUSIC 1(1,0)
Music Theatre Ensemble: PR: Junior standing and C.I. Rehearse, study, and preparation of musical theatre score for pit orchestra and off-stage singers, culminating in public performance with University Theatre. May be repeated for credit.

MUS 4330 AS-MUSIC 2(1,1)
Recording Techniques for Classical Music: PR: MUS 2320 or C.I. Concert hall recording techniques for classical music.

MUS 4401 AS-MUSIC 2(1,1)
Studio Teaching: PR: C.I. 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.

MUS 4905 AS-MUSIC 1-4(1-4)
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.

MUS 5526 AS-MUSIC 3(3,0)
Music and Technology: PR: Graduate Student. The emergence of technology in music including MIDI, CD ROM, and the high-tech music classroom.

MUT 1001 AS-MUSIC 3(3,0)
Fundamentals of Music I: Basic music theory and reading music at the keyboard.

MUT 1002 AS-MUSIC 3(3,0)

MUT 1111 AS-MUSIC 2(2,1)

MUT 1112 AS-MUSIC 2(2,1)

MUT 1241 AS-MUSIC 1(0,2)
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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUT 4344</td>
<td>AS-MUSIC 1(1,0)</td>
<td>Seminar in Music Arranging: PR: MUT 3311. Scoring for choral and instrumental ensembles.</td>
</tr>
<tr>
<td>MVB 1211</td>
<td>AS-MUSIC 1(0,1)</td>
<td>Secondary Trumpet: PR: Consent of Music Chair. CR: Performing ensemble. Advanced instruction in trumpet. Intended for non-music majors. May be repeated for credit.</td>
</tr>
<tr>
<td>MVB 1212</td>
<td>AS-MUSIC 1(0,1)</td>
<td>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.</td>
</tr>
<tr>
<td>MVB 1213</td>
<td>AS-MUSIC 1(0,1)</td>
<td>Secondary Trombone: PR: Consent of Music Chair. CR: Performing ensemble. Advanced instruction in trombone. Intended for non-music majors. May be repeated for credit.</td>
</tr>
<tr>
<td>MVB 1214</td>
<td>AS-MUSIC 1(0,1)</td>
<td>Secondary Baritone: PR: Consent of Music Chair. CR: Performing ensemble. Advanced instruction in baritone. Intended for non-music majors. May be repeated for credit.</td>
</tr>
<tr>
<td>MVB 1215</td>
<td>AS-MUSIC 1(0,1)</td>
<td>Secondary Tuba: PR: Consent of Music Chair. CR: Performing ensemble. Advanced instruction in tuba. Intended for non-music majors. May be repeated for credit.</td>
</tr>
<tr>
<td>MVB 1411</td>
<td>AS-MUSIC 2(1,1)</td>
<td>Trumpet I: PR: Major in music or consent of chair; audition. May be repeated for credit.</td>
</tr>
<tr>
<td>MVB 1412</td>
<td>AS-MUSIC 2(1,1)</td>
<td>French Horn I: PR: Major in music or consent of chair; audition. May be repeated for credit.</td>
</tr>
<tr>
<td>MVB 1413</td>
<td>AS-MUSIC 2(1,1)</td>
<td>Trombone I: PR: Major in music or consent of chair; audition. May be repeated for credit.</td>
</tr>
<tr>
<td>MVB 1414</td>
<td>AS-MUSIC 2(1,1)</td>
<td>Baritone I: PR: Major in music or consent of chair; audition. May be repeated for credit.</td>
</tr>
<tr>
<td>MVB 1415</td>
<td>AS-MUSIC 2(1,1)</td>
<td>Tuba I: PR: Major in music or consent of chair; audition. May be repeated for credit.</td>
</tr>
<tr>
<td>MVB 2421</td>
<td>AS-MUSIC 2(1,1)</td>
<td>Trumpet II: PR: MVB 1411 and competence determined by faculty jury. Continuation of MVB 1411. May be repeated for credit.</td>
</tr>
<tr>
<td>MVB 2422</td>
<td>AS-MUSIC 2(1,1)</td>
<td>French Horn II: PR: MVB 1412 and competence determined by faculty jury. Continuation of MVB 1412. May be repeated for credit.</td>
</tr>
<tr>
<td>MVB 2423</td>
<td>AS-MUSIC 2(1,1)</td>
<td>Trombone II: PR: MVB 1413 and competence determined by faculty jury. Continuation of MVB 1413. May be repeated for credit.</td>
</tr>
<tr>
<td>MVB 2424</td>
<td>AS-MUSIC 2(1,1)</td>
<td>Baritone II: PR: MVB 1414 and competence determined by faculty jury. Continuation of MVB 1414. May be repeated for credit.</td>
</tr>
<tr>
<td>MVB 2425</td>
<td>AS-MUSIC 2(1,1)</td>
<td>Tuba II: PR: MVB 1415 and competence determined by faculty jury. Continuation of MVB 1415. May be repeated for credit.</td>
</tr>
<tr>
<td>MVB 3431</td>
<td>AS-MUSIC 2(1,1)</td>
<td>Trumpet III: PR: MVB 2421 and competence determined by faculty jury. Continuation of MVB 2421. May be repeated for credit.</td>
</tr>
<tr>
<td>MVB 3432</td>
<td>AS-MUSIC 2(1,1)</td>
<td>French Horn III: PR: MVB 2422 and competence determined by faculty jury. Continuation of MVB 2422. May be repeated for credit.</td>
</tr>
<tr>
<td>MVB 3433</td>
<td>AS-MUSIC 2(1,1)</td>
<td>Trombone III: PR: MVB 2423 and competence determined by faculty jury. Continuation of MVB 2423. May be repeated for credit.</td>
</tr>
<tr>
<td>MVB 3434</td>
<td>AS-MUSIC 2(1,1)</td>
<td>Baritone III: PR: MVB 2424 and competence determined by faculty jury. Continuation of MVB 2424. May be repeated for credit.</td>
</tr>
<tr>
<td>MVB 3435</td>
<td>AS-MUSIC 2(1,1)</td>
<td>Tuba III: PR: MVB 2425 and competence determined by faculty jury. Continuation of</td>
</tr>
</tbody>
</table>
MVK 1213 AS-MUSIC 1(1,1)
Secondary Organ: PR: Consent of Music Chair. CR: Performing ensemble.
Advanced instruction in organ. Intended for non-music majors. May be repeated for credit.

MVK 1411 AS-MUSIC 2(1,1)
Piano I: PR: Major in music or consent of chairperson; audition. May be repeated for credit.

MVK 1413 AS-MUSIC 2(1,1)
Organ I: PR: Major in music or consent of chairperson; audition. May be repeated for credit.

MVK 2121 AS-MUSIC 1(0,2)
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 2421 AS-MUSIC 2(1,1)
Piano II: PR: MVK 1411 and competence determined by faculty jury. Continuation of MVK 1411. May be repeated for credit.

MVK 2423 AS-MUSIC 2(1,1)
Organ II: PR: MVK 1413 and competence determined by faculty jury. Continuation of MVK 1413. May be repeated for credit.

MVK 3131 AS-MUSIC 1(0,2)
Class Piano III: PR: MVK 1121 or C.I. Continuation of MVK 1121.

MVK 3431 AS-MUSIC 2(1,1)
Piano III: PR: MVK 2421 and competence determined by faculty jury. Continuation of MVK 2421. May be repeated for credit.

MVK 3433 AS-MUSIC 2(1,1)
Organ III: PR: MVK 2423 and competence determined by faculty jury. Continuation of MVK 2423. May be repeated for credit.

MVK 4141 AS-MUSIC 1(0,2)
Class Piano IV: PR: MVK 1131 or C.I. Continuation of MVK 1131.

MVK 4441 AS-MUSIC 2(1,1)
Piano IV: PR: MVK 3431 and competence determined by faculty jury. Continuation of MVK 3431. May be repeated for credit.

MVK 4443 AS-MUSIC 2(1,1)
Organ IV: PR: MVK 3433 and competence determined by faculty jury. Continuation of MVK 3433. May be repeated for credit.

MVK 4640 AS-MUSIC 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-MUSIC 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-MUSIC 2(1,0)
Percussion V: PR: C.I. May be repeated for credit.

MVS 1211 AS-MUSIC 1(0,1)

MVS 1212 AS-MUSIC 1(0,1)

MVS 1213 AS-MUSIC 1(0,1)

MVS 1214 AS-MUSIC 1(0,1)

MVS 1216 AS-MUSIC 1(0,1)

MVS 1411 AS-MUSIC 2(1,1)
Violin I: PR: Major in music or consent of chair; audition. May be repeated for credit.

MVS 1412 AS-MUSIC 2(1,1)
Viola I: PR: Major in music or consent of chair; audition. May be repeated for credit.

MVS 1413 AS-MUSIC 2(1,1)
Cello I: PR: Major in music or consent of chair; audition. May be repeated for credit.

MVS 1414 AS-MUSIC 2(1,1)
Bass I: PR: Major in music or consent of chair; audition. May be repeated for credit.

MVS 1415 AS-MUSIC 2(1,1)
Harp I: PR: Major in music or consent of chair; audition. May be repeated for credit.

MVS 1416 AS-MUSIC 2(1,1)
Guitar I: PR: Major in music or consent of chair; audition. May be repeated for credit.
V: Violin
G: Guitar
B: Bass
H: Harp
C: Cello
V: Viola
M: MVS
PR: Private
C.I.: Class Instruction
AS-MUSIC: Advanced Studies in Music
MUSIC: Music
1(0,1): One credit, no prerequisites
2(1,0): Two credits, one prerequisite
2(1,1): Two credits, one prerequisite
1(0,1): One credit, no prerequisites
2(2,0): Two credits, two prerequisites

MVS 2421 AS-MUSIC 2(1,1)
Violin II: PR: MVS 1411 and competence determined by faculty jury. Continuation of MVS 1411. May be repeated for credit.

MVS 2422 AS-MUSIC 2(1,1)
Viola II: PR: MVS 1412 and competence determined by faculty jury. Continuation of MVS 1412. May be repeated for credit.

MVS 2423 AS-MUSIC 2(1,1)
Cello II: PR: MVS 1413 and competence determined by faculty jury. Continuation of MVS 1413. May be repeated for credit.

MVS 2424 AS-MUSIC 2(1,1)
Bass II: PR: MVS 1414 and competence determined by faculty jury. Continuation of MVS 1414. May be repeated for credit.

MVS 2425 AS-MUSIC 2(1,1)
Harp II: PR: MVS 1415 and competence determined by faculty jury. Continuation of MVS 1415. May be repeated for credit.

MVS 2426 AS-MUSIC 2(1,1)
Guitar II: PR: MVS 1416 and competence determined by faculty jury. Continuation of MVS 1416. May be repeated for credit.

MVS 3431 AS-MUSIC 2(1,1)
Violin III: PR: MVS 2421 and competence determined by faculty jury. Continuation of MVS 2421. May be repeated for credit.

MVS 3432 AS-MUSIC 2(1,1)
Viola III: PR: MVS 2422 and competence determined by faculty jury. Continuation of MVS 2422. May be repeated for credit.

MVS 3433 AS-MUSIC 2(1,1)
Cello III: PR: MVS 2423 and competence determined by faculty jury. Continuation of MVS 2423. May be repeated for credit.

MVS 3434 AS-MUSIC 2(1,1)
Bass III: PR: MVS 2424 and competence determined by faculty jury. Continuation of MVS 2424. May be repeated for credit.

MVS 3435 AS-MUSIC 2(1,1)
Harp III: PR: MVS 2425 and competence determined by faculty jury. Continuation of MVS 2425. May be repeated for credit.

MVS 3436 AS-MUSIC 2(1,1)
Guitar III: PR: MVS 2426 and competence determined by faculty jury. Continuation of MVS 2426. May be repeated for credit.

MVS 4441 AS-MUSIC 2(1,1)
Violin IV: PR: MVS 3431 and competence determined by faculty jury. Continuation of MVS 3431. May be repeated for credit.

MVS 4442 AS-MUSIC 2(1,1)
Viola IV: PR: MVS 3432 and competence determined by faculty jury. Continuation of MVS 3432. May be repeated for credit.

MVS 4443 AS-MUSIC 2(1,1)
Cello IV: PR: MVS 3433 and competence determined by faculty jury. Continuation of MVS 3433. May be repeated for credit.

MVS 4444 AS-MUSIC 2(1,1)
Bass IV: PR: MVS 3434 and competence determined by faculty jury. Continuation of MVS 3434. May be repeated for credit.

MVS 4445 AS-MUSIC 2(1,1)
Harp IV: PR: MVS 3435 and competence determined by faculty jury. Continuation of MVS 3435. May be repeated for credit.

MVS 4446 AS-MUSIC 2(1,1)
Guitar IV: PR: MVS 3436 and competence determined by faculty jury. Continuation of MVS 3436. May be repeated for credit.

MVS 5451 AS-MUSIC 2(1,0)
Violin V: PR: C.I. May be repeated for credit.

MVS 5452 AS-MUSIC 2(1,0)
Viola V: PR: C.I. May be repeated for credit.

MVS 5453 AS-MUSIC 2(1,0)
Cello V: PR: C.I. May be repeated for credit.

MVS 5454 AS-MUSIC 2(1,0)
Bass V: PR: C.I. May be repeated for credit.

MVS 5455 AS-MUSIC 2(1,0)
Harp V: PR: C.I. May be repeated for credit.

MVS 5456 AS-MUSIC 2(1,0)
Guitar V: PR: C.I. May be repeated for credit.

MVS 4441. This course is devoted to performing ensemble. CR: Performing ensemble.

MVV 4441 AS-MUSIC 2(1,1)
Voice IV: PR: Consent of Music Chair. CR: Performing ensemble. Advanced instruction in voice. Intended for non-music majors. May be repeated for credit.

MVV 1111 AS-MUSIC 1(0,1)
Class Voice: Class instruction in beginning voice. May be repeated for credit.

MVV 1211 AS-MUSIC 1(0,1)

MVW 1213 AS-MUSIC 1(0,1)
Secondary Clarinet: PR: Consent of
Music Chair. CR: Performing ensemble. Advanced instruction in clarinet. Intended for non-music majors. May be repeated for credit.

MVW 1214 AS-MUSIC 1(0,1)

MVW 1215 AS-MUSIC 1(0,1)

MVW 1411 AS-MUSIC 2(1,1)
Flute I: PR: Major in music or consent of chair; audition. May be repeated for credit.

MVW 1412 AS-MUSIC 2(1,1)
Oboe I: PR: Major in music or consent of chair; audition. May be repeated for credit.

MVW 1413 AS-MUSIC 2(1,1)
Clarinet I: PR: Major in music or consent of chair; audition. May be repeated for credit.

MVW 1414 AS-MUSIC 2(1,1)
Bassoon I: PR: Major in music or consent of chair; audition. May be repeated for credit.

MVW 1415 AS-MUSIC 2(1,1)
Saxophone I: PR: Major in music or consent of chair; audition. May be repeated for credit.

MVW 2421 AS-MUSIC 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-MUSIC 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-MUSIC 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-MUSIC 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 AS-MUSIC 2(1,1)
Saxophone II: PR: MVW 1415 and competence determined by faculty jury. Continuation of MVW 1415. May be repeated for credit.

MVW 3431 AS-MUSIC 2(1,1)
Flute III: PR: MVW 2421 and competence determined by faculty jury. Continuation of MVW 2421. May be repeated for credit.

MVW 3432 AS-MUSIC 2(1,1)
Oboe III: PR: MVW 2422 and competence determined by faculty jury. Continuation of MVW 2422. May be repeated for credit.

MVW 3433 AS-MUSIC 2(1,1)
Clarinet III: PR: MVW 2423 and competence determined by faculty jury. Continuation of MVW 2423. May be repeated for credit.

MVW 3434 AS-MUSIC 2(1,1)
Bassoon III: PR: MVW 2424 and competence determined by faculty jury. Continuation of MVW 2424. May be repeated for credit.

MVW 3435 AS-MUSIC 2(1,1)
Saxophone III: PR: MVW 2425 and competence determined by faculty jury. Continuation of MVW 2425. May be repeated for credit.

MVW 3630 AS-MUSIC 2(2,0)
Woodwind Pedagogy: PR: C.I. Methods, materials for teaching individuals and woodwind ensembles.

MVW 4441 AS-MUSIC 2(1,1)
Flute IV: PR: MVW 3431 and competence determined by faculty jury. Continuation of MVW 3431. May be repeated for credit.

MVW 4442 AS-MUSIC 2(1,1)
Oboe IV: PR: MVW 3432 and competence determined by faculty jury. Continuation of MVW 3432. May be repeated for credit.

MVW 4443 AS-MUSIC 2(1,1)
Clarinet IV: PR: MVW 3433 and competence determined by faculty jury. Continuation of MVW 3433. May be repeated for credit.

MVW 4444 AS-MUSIC 2(1,1)
Bassoon IV: PR: MVW 3434 and competence determined by faculty jury. Continuation of MVW 3434. May be repeated for credit.

MVW 4445 AS-MUSIC 2(1,1)
Saxophone IV: PR: MVW 3435 and competence determined by faculty jury. Continuation of MVW 3435. May be repeated for credit.

MVW 5451 AS-MUSIC 2(1,0)
Flute V: PR: C.I. May be repeated for credit.

MVW 5452 AS-MUSIC 2(1,0)
Oboe V: PR: C.I. May be repeated for credit.

MVW 5453 AS-MUSIC 2(1,0)
Clarinet V: PR: C.I. May be repeated for credit.

MVW 5454 AS-MUSIC 2(1,0)
Bassoon V: PR: C.I. May be repeated for credit.

MVW 5455 AS-MUSIC 2(1,0)
Saxophone V: PR: C.I. May be repeated for credit.

NUR 3026C HPA-NURS 3(0,2)
Therapeutic Interventions for Health Professionals: PR: Admission to Nursing Program. Theoretical rationale and psychomotor development for therapeutic interventions in nursing practice.

NUR 3065 HPA-NURS 3(2,1)
Health Assessment: PR: PCB 3703C, ZOO 3733C or Florida RN License. Concepts of health assessment of clients.

NUR 3165 HPA-NURS 3(0,2)
Critical Inquiry: PR: STA 2014 or 2023; NUR 3809 and RN status or NUR 3065. A study of approaches to problematic situations in nursing. Selected experiences in investigating, analyzing, and interpreting nursing research.

NUR 3617 HPA-NURS 3(3,0)
Promoting Healthy Communities: PR: Admission to the School of Nursing.
**Exploration of community-oriented nursing practice, including epidemiological, community health, nursing, economic, and health care system perspectives. May be repeated for credit.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Prerequisites</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR 3795</td>
<td>Principles of Oncology Nursing</td>
<td>PR: C.I. or Junior standing. Basic principles and concepts in oncology. Focus on cancer and its related professional nursing practice</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 3809</td>
<td>Transitional Concepts in Nursing I</td>
<td>PR: Florida RN status. Exploration of issues and theories related to professional nursing practice and facilitation of transition from RN to baccalaureate level of nursing practice</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 3825</td>
<td>The Role of the Professional Nurse</td>
<td>PR: Admission to the School of Nursing. Examination of the role and function of the professional nurse, including professional, legal, and practice issues</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 3826H</td>
<td>Bioethics: Value and Ethics in Everyday Life</td>
<td>PR: Admission to the Honors Program. Includes questions concerning human values and ethical questions arising in health care delivery, policy issues, and professional practice among licensed health care practitioners</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 3905</td>
<td>Variable Independent Study</td>
<td>Directed Study.</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 3936</td>
<td>International Perspectives of Nursing and Health Care</td>
<td>PR: Enrolled in School of Nursing or C.I. Comparative analysis of professional nursing practice and health care system in the United States and selected countries</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 4084</td>
<td>Transitional Concepts in Nursing II</td>
<td>PR: NUR 3809, NUR 3065, NUR 3165. Enhancement of knowledge from basic registered nurse programs and continuation of study from NUR 3809</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 4196</td>
<td>Crisis Intervention</td>
<td>PR: Completion of PSY 2013, SYG 2000 or ANT 2000. Crisis theory and techniques; recognition and intervention in crisis events. Applicable to all areas of nursing and all helping professions</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 4286</td>
<td>Gerontologic Nursing</td>
<td>PR: NUR 4286 or RN status or C.I. Theories and principles related to the promotion, maintenance, and restoration of health in older adults in various settings.</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 4635C</td>
<td>Scientific Theories of Nursing VI</td>
<td>PR: NUR 4084 and admission to the Nursing Program. Theories and principles of public health nursing. Clinical applications in selected settings.</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 4827</td>
<td>Leadership and Management Principles</td>
<td>PR: NUR 3809 or NUR 4635, RN Status or C.I. Scientific theories and principles of leadership and management needed to function in leadership, management, and teaching roles in professional nursing. Application of decision making process.</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 4828</td>
<td>Professional Issues and Development</td>
<td>PR: NUR 4635C, RN status, or C.I. CR NUR 4945L, NUR 4827. Analysis of current issues relating to health care delivery and the baccalaureate graduate entering professional nursing practice</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 4836</td>
<td>Professional Development Seminar in Nursing</td>
<td>PR: Acceptance to RN-MSN program track; current Florida RN license; CR: NUR 3809. Exploration of the role of the professional nurse</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 4836L</td>
<td>Directed Practicum in Nursing Administration</td>
<td>CR: NGR 5720. Clinical practice in an area of nursing administration.</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 4880</td>
<td>Introduction to Critical Care Nursing</td>
<td>PR: RN status or C.I. Theories and principles of comprehensive nursing care of individuals and families in critical care settings.</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 4905C</td>
<td>Variable Independent Study</td>
<td>Directed Study.</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 4906</td>
<td>Variable Independent Study</td>
<td>Directed Study.</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 4934</td>
<td>Holistic Nursing</td>
<td>PR: NUR 4924. An opportunity for an in-depth clinical study in an area of special interest to the student.</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 4935</td>
<td>Women's Health Issues</td>
<td>PR: ENC 1102. Junior standing, or C.I. Factors and conditions impacting the health of women. May be repeated for credit.</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 4941</td>
<td>Selected Nursing Practicum</td>
<td>PR: NUR 4756C and 4758C. An opportunity for an in-depth clinical study in an area of special interest to the student.</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>NUR 4945L</td>
<td>Directed Nursing Practice</td>
<td>PR: NUR 4635C, RN status, or C.I CR NUR 4827, NUR 4828. In depth study of one area of clinical nursing practice</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>PAD 3003</td>
<td>Public Administration in American Society</td>
<td>PR: POS 2041. An examination of the basic environment, culture, and organization of public administration in the United States.</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>PAD 4034</td>
<td>The Administration of Public Policy</td>
<td>PR: ECO 2023. Problems of values, interests, and objectives and their impact on the administration of public programs, stressing the interplay between social values, policies and administration.</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>PAD 4104</td>
<td>Administrative Theory</td>
<td>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.</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>PAD 4110</td>
<td>Intergovernmental Administration</td>
<td>Various approaches to studying and explaining the American Intergovernmental system. Emphasis on interorganizational activities, i.e., negotiation, cooperation, and coordination within the legal setting.</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>PAD 4131</td>
<td>Public Sector Project Management</td>
<td>Various approaches to managing projects, including using scheduling techniques such as Gantt, CPM, and PERT, as well as team building, facilitating, and leadership skills.</td>
<td>May be repeated for credit.</td>
</tr>
<tr>
<td>PAD 4144</td>
<td>Non-Profit Organizations</td>
<td>PR: PAD 3003 or C.I. The operations of non-profit organizations, including working with board of directors, volunteer services, fund-raising and grantsmanship, financial management and marketing.</td>
<td>May be repeated for credit.</td>
</tr>
</tbody>
</table>
PAD 4153  HPA-PUB  3(3,0)
Planning and Improvement for Pub Org: Prepare future leaders for the changing paradigms of the public sector by providing education in a variety of quality related areas.

PAD 4204  HPA-PUB  3(3,0)
Fiscal Management: PR: C.I. Analysis of methods of securing public funds, the process of budget making, and techniques of management used in managing public funds.

PAD 4223  HPA-PUB  3(3,0)
Public Budgeting: Skills and Techniques: PR: PAD 4204 or C.I. Analytical skills and administrative techniques employed by public budget analysis, focusing on the process of generating and using information.

PAD 4253  HPA-PUB  3(3,0)
Community & Economic Development: PR: PAD 3003 or C.I. This course will examine local and regional economic development strategies, with an emphasis on effective policy setting and planning.

PAD 4327  HPA-PUB  3(3,0)
Program Evaluation for Public and Non-Profit Organizations: PR: PAD 3003 or C.I. To develop an understanding of program evaluation and to apply the process by developing a program evaluation for a program.

PAD 4351  HPA-PUB  3(3,0)
Issues in Environmental Program Management: The study of environmental policy making processes, programs, and problems through lectures, field study, and research projects.

PAD 4392  HPA-PUB  3(3,0)
Managing Public Emergencies: PR: Pad 3003 or C.I. After a public emergency, a variety of services must be provided to the victims. This course reviews and analyzes coordination and management of these services.

PAD 4393  HPA-PUB  3(3,0)
Emergency Management & Disaster Planning: PR: Pad 3003 or C.I. Emergency Management and Disaster Planning on events most likely to affect Florida including reviewing the four phases of Planning, mitigation, response, and preparedness.

PAD 4414  HPA-PUB  3(3,0)
Public Personnel Administration: The history, operating components, structural characteristics, and increasing impact of laws and related sanctions on personnel practices of public agencies.

PAD 4446  HPA-PUB  3(3,0)
Multiculturalism in Public Administration: PR: PAD 3003 or C.I. This course is designed to help public managers examine public and personal attitudes and values, ethical dilemmas, and social consequences related to issues of diversity.

PAD 4616  HPA-PUB  3(3,0)
Privatization: PR: PAD 3003 or C.I. Analysis of the process of privatizing existing governmental services, including: privatization decision, creation of RFP or ITB, contract award and contract management.

PAD 4720  HPA-PUB  3(3,0)
Survey Research in Public Administration: Introduction to the concepts, design, methodology, computer applications, and data analysis in applied research in the public sector.

PAD 4803  HPA-PUB  3(3,0)
Issues in Urban Administration: To provide students with an understanding of public policy and administrative responses to socioeconomic problems within the urban context.

PAD 4941  HPA-PUB  3-6(0,6)
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.

PAD 5041  HPA-PUB  3(3,0)
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.

PAD 5336  HPA-PUB  3(3,0)
Introduction to Urban Planning: Issues of urbanization, regional development, land use and comprehensive planning, environmental planning, and social planning.

PAD 5337  HPA-PUB  3(3,0)
Urban Design: Planning techniques such as planned unit developments, capital improvements planning, and growth management, and planning methods, including needs assessment and graphic design.

PAD 5338  HPA-PUB  3(3,0)
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.

PAD 5425  HPA-PUB  3(3,0)
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.

PAD 5427  HPA-PUB  3(3,0)
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.

PAD 5806  HPA-PUB  3(3,0)
Local Government Operations: Operational Functions of municipal and county governments and the role of the chief executive officer.

PAD 5807  HPA-PUB  3(3,0)
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.

PAD 5850  HPA-PUB  3(3,0)
Grant and Contract Management: PR: PAD 3003 or C.I. Study of government or public nonprofit agency grant and contract administration and management responding to funding assistance solicitations and grant and contract preparation, evaluation, and presentation.

PCB 3023  AS-BIOL  3(3,0)

PCB 3043  AS-BIOL  3(3,0)

PCB 3043L  AS-BIOL  1(0,3)
Principles of Ecology Laboratory: CR: PCB 3043 or C.I. Field and laboratory investigations of natural ecosystems, with emphasis on current methodology in ecology.
PCB 3063 AS-BIOL 3(3,0)
Genetics: PR: BSC 2010C, BSC 2011C and CHM 2046, or C.I. Basic principles of heredity as applied to prokaryotes and eukaryotes.

PCB 3063L AS-BIOL 1(0,3)
Genetics Laboratory: CR: PCB 3063 or C.I. Introduction to laboratory techniques of genetics.

PCB 3233 HPA-M&M 3(3,0)
Immunology: PR: BSC 2010C. Basic principles of immune reactions, antigen antibody interactions, cell mediated immunity, tumor immunology, and immuno therapy.

PCB 3233L HPA-M&M 1(0,3)
Immunology Laboratory: CR: PCB 3233. Introduction to laboratory techniques in immunology.

PCB 3301C AS-BIOL 4(3,4)

PCB 3442 AS-BIOL 3(3,0)
Florida Aquatic Ecology: PR: BSC 2010C and BSC 2011C, or C.I. An introduction to aquatic ecology of Florida with emphasis on ponds, lakes, streams, and rivers.

PCB 3523 HPA-M&M 3(3,0)
Molecular Biology I: PR: CHM 221 I and MCB 3020C or C.I. The general principles governing the structure and function of both procaryotic and eucaryotic genes.

PCB 3703C HPA-M&M 4(3,3)
Human Physiology: PR: BSC 2010C, CHM 2046 or equivalent. The physiology and interrelationships of organ systems of the human body.

PCB 4302C AS-BIOL 4(2,8)
Physicochemical Limnology: PR: BSC 2010C and BSC 2011C, or C.I. Introduction to limnology and methods for freshwater ecology, with respect to physical, chemical and biological parameters.

PCB 4303C AS-BIOL 4(2,8)
Biological Limnology: PR: BSC 2010C and BSC 2011C, or C.I. Methods for studying freshwater ecology, with respect to physical, chemical and biological parameters.

PCB 4524 HPA-M&M 3(3,0)
Molecular Biology II: PR: PCB 3523. The processes regulating gene function in procaryotes and eucaryotes, specialized genetic aspects underlying multi-cellular existence, DNA evolution.

PCB 4524H HPA-M&M 3(3,0)
Molecular Biology II-Honors: PR: PCB 3523. Same as PCB 4524 with honors level content.

PCB 4683C AS-BIOL 5(4,2)
Population Biology and Evolution: PR: PCB 3043 and PCB 3063 or equivalents. Demographic and genetic structure of populations and their relationship to speciation, adaptation, and macroevolutionary processes in plants and animals.

PCB 4723 AS-BIOL 4(4,0)
Animal Physiology: PR: PCB 3023 or C.I. Functions of body processes occurring in animals, with emphasis on vertebrate physiology.

PCB 5026 HPA-M&M 3(3,0)
Signal Transduction Mechanics: PR: PCB 3523 and PCB 4524. A course emphasizing various signal transduction cascades used in mammalian cells to control growth and differentiation. Discussion of original research papers will occur.

PCB 5045C AS-BIOL 4(3,2)
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 5107C AS-BIOL 3(3,0)
Advanced Cell Biology: PR: PCB 3063 and PCB 3023 or C.I. Review of selected topics in cell biology with emphasis on current research in areas of membrane structure, protein targeting, cytoskeleton, signalling and cell cycle.

PCB 5235 HPA-M&M 3(3,0)
Immunopathology: PR: PCB 3233. In-depth overview of diseases due to deficiencies or over-reactivity of the immune system.

PCB 5239 HPA-M&M 3(3,0)
Tumor Biology: PR: PCB 4524. A course designed to provide an introduction and broad overview of the current knowledge and research in the field of cancer biology.

PCB 5256C AS-BIOL 4(3,2)
Advanced Developmental Biology: PR: PCB 3063 and ZOO 4603 or equivalent. Lecture and literature review of emerging areas in plant and animal developmental biology.

PCB 5325C AS-BIOL 4(2,4)
Landscape Ecology: PR: PCB 3043, STA 2023 or C.I. Influence of spatial heterogeneity on ecological processes. Emphasizes quantitative methods (e.g., GIS, remote sensing and modeling) to characterize landscape patterns and dynamics.

PCB 5326C AS-BIOL 5(3,2)
Ecosystems of Florida: PR: PCB 3043, PCB 3043L, or equivalent. Ecosystems of Florida will be discussed to include geography, geology, climate, energetics, nutrient cycling, community structure and conservation.

PCB 5485 AS-BIOL 3(3,0)
Models in Ecology: PR: PCB 3043, MAC 2311 (or equivalent). A survey of how simulation models are applied to ecological questions of both a theoretical and managerial nature.

PCB 5665C AS-BIOL 4(3,2)
Human Genetics: PR: PCB 3063, graduate standing or C.I. Human Genetics provides a theoretical framework for understanding the biology of the human species.

PCB 5806 HPA-M&M 3(3,0)
Endocrinology: PR: PCB 4723 and BCH 4053 or C.I. Mechanisms of action of hormones; interrelationship between the nervous and endocrine systems.

PCO 4203 AS-PSYCH 4(3,2)
Interviewing and Counseling: PR: PSY 2013, PPE 3003, CLP 3143 and C.I. A review of various interviewing and counseling theories and techniques used in Mental Health settings as well as practical experience in interviewing and counseling procedures.

PEL 2011 ED-E PE 2(2,1)
Basic Volleyball and Softball: The analysis of offensive and defensive alignment, techniques, and strategies.

PEL 2111 ED-E PE 2(1,1)
Bowling: A study of the fundamentals of bowling techniques and the development of skills based on those fundamentals.

PEL 2121 ED-E PE 2(2,1)
Beginning Golf: Performance and application of basic skills, rules, and etiquette. Physiological and social values accruing from this lifetime sport.

PEL 2122 ED-E PE 2(2,1)
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 2341 ED-E PE 2(2,1) Beginning Tennis: Performance and application of basic skills, rules and etiquette. Physiological and social values accruing from this lifetime sport.

PEL 2342 ED-E PE 2(2,1) 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 ED-E PE 2(2,1) Basic Football and Basketball: The analysis of offensive and defensive alignment, techniques, and strategies.

PEM 2101 ED-E PE 2(2,1) Body Development: An in-depth study of individual physical (musculo-skeletal, neuromuscular, cardiorespiratory) fitness. Emphasis on individual diagnosis, principles, procedures, and conduct of related exercise programs.

PEM 2104 ED-E PE 2(2,1) 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 2123 ED-E PE 2(1,1) Step Aerobics: Appropriate rhythmic muscle toning movements utilizing the step to develop aerobic fitness. Concepts taught include warm-up, flexibility, work-out, and cool-down.

PEM 2131 ED-E PE 2(2,1) Strength Resistance Training: Study of fitness and strength development through resistance exercise.

PEM 2171 ED-E PE 2(2,1) Aerobic Dancing: Appropriate rhythmic muscle toning movements that develop aerobic fitness; concepts taught include warm-up, flexibility, stretching, cool down, and heart rate.

PEM 2405 ED-E PE 3(1,2) Self Defense for Women and Men: Designed to provide students with self defense skills.

PEN 1121 ED-E PE 2(2,1) Elementary Swimming: For non-swimmers and beginning swimmers. Development and study of technique in the basic skills of water safety and swimming.

PEO 2011 ED-E PE 3(2,1) Team Sports: PR: This course is designed to develop skill proficiency and knowledge to plan, implement and evaluate team sports as part of the Physical Education program.

PEO 2031 ED-E PE 3(2,1) Individual Sports and Leisure Activities: This course is designed to develop skill proficiency and knowledge to plan, implement and evaluate individual sports and leisure activities in physical education program.

PEO 2624 ED-E PE 3(2,1) Coaching Basketball: Theory and methods of coaching basketball, including the analysis of offensive and defensive techniques and strategies.

PEO 3205 ED-E PE 3(2,1) Gymnastics: This course is designed to develop skill proficiency and instructional strategies in gymnastics.

PET 2175 ED-E PE 2(1-2) Country/Western Dance: Basic instruction in Country/Western Dance. Improve aerobic fitness by learning line dances, circle dances and basic partner steps, such as two-step and waltz.

PET 2443 ED-E PE 2(1-2) Tae Kwon Do: An analysis and application of the martial arts, as part of an overall physical and mental training system.

PET 2622 ED-E PE 3(2,1) Human Injuries: PR: Biomechanics or C.I. The prevention, identification, care, and rehabilitation of human injuries.

PET 3214 AS-PSYCH 3(3,0) Sports Psychology: A review of principles of psychology related to the enhancement of satisfaction and performance in sports.


PET 3644 ED-E PE 3(2,1) Coaching Football: Theory and methods of coaching football, including the analysis of offensive and defensive techniques and strategies.

PET 3670C HPA-H&PT 4(0,8) Practicum in Athletic Training I: PR: PET 3620C. Clinical introduction to an athletic training site under direct supervision of a Certified athletic trainer.

PET 3671C HPA-H&PT 4(0,8) Practicum in Athletic Training II: PR: PET 3670C. Continuation of Clinical practicum under direct supervision of Certified athletic trainer.

PET 3720C ED-E PE 2(1,1) Teaching Physical Education in the Elementary and Middle School (K-8): PR: Admission to Junior Block, or C.I. Curricular and instructional considerations for teaching elementary and middle school physical education.

PET 3740C ED-E PE 2(1,1) Teaching Physical Education in the Secondary and Middle School (6-12): PR: Admission to Junior Block, or C.I. Curricular and instructional considerations for teaching secondary and middle school physical education.

PET 3765 ED-E PE 3(3,0) Coaching Theory and Officiating: Theory and methods of coaching and officiating techniques.

PET 4002 ED-E PE 3(1,2) Outdoor and Leisure Activities: Study of contemporary outdoor and leisure activities. Course will include but not be limited to the "adventure activity curriculum," camping, water activities, fishing, orienteering, hiking.

PET 4035C ED-E PE 3(2,1) 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 4243 ED-E PE 12(0,35)  
Internship II: PR: Must have completed course work in specialization. Satisfactory completion of the portfolio. Full-time student teaching under a certified elementary or secondary physical education teacher. May be repeated for credit.

PET 4312 ED-E PE 3(2,1)  
Biomechanics: PR: Anatomy. The comprehension and application of anatomical and mechanical principles involved in human movement.

PET 4315C HPA-H&PT 3,2,2  
Biomechanics of Sport: PR: PET 4630C. Assessment and recognition of physiological and mechanical aspects of sports and injuries.

PET 4351 ED-E PE 3(2,1)  
Applied Exercise and Human Physiology: An in-depth study of metabolic, neuromuscular, respiratory and cardiovascular physiological concepts and principles with practical application to physical education and sport.

PET 4382 ED-E PE 3(2,1)  
Fitness Assessment and Exercise Physiology: A study and acquisition of health-related fitness, exercise strategies and related assessment techniques.

PET 4401 ED-E PE 3(3,0)  
Administration and Evaluation in Physical Education: This course is designed to address administrative, measurement and evaluation considerations of physical education programs.

PET 4603 HPA-H&PT 3(3,0)  
Introduction to Sports Medicine: A comprehensive study of care of sports injuries, including instruction in attitudes, health and conditioning in sports participants.

PET 4604 HPA-H&PT 3(3,0)  
Sports Medicine Field Application: Demonstration and application of the treatment for various sports injuries.

PET 4606 HPA-H&PT 3(3,0)  
Applied Fitness in Sport: PR: PET 3671. Appreciation and clinical application of fitness regarding athletics.

PET 4624C HPA-H&PT 3(2,2)  
Art and Science of Athletic Training II: PR: PET 3623C. Specific diagnostic and sport specific injuries in athletics.

PET 4630C HPA-H&PT 4(2,4)  
Therapeutic Exercise in Athletic Training: PR: PET 3623C. Rehabilitation processes regarding exercise progression for athletic injury.

PET 4632C HPA-H&PT 4(2,4)  
Therapeutic Modalities in Athletic Training: PR: PET 4624C. Principles and techniques for applying therapeutic modalities.

PET 4640 ED-E PE 3(3,0)  
Adapted Physical Education: Principles and methods of adapting physical education activities and programs for exceptional children and adults; mainstreaming rationale and methods analyzed.

PET 4660C HPA-H&PT 3(3,0)  
Organization and Administration of Athletic Training: PR: PET 3671C. Administrative knowledge in the athletic training profession.

PET 4672C HPA-H&PT 4(0,8)  
Practicum in Athletic Training III: PR: PET 3671C. Advanced clinical internship with increased responsibilities under the supervision of a Certified athletic trainer.

PET 4673C HPA-H&PT 4(0,8)  
Practicum in Athletic Training IV: PR: PET 4672C. Advanced clinical internship with increased responsibilities under the supervision of a Certified athletic trainer.

PET 4724 ED-E PE 3(3,0)  
Development and History of Physical Education Curriculum: A study of the factors involved in curriculum development and historical and philosophical considerations of physical education programs.

PET 5355 HPA-H&PT 3(3,0)  
Exercise Physiology and Health: In-depth study of adaptations of cardiovascular and respiratory systems during varying degrees of exercise.

PGY 2401C AS-ART 3(3,2)  

PGY 3610C AS-COMM 3(1,3)  
Photjournalism I: PR: Acceptance to School of Communication. Black and white shooting and processing. Darkroom and computer software work as part of newspaper assignments. 35 mm SLR camera required.

PGY 3640C AS-COMM 3(1,2)  

PGY 3680 AS-COMM 3(3,0)  
Photjournalism III: PR: PGY 3610C. Photography Editing. Assignment selection, picture and copy editing, cropping, picture desk management, and ethics of photojournalism, and the new technological advances.

PGY 4420C AS-ART 3(2,3)  
Advanced Photography: PR: ART 2201C, ART 2202C, and PGY 3401C. Advanced photography skills and portfolio development. Designed for art majors. May be repeated for credit.

PGY 4440C AS-ART 3(2,3)  
Special Problems in Photography: PR: ART 2201C, ART 2202C, and PGY 3401C. Designed for upper division art majors with photography concentration. A series of directed photographic problems of a research nature.

PHH 3041 AS-PHIL 3(3,0)  
Russian Philosophy: A study of major themes and developments in Russian philosophy from the 18th century to the present, including critiques of culture, religion, society, and politics.

PHH 3100 AS-PHIL 3(3,0)  
Ancient Philosophy: PR: PHI 2010 or C.I. Foundations of Western philosophy in ancient Greek thinking about human beings and nature, including the pre-Socratics, Socrates, Plato, Aristotle.

PHH 3200 AS-PHIL 3(3,0)  
Medieval Philosophy: The influence of Greek philosophical thought in medieval Muslim, Jewish and Christian philosophy, as expressed in its main problems and representative thinkers.

PHH 3400 AS-PHIL 3(3,0)  
Modern Continental Philosophy: Continental European philosophy from the 17th through the 19th century (Descartes to Nietzsche). Rationalism, Kant, and post-Kantian idealism, materialism, and the critique of reason.

PHH 3402 AS-PHIL 3(3,0)  
PHH 3601 AS-PHIL 3(3,0) 
Contemporary Continental Philosophy: Current trends in philosophy as represented by the phenomenologists, Frankfurt School, structuralists, ecosophists, and postmodern deconstructionists. Examples range from Husserl, Habermas to Foucault, Derrida.

PHI 3620 AS-PHIL 3(3,0) 
Contemporary Analytic Philosophy: Anglo-American philosophy oriented toward recent developments by Russell, Wittgenstein, and Kripke, including a study of positivism, ideal and ordinary language analysis, and possible-worlds analysis.

PHI 2010 AS-PHIL 3(3,0) 
Introduction to Philosophy: Inquiry into the meaning and justification of fundamental ideas and beliefs concerning reality, knowledge, and values; application to relevant topics in ethics, religion, and politics.

PHI 2010H AS-PHIL 3(3,0) 
Honors Introduction to Philosophy: Same as PHI 2010 with honors-level content.

PHI 2011 AS-PHIL 3(3,0) 
Philosophical Reasoning: A study of reasoning in philosophy: the role of inconsistency, infinite regress arguments, modeling, and system building, discovery procedures, diagonalization, and contract and paradigm case arguments.

PHI 2101 AS-PHIL 3(3,0) 
Critical Thinking: The logic of conversation, informal fallacies, and reasoning about human action.

PHI 2600 AS-PHIL 3(3,0) 
Ethics: An examination of the nature of moral problems, judgments and principles, with an emphasis on recent formulations in ethical theory.

PHI 3022 AS-PHIL 3(3,0) 
Sexuality, Gender & Philosophy: Examines the contributions of poststructuralist and neopsychoanalytical theories to cultural issues in sexuality and gender.

PHI 3033 AS-PHIL 3(3,0) 
Philosophy, Religion, and the Environment: PR: Junior standing or C.I. A multicultural treatment of the influence of philosophical and religious views on our understanding of, and relation to, the environment.

PHI 3130 AS-PHIL 3(3,0) 
Formal Logic I: A study of sentence and predicate logics, with introduction to modal, epistemic, deontic, multi-valued, and indeterminant logics.

PHI 3131 AS-PHIL 3(3,0) 
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 3320 AS-PHIL 3(3,0) 
Philosophy of Mind: Recent and contemporary attempts to understand the relation of mind to body, the relation of consciousness to personhood, and the relation of psychology to neurobiology.

PHI 3400 AS-PHIL 3(3,0) 
Philosophy of Law: Study of the nature of, and justifications for, law and punishment. Examination of the concepts of legal personhood, rights and responsibilities.

PHI 3601 AS-PHIL 1(1,0) 
Practical Wisdom: A radio course in applied ethics which focuses on the human good, dealing with the relationship between means and ends and how they define one another.

PHI 3640 AS-PHIL 3(3,0) 
Environmental Ethics: PR: Junior standing. Major contemporary views in environmental ethics, including individual and holistic approaches, deep ecology, ecofeminism, and social ecology.

PHI 3670 AS-PHIL 3(3,0) 
Ethical Theory: PR: Junior standing and C.I. Major classical and contemporary topics in ethics, including virtue theory, utilitarian, deontological, virtue-based and feminist approaches to ethics, rights, and justice; some examination of metaethical issues.

PHI 3700 AS-PHIL 3(3,0) 
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 AS-PHIL 3(3,0) 
Aesthetics: An investigation into the nature of human artistic experience, with special reference to questions of form, perception, and style.

PHI 3803 AS-PHIL 3(3,0) 
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 3941 AS-PHIL 3(1,3) 
Philosophy Practicum: PR: C.I. Mentor at-risk grade schoolers three hours weekly and participate in a two-hour class every other week, evaluating such work-related concepts as justice and fairness. Pass/Fail grading.

PHI 4360 AS-PHIL 3(3,0) 
Theories of Knowledge: PR: Philosophy major or C.I. Classical and contemporary theories of knowledge. A critical examination of various forms of, and reasons for, skepticism, criteria for truth and justification for belief.

PHI 4400 AS-PHIL 3(3,0) 
Philosophy of Science: An examination of the conceptual foundations and methodology of modern science.

PHI 4420 AS-PHIL 3(3,0) 
Philosophy of Social Science: An examination of the objectives, methods and guiding norms of the social sciences and their role in the development of human knowledge.

PHI 4500 AS-PHIL 3(3,0) 
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.

PHI 4633 AS-PHIL 3(3,0) 
Ethics and Biological Science: PR: Completion of the GEP. An application of contemporary thinking to ethical issues arising from the biological sciences, including human and animal experimentation, genetic engineering, biodiversity.

PHI 4804 AS-PHIL 3(3,0) 
Critical Theory: PR: PHI 3601 or C.I. Critical theory and cultural studies emphasizing current trends as they apply to arts in diverse media.

PHI 4933 AS-PHIL 3(3,0) 
Metaphilosophy: PR: Senior standing. Reflection on the nature of philosophy, its relation to other disciplines, and its central questions. Thesis or project required.

PHM 3100 AS-PHIL 3(3,0) 
Freedom and Justice: Philosophical analysis and evaluation of selected issues...
arising from the interaction of the individual, society, and the state; includes topics such as freedom, equality, and justice.

PHM 3123 AS-PHIL 3(3,0) Feminist Theories: PR: ENC 1102. Contemporary issues and perspectives in feminist theory and their relation to divergent feminist practices.

PHP 3786 AS-PHIL 3(3,0) Existentialism: Study of existentialist analysis and criticism of the human situation as found in the writings of such philosophers as Kierkegaard, Nietzsche, Heidegger, Sartre, and Camus.

PHT 3002 HPA-HPT 2(3,0) Foundations of Physical Therapy I: PR: PHT 3259, PHT 3259L. An introduction to the profession of physical therapy. Patient-practitioner interaction and documentation skills addressed. Appreciation of the total health care team approach to modern medicine; utilization of professional ethics and values are presented.

PHT 3069 HPA-HPT 1(1,0) Physical Assessment: CR: PHT 3069L. Extensive theory and practice in the examination of the patient. Incorporates a systems approach, utilizing screening and patient problem solving.

PHT 3112C HPA-HPT 4(2,6) Gross Anatomy/Neuroscience I: PR: Admission into the Physical Therapy program. In-depth study of human morphology emphasizing the back, spinal cord, cranial nerves, upper and lower extremities, and abdomen.

PHT 3113 HPA-HPT 2(2,0) Gross Anatomy/Neuroscience II: PR: PHT 3112; PHT 3112L. CR: PHT 3113L. In-depth study of human morphology emphasizing the brain, the cervical spine, pelvis, and the internal organs.

PHT 3122 HPA-HPT 3(3,0) Clinical Kinesiology: CR: PHT 3120L. Mechanical aspects of human movement, including joint mechanics of the upper and lower extremity, the vertebral column, and tissue mechanics of relevant human tissues. Coordinated with cadaver dissection.

PHT 3155 HPA-HPT 2(2,0) Physiology of Therapeutic Exercise: PR: PHT 3255C. CR: PHT 3155L. Exercise physiology investigating the physiological responses and adaptations to human movement including cardiovascular and pulmonary systems.


PHT 3222C HPA-HPT 2(1,3) Therapeutic Exercise I: Theory and practice in developing, implementing, and evaluating an exercise program for patients with musculoskeletal dysfunction.

PHT 3223C HPA-HPT 3(2,2) Functional Rehabilitation in Physical Therapy: PR: Full time enrollment in PT program. Functional management of patients seen in long term rehabilitation setting. Develop, and implement a PT plan of care for patients with central or peripheral trauma.

PHT 3259 HPA-HPT 2(2,0) Patient Care Skills: CR: PHT 3259. Affective, cognitive, and psychomotor skills applied to patient care. Diversity issues discussed. Basic skills of patient care; transfers, mobility skills, draping, gait training.

PHT 3620 HPA-HPT 2(4,0) Introduction to Clinical Research: PR: STA 2023. Methods of research applied to clinical environment of physical therapy. Coverage of the language, logic, design and analysis of clinical research.

PHT 3821 HPA-HPT 1(0,8) Clinical Education I: Three weeks of supervised education in clinical facilities. Application of objectives of courses previously completed.

PHT 4143 HPA-HPT 3(2,2) Pediatrics: PR: PHT 3113C and PHT 3122. Examination of the psychosocial, gross morphological and neurodevelopmental sequences that provide the baseline for pediatric clinical assessment of individuals from birth to twenty one years of age.

PHT 4216 HPA-HPT 2(2,0) Theories and Procedures II: PR: PHT 4XXX (Theories and Procedures I), PHT 4XXXL (Theories and Procedures I Lab) CR: PHT(4xX)Theories and Procedures II Lab. Continuation of Theories and Procedures I. Focus on electrodiagnosis and electrophysiologic examinations and the interventions used in the treatment of pain and dysfunction.

PHT 4234C HPA-HPT 2(1,3) Clinical Neurology I: Development of care plans for patients with brain/brain stem pathology. Introduction to theoretical applications for Boboth, Brunstrom, Rood and Voss.

PHT 4307 HPA-HPT 3(3,0) Pathology/Pharmacology: PR: PHT 3113. Organized seminars on the pathophysiology and clinical manifestations of various medical conditions as they relate to medical management in physical therapy practice.

PHT 4308 HPA-HPT 2(2,0) Medical Science and Pharmacology II: The impact on movement and posture of various orthopedic and neurological disorders; drugs used in their management. Relates neuropathology and orthopedic pathology to the study of movement.

PHT 4311C HPA-HPT 2(1,2) Clinical Neurology in Physical Therapy: Analysis of selected neuromotor theories and their clinical applications. Advanced evaluation and treatment procedures. The use of research to determine optimum regimen in treating neurological patients.

PHT 4316 HPA-HPT 2(2,0) Orthopedic Physical Therapy: PR: PHT 3069; PHT 3069L. CR: PHT 3316L. Examination and interventions for the evaluation and treatment of specific orthopedic cases and injuries are presented. Injury recognition, signs and symptoms or orthopedic involvement, and documentation are highlighted.


PHT 4822 HPA-HPT 2(0,16) Clinical Education II: Six weeks of supervised clinical education in a general hospital setting. All previous education objectives apply and are accumulative.
Pr 4823 HPA-H&PT 1(0,8)
Clinical Education III: Clinical practicum in a long-term care setting. Emphasis on gerontology. Supervised by a licensed professional therapist, the student will integrate and apply all previous course work.

Pr 4832 HPA-H&PT 1(0,8)
Clinical Education IV: PR: PHT 4143, PHT 4372. Full-time clinical internship under the supervision of a physical therapist, the student practices and integrates evaluation skills and treatment knowledge from previous courses.

Pr 5605 HPA-H&PT 2(2,0)

Pr 5816 HPA-H&PT 2(0,6)
Advanced Clinical Applications I: PR: PHT 3821. Full time supervised clinical education in a physical therapy setting. All previous education objectives apply and are cumulative.

Ph 2014C AS-PHYS 3(2,2)
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.

Ph 2048 AS-PHYS 3(3,0)
Physics for Engineers & Scientists I: PR: MAC 2311 or equivalent. Mechanics, Thermodynamics, fluids.

Ph 2048H AS-PHYS 3(3,0)
Honors Physics for Engineers and Scientists I: PR: MAC 2311 or equivalent. Same as PHY 2048 with honors-level content.

Ph 2048L AS-PHYS 1(0,3)
Honors Physics Laboratory for Engineers and Scientists I: PR: MAC 2311 or equivalent. Same as PHY 2048L with honors-level content.

Ph 2048L AS-PHYS 1(0,3)
Physics Laboratory for Engineers and Scientists I: CR: PHY 2048. Laboratory experiments covering selected topics in physics related to PHY 2048.

Ph 2049 AS-PHYS 3(3,0)
Physics for Engineers and Scientists II: PR: MAC 2312 and PHY 2048 or PHY 3048H. Electricity, magnetism, optics.

Ph 2049H AS-PHYS 3(3,0)
Honors Physics for Engineers and Scientists II: PR: PHY 2048H, MAC 2312. Same as PHY 2049 with honors-level content.

Ph 2049L AS-PHYS 1(0,3)
Laboratory for Engineers and Scientists II: CR: PHY 2049. Laboratory experiments covering selected topics in physics related to PHY 2049.

Ph 2053C AS-PHYS 4(3,3)
College Physics I: PR: MAC 1105 and MAC 1114 or equivalent or C.I. Mechanics, waves, thermodynamics.

Ph 2054C AS-PHYS 4(3,3)
College Physics II: PR: PHY 2053C. Fluids, electricity and magnetism, optics, x-rays, radioactivity.

Ph 3101 AS-PHYS 3(3,0)
Physics for Engineers and Scientists III: PR: MAC 2313 and PHY 2049 or PHY 3049H. Thermodynamics, oscillations, modern physics.

Ph 3110H AS-PHYS 3(3,0)
Honors Physics for Engineers and Scientists III: PR: PHY 2049 or PHY 3049H. Same as PHY 3101 with honors-level content.

Ph 3221 AS-PHYS 3(3,0)
Mechanics I: PR: PHY 2048 or PHY 2048H. Particle dynamics, rigid bodies, Lagrangian formulation of mechanics, Hamilton's equations.

Ph 3323 AS-PHYS 3(3,0)

Ph 3503 AS-PHYS 3(3,0)
Thermal and Statistical Physics: PR: PHY 3101 or PHY 3101H or C.I. Thermodynamics, kinetic theory, elements of statistical mechanics.

Ph 3722C AS-PHYS 3(1,5)

Ph 3752C AS-PHYS 3(1,5)

Ph 3802L AS-PHYS 3(1,5)
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.

Ph 4324 AS-PHYS 3(3,0)
Electricity and Magnetism II: PR: PHY 3323. Dielectrics, magnetic materials, electromagnetic waves, reflection, complex impedance, static solutions to Laplace's Equation, radiation from an accelerated charge and antennae, special relativity.

Ph 4424 AS-PHYS 3(3,0)
Optics: PR: PHY 3101 and PHY 3323. Wave optics, absorption, stimulated emission, lasers, transforms, coherence, holography.

Ph 4424L AS-PHYS 3(0,3)
Optical Physics Laboratory: A laboratory course on geometric optics, interference, diffraction, materials and modern optics.

Ph 4604 AS-PHYS 3(3,0)

Ph 4605 AS-PHYS 3(3,0)

Ph 4803L AS-PHYS 3(1,5)

Ph 4942C AS-PHYS 3(2,3)
Practicum in Physics: PR: C.I. Physics laboratories and demonstrations, and the study of recent research on the learning of physics.

Ph 5015C AS-PHYS 3(2,2)

Ph 5081C AS-PHYS 1(0,5,1,5)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Department</th>
<th>Title</th>
<th>Prerequisites</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 5100</td>
<td>AS-PHYS</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. May be repeated for credit.</td>
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<tr>
<td>PHY 5200C</td>
<td>AS-PHYS</td>
<td>Newtonian Mechanics for Teachers</td>
<td>PR: C.I. A lab, lecture, demonstration course studying selected topics in classical mechanics.</td>
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<tr>
<td>PHY 5300C</td>
<td>AS-PHYS</td>
<td>Electricity for Teachers</td>
<td>PR: C.I. Circuits, multimeters, oscilloscopes, circuit elements.</td>
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<tr>
<td>PHY 5401C</td>
<td>AS-PHYS</td>
<td>Optics for Teachers</td>
<td>PR: C.I. Geometrical and physical optics, spectrometers and lasers.</td>
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<tr>
<td>PHY 5431</td>
<td>AS-PHYS</td>
<td>Optical Properties of Materials</td>
<td>PR: PHY 4324, MAP 2302, PHY 4424. Normal modes (dipole and Raman active); microscopic theory of absorption, dispersion, and refraction; wave propagation, crystal optics; scattering mechanisms; optical activity.</td>
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<tr>
<td>PHY 5446</td>
<td>AS-PHYS</td>
<td>Laser Principles</td>
<td>PR: PHY 3101, MAP 2302, PHY 4424. Classical introduction to the basic principles of laser gain media, properties of resonators and modes, description of specific laser systems.</td>
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<tr>
<td>PHY 5455</td>
<td>AS-PHYS</td>
<td>Modern X-Ray Science</td>
<td>An introduction to the science and applications of modern x-ray optics, x-ray lasers, etc., with a review of basic properties of x-rays.</td>
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<tr>
<td>PHY 5465C</td>
<td>AS-PHYS</td>
<td>Wave Motion for Teachers</td>
<td>PR: C.I. Water waves, waves on strings, sound and vibrations.</td>
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<tr>
<td>PHY 5500C</td>
<td>AS-PHYS</td>
<td>Thermal Physics for Teachers</td>
<td>PR: C.I. Engines, heat pumps, kinetic theory, phase changes, radiation, weather.</td>
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<tr>
<td>PHY 5606</td>
<td>AS-PHYS</td>
<td>Quantum Mechanics I</td>
<td>PR: PHY 4605 or C.I. Basic postulates of quantum mechanics, operators, eigenvalues, parity, potential wells, harmonic oscillator, time dependent and time independent Schrodinger equation, matrix formulation, and time dependent perturbation theory.</td>
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<tr>
<td>PHY 5933</td>
<td>AS-PHYS</td>
<td>Selected topics in biophysics of macromolecules</td>
<td>PR: PHY 3101, CHM 2046, or C.I. Physical concepts and techniques used in the spectroscopic study of dynamic structure and function of biological macromolecules such as proteins; Connections with other complex systems. May be repeated for credit.</td>
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<tr>
<td>PHZ 3113</td>
<td>AS-PHYS</td>
<td>Introduction to Theoretical Methods of Physics</td>
<td>PR: MAP 2302. Analytical techniques to solve problems of physics.</td>
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<tr>
<td>PHZ 5150C</td>
<td>AS-PHYS</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>
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<tr>
<td>PHZ 5301C</td>
<td>AS-PHYS</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>
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<tr>
<td>PHZ 5304</td>
<td>AS-PHYS</td>
<td>Nuclear and Particle Physics</td>
<td>PR: PHY 4604 or equivalent. Particles and nuclei, symmetries and conservation laws, interactions, models.</td>
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<tr>
<td>PHZ 5405</td>
<td>AS-PHYS</td>
<td>Condensed Matter Physics</td>
<td>PR: PHY 4604, PHY 3101, or C.I. Crystal lattice cell structure, phonons, free electron model, band theory of solids, Fermi surface, solid state applications, and polymers.</td>
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<tr>
<td>PHZ 5505</td>
<td>AS-PHYS</td>
<td>Plasma Physics</td>
<td>PR: PHY 4324 or C.I. Introduction to theory and experimental basis of both weakly and highly ionized plasmas. Instabilities, plasma waves, nonlinear effects, controlled thermonuclear fusion.</td>
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<tr>
<td>PLA 3013</td>
<td>HPA-CJ/LS</td>
<td>Law and the Legal System</td>
<td>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.</td>
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<tr>
<td>PLA 3105</td>
<td>HPA-CJ/LS</td>
<td>Legal Research</td>
<td>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.</td>
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<tr>
<td>PLA 3155</td>
<td>HPA-CJ/LS</td>
<td>Legal Writing</td>
<td>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.</td>
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<tr>
<td>PLA 3203</td>
<td>HPA-CJ/LS</td>
<td>Civil Practice and Procedure</td>
<td>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.</td>
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<tr>
<td>PLA 3203H</td>
<td>HPA-CJ/LS</td>
<td>Civil practice and Procedure - Honors</td>
<td>PR: PLA 3013 or C.I. Same as PLA 3203 with honors level content.</td>
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</table>
| PLA 3273    | HPA-CJ/LS | The Law of Torts | PR: PLA 3013 or C.I. Theories governing liability for civil injuries not arising from contractual...
dissolution of business organizations, define rules of evidence for trial courts.

PLA 3304 HPA-CJ/LS 3(3,0)
Criminal Law: Basic concepts of substantive criminal law. The course includes examination of elements of major crimes, criminal responsibility, legal defenses, and parties to crime.

PLA 3308 HPA-CJ/LS 3(3,0)
Criminal Procedure: PR: PLA 3013 or C.CJ 3024 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 HPA-CJ/LS 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 HPA-CJ/LS 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 HPA-CJ/LS 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 4408 HPA-CJ/LS 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 4433 HPA-CJ/LS 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 HPA-CJ/LS 3(3,0)
Administrative Law: PR: PLA 3013 or PAD 3003. The law regarding governmental agencies with emphasis on the administrative process, Administrative Procedures Acts and special problems of state administrative law.

PLA 4584 HPA-CJ/LS 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 4603 HPA-CJ/LS 3(3,0)
Estate 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 HPA-CJ/LS 3(3,0)
Estate Administration: PR: PLA 4603. Study of the laws and procedures applicable to administration of estates.

PLA 4700 HPA-CJ/LS 3(3,0)

PLA 4763 HPA-CJ/LS 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 4794 HPA-CJ/LS 3(3,0)
Advanced Legal Applications Computer Software: PR: PLA 3013 or C.I. Course will acquaint students with contemporary computer software applications used to satisfy the demands of today's law firms and law-related fields.

PLA 4803 HPA-CJ/LS 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.

PLA 4813 HPA-CJ/LS 3(3,0)
Juvenile Law and Procedure: PR: PLA 3013 or C.I. Examines both the substantive and procedural law for juvenile delinquency and dependency. Emphasis on Florida law and comparison with other jurisdictions.

PLA 4823 HPA-CJ/LS 3(3,0)
Sports Law: PR: PLA 3010 or C.I. Introduction to the legal issues and regulation of sports, focusing on torts, contracts, agency and constitutional law as applied to athletes.

PLA 4830 HPA-CJ/LS 3(3,0)
World Legal Systems: PR: PLA 3013 or equivalent. An examination of various legal traditions and systems of the World. Substantive and procedural laws will be examined.

PLA 4840 HPA-CJ/LS 3(3,0)
Entertainment Law: PR: PLA 3013 or C.I. Introduction to the control and regulation of the entertainment industry and the associated legal issues.

PLA 4910 HPA-CJ/LS 3(4,0)
Trial Advocacy: PR: PLA 3013 or C.I. Analysis of the entire litigation process from the initial client interview through the appellate stage, and development of oral advocacy skills.

PLA 4935 HPA-CJ/LS 3(3,0)
Capstone: Legal Issues: PR: senior status, Legal Studies major. The legal and socio-legal analysis of selected issues that require students to synthesize their legal studies education.

PLA 5937 HPA-CJ/LS 3(1,2)

POR 1120 AS-LANG 4(4,1)
Elementary Portuguese Language and Civilization I: Introduces the student to Portuguese culture through the major language skills: listening, speaking, reading, and writing. Open only to students with no experience in this language.

POR 1121 AS-LANG 4(4,1)
Elementary Portuguese Language and Civilization II: PR: POR 1120 or C.I. Continuation of POR 1120. The course emphasizes the four major language skills: reading, writing, listening, and speaking.

POS 2041 AS-POLS 3(3,0)
American National Government: A study of the dynamics of American national government, including its structure, organization, powers, and procedures.

POS 2041H AS-POLS 3(3,0)
Honors American National Government: Same as POS 2041 with honors-level content.

POS 3122 AS-POLS 3(3,0)
State Government and Public Policy: PR: POS 2041 or C.I. A comparative study of
American state governments, political processes, and public policies, with emphasis on Florida.

**POS 3173 AS-POLS 3(3,0)**
Southern Politics: PR: POS 2041 or C.I. Study of southern politics past and present. Emphasis on factors effecting changes in the region and the states. Southern and national relationship examined.

**POS 3223 AS-POLS 3(3,0)**
Public Opinion: A substantive and theoretical study of public opinion, with emphasis on opinion formation, opinion measurement, policy linkage. May include field experiences in polling.

**POS 3225 AS-POLS 3(3,0)**
Mass Media and Politics: PR: POS 2041 or C.I. Influence of media on campaigns, public officials, public opinion, the definition of political news, and selected public policies.

**POS 3253 AS-POLS 3(3,0)**
Contemporary Revolution and Political Violence: Theories and cases of revolutionary change and political violence in the contemporary world.

**POS 3273 AS-POLS 3(3,0)**
Voting and Elections: Theoretical and substantive inquiry into U.S. electoral system; includes focus on voter behavior as well as national and state electoral systems.

**POS 3413 AS-POLS 3(3,0)**
The American Presidency: PR: POS 2041 or C.I. 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.

**POS 3424 AS-POLS 3(3,0)**
Congress and the Legislative Process: PR: POS 2041 or C.I. Examination of the Congress as an institution undergoing dynamic change; emphasis upon recruitment of legislators, institutional and informal rules, the committee system, legislative procedures.

**POS 3443 AS-POLS 3(3,0)**
Political Parties and Processes: PR: POS 2041 or C.I. 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.

**POS 3463 AS-POLS 3(3,0)**
Interest Groups: PR: POS 2041 or C.I. Analyzes the non-electoral behavior of economics, ideological, and citizen groups; political action committees; and the proliferation of interest organizations over the past quarter century.

**POS 3627 AS-POLS 3(3,0)**
Cultural Pluralism and Law: PR: POS 2041. A case law approach to the legal and constitutional aspects of historical and current issues facing minorities in the U.S.

**POS 3703 AS-POLS 3(3,0)**
Scope and Methods of Political Science: PR: Junior standing or C.I. The scope and methodology of political analysis. Extensive examination of the discipline, research design and methodology.

**POS 4142 AS-POLS 3(3,0)**
Metropolitan Politics: Analysis of political patterns, processes, and issues in American communities. Intergovernmental relations and structural and political arrangements in the existing and emerging metropolitan areas.

**POS 4206 AS-POLS 3(3,0)**
Political Psychology: 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.

**POS 4246 AS-POLS 3(3,0)**
Political Socialization: PR: POS 2041 or C.I. Analysis of recruitment and socialization processes. Identification of the agents and processes of political socialization in national and cross-cultural contexts.

**POS 4265 AS-POLS 3(3,0)**
Power and Policy in the U.S.: PR: POS 2041 or C.I. Examination of the bases of political power in the U.S. In-depth study of socio-economic political linkages in the policy-making process.

**POS 4284 AS-POLS 3(3,0)**
Judicial Process and Polities: Study of the formal and informal judicial process. Legal culture, bureaucratic model, judicial recruitment and outputs, comparative judicial behavior.

**POS 4412 AS-POLS 3(3,0)**
Presidential Campaigning: PR: C.I. Introduces the process of candidate selection, convention behavior, actual campaign process and the transition of power.

**POS 3603 AS-POLS 3(3,0)**
American Constitutional Law: PR: POS 2041 or C.I. Development of American federalism and national power, commerce clause, and nationalization of the economy.

**POS 4604 AS-POLS 3(3,0)**
American Constitutional Law II: PR: POS 2041 or C.I. Development of civil liberties and civil rights in the American federal system.

**POS 4622 AS-POLS 3(3,0)**
Politics and Civil Rights: PR: Junior standing or C.I. Examination of civil rights issues in the context of political behavior, political institutions and public policy since 1865.

**POS 4941L AS-POLS 3-9(0,3-9)**
Political Science Internship: PR: C.I. Internship working with the national, state, county or municipal government. Assignments with selected civic organizations, elected or appointed officials. May be repeated for credit.

**POT 3204 AS-POLS 3(3,0)**
American Political Thought: From its sources to the 20th century, including liberalism, puritanism, the Federalist, the rise of industrialism, resulting social movements, modern variations.

**POT 3302 AS-POLS 3(3,0)**
Modern Political Ideologies: A study of modern ideologies since the French Revolution including liberalism, conservatism, capitalism, nationalism, fascism and anarchism.

**POT 4003 AS-POLS 3(3,0)**
Political Theory: PR: POS 2041 or C.I. Examination of various normative approaches to the study of political science, stressing contemporary developments in the field.

**POT 4025 AS-POLS 3(3,0)**
Ancient, Medieval and Early Modern Political Philosophy: Study of the development of political and social ideas in western thought from early Greece through the 17th century.

**POT 4054 AS-POLS 3(3,0)**
Modern Political Philosophy: 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).

**POT 4066 AS-POLS 3(3,0)**
Contemporary Political Theory: PR:
neuroanatomy as the foundation of
drug abuse and impact on mental health.
The physiological basis of behavior,
emphasizing the relationship between the
nervous system and behavior.

PSB 3002 AS-PSYCH 3(3,0)
Physiological Psychology: PR: PSY 2013. The
physiological basis of behavior, emphasizing the relationship between the
nervous system and behavior.

PSB 3441 AS-PSYCH 3(3,0)
Psychobiological Aspects of Drugs: PR: PSY 2013. An advanced course designed
for web instruction. Focuses on pharmacology, neurophysiology and
neuroanatomy as the foundation of understanding behavior and social
consequences of drug use.
Acceptance to Clinical Psychology Ph.D. program or C.I. An examination of modern American psychology from its origins in the late 19th century to the present time. This course is intended for the Ph.D. in Clinical Psychology; in certain instances graduate students in other programs may enroll.

PUP 3204 AS-POLS 3(3,0)
Environmental Politics: An examination of politics and policy-making concerning issues of conservation, pollution and development of land, air, and water resources.

PUP 3314 AS-POLS 3(3,0)
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.

PUP 3508 AS-POLS 3(3,0)
Space Studies: PR: Junior standing or C.I. Multidisciplinary overview of space studies, providing familiarity with some technical aspects as well as the relationship between technical and public policy considerations.

PUP 4003 AS-POLS 3(3,0)
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.

PUP 4323 AS-POLS 3(3,0)
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.

PUP 4503 AS-POLS 3(3,0)
Government and Science: PR: C.I. Examination of interface between science and government. Focus is upon governmental support for science, social accountability, and the role of the scientist-policy maker in comparative context.

PUP 4510 AS-POLS 3(3,0)
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.

PUP 4602 AS-POLS 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 4931 AS-POLS 3(3,0)
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.

PUR 3100 AS-COMM 3(2,1)
Writing for Public Relations: PR: Majors only, Grammar Proficiency Examination, and typing test. Development of skills in writing for public relations.

PUR 4000 AS-COMM 3(3,0)
Public Relations: Principles and practice of Public Relations including techniques, research tools publicity, and management.

PUR 4110 AS-COMM 3(1,3)
Public Relations Publications: PR: PUR 4000, PUR 3100. Provides basic principles and techniques of desktop production of public relations publications.

PUR 4800 AS-COMM 3(3,0)
Public Relations Campaigns: PR: Majors only, PUR 4000 or C.I. Planning and execution of public relations campaigns for profit and non-profit organizations.

PUR 4801 AS-COMM 3(3,0)
Public Relations Case Studies: PR: PUR 4000 or C.I. Discussion and analysis of public relations cases highlighting the application of PR theory to advance organizational goals

RAT 3001 HPA-H&PT 3(3,0)

RAT 3241 HPA-H&PT 3(3,0)
Clinical Radiobiology: Application of the principles and theories of radiobiology to the clinical practice of radiation therapy.

RAT 3242 HPA-H&PT 2(2,0)
Oncologic Pathology: PR: Acceptance to program. Study of neoplastic diseases, including causative factors, characteristics, histologic grading, staging and treatment.

RAT 3614 HPA-H&PT 2(2,0)
Radiation Therapy Physics I: PR: Acceptance to program. Study of radiation production, properties, interactions, measurement, and protection.

RAT 4247 HPA-H&PT 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 4248 HPA-H&PT 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 4619C HPA-H&PT 4(3,3)
Radiation Therapy Physics III: PR: RAT 4618. Study of treatment planning principles and techniques, including multiple beam therapy, rotation therapy, arc therapy, and irregular field techniques.

RAT 4804L HPA-H&PT 5(2,0)
Clinical Education I: PR: RTE 3500, 3111, 3528, 3684, 3804, 3457, 3549, or C.I. Supervised clinical practice in patient care and orientation to radiation therapy simulation, and treatment planning and delivery procedures.

RAT 4814L HPA-H&PT 6(0,24)
Clinical Education II: PR: RAT 4804. Supervised clinical practice in patient care, education, simulation, treatment planning and delivery and utilization of treatment units.

RAT 4824L HPA-H&PT 6(0,24)

RED 3012 ED-IP 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 3310 ED-IP 3(3,0)
Emerging Literacy: PR: LAE 3504, Admission to program, or C.I. Investigates emergence of reading/writing processes during preschool, kindergarten, and early first grade years.

RED 4311 ED-IP 3(3,0)
Development of Literacy: PR: LAE 3504 and RED 3310. Methods for development of reading and writing process during primary (first-third) grades.
RED 4519 ED-IP 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-IP 3(3,0)

RED 5514 ED-IP 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-FIN 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. Not usable for credit by Finance majors.

REE 4103 BA-FIN 3(3,0)
Real Estate Appraisal and Valuation: PR: FIN 3403. Focus on the fundamentals of real estate valuation utilizing tools of financial and economic analysis.

REE 4204 BA-FIN 3(3,0)
Real Estate Finance: PR: FIN 3403. Focus on the fundamentals of real estate finance utilizing tools of financial and economic analysis.

REE 4303 BA-FIN 3(3,0)
Real Estate Investment Analysis: PR: FIN 3403. Focus on real estate decision-making in the private sector utilizing tools of financial and economic analysis.

REE 4433 BA-FIN 3(3,0)
Real Estate Law: PR: Junior standing. An analysis of real estate law with emphasis on Florida statutes and case law.

REL 2300 AS-PHIL 3(3,0)
World Religions: Basic features and historical background of Confucianism, Taoism, Hinduism, Buddhism, Judaism, Christianity, and Islam.

REL 3162 AS-PHIL 3(3,0)
Healing: Culture, Art and Praxis: PR: Junior standing. A theory of the culture-specific nature of illness, including soul loss, spirit intrusion and the medicalization of deviance.

RET 3026C HPA-H&PT 4(3,3)
Introduction to Respiratory Care: 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.

RET 3174 HPA-H&PT 3(3,0)
Pediatric Respiratory Care: PR: RET 3026. The study of childhood respiratory diseases, congenital problems, infections, metabolic disorders, and AIDS.

RET 3264C HPA-H&PT 3(2,3)
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.

RET 3483 HPA-H&PT 1(1,1)
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.

RET 3484C HPA-H&PT 4(3,3)

RET 3874 HPA-H&PT 5(1,16)

RET 3875 HPA-H&PT 8(1,24)
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.

RET 4034 HPA-H&PT 3(3,0)

RET 4244 HPA-H&PT 3(3,0)

RET 4284 HPA-H&PT 3(3,0)
Cardiopulmonary Diagnostics I: PR: RET 4244C. Non-invasive cardiac diagnostics, including echocardiography, nuclear cardiology, and stress testing.

RET 4285 HPA-H&PT 3(3,0)
Cardiopulmonary Diagnostics II: PR: RET 4244C and RET 4284C. Invasive cardiac diagnostic and therapeutic measures, including cardiac catheterization, PTCA, streptokinase use, and heart surgery.

RET 4414C HPA-H&PT 4(3,3)
Pulmonary Function Studies: PR: RET 3026C. Detailed procedures and tests to provide information for diagnosis of pulmonary disease. Lecture-laboratory.

RET 4441 HPA-H&PT 4(3,3)
Vascular Ultrasound: Study of application of ultrasound in the diagnosis of vascular diseases. Includes doppler and color flow doppler examination of arterial and venous systems.

RET 4443 HPA-H&PT 4(3,3)
Advanced Cardiac Ultrasound: PR: RET 4284 or C.I. Study of advanced applications of ultrasound in the diagnosis of cardiac abnormalities. Two-dimensional echo, conventional doppler, and color doppler covered.

RET 4503 HPA-H&PT 3(3,0)
Chest Medicine: PR: RET 3026. Disease states treated medically in conjunction with one or more modalities of respiratory therapy.

RET 4715 HPA-H&PT 3(3,0)

RET 4876 HPA-H&PT 8(1,24)

RET 4934 HPA-H&PT 2(2,0)
Selected Topics in Respiratory Therapy: PR: C.I. Current topics of adult critical care, as they apply to the advanced study of respiratory therapy.
quality evaluation of radiographic studies

Admission to the program. Positioning, equipment manipulation, and fundamental knowledge of radiographic digital image quality.

of the chest, abdomen, routine contrast

RTE 3513C HPA-H&PT 3(2,3)
Radiographic Procedures II: PR: RTE 3503C 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.

RTE 3684C HPA-H&PT 2(2,0)
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.

RTE 3804 HPA-H&PT 4(0,16)
Clinical Education I: PR: RTE 3111C or C.I. Supervised clinical practice in radiographic procedures, radiation protection, patient care, equipment.

RTE 4202 HPA-H&PT 3(3,0)
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.

RTE 4206 HPA-H&PT 3(3,0)
Leadership in Radiologic Sciences: PR: Senior level status in RS major or C.I. Study of the theories, principles and skills needed to function in a leadership position in Radiologic Sciences.

RTE 4209 HPA-H&PT 2(0,8)
Radiological Administrative Practice: A directed practice in the management of a radiology department, with application of theory and methodology.

RTE 4385 HPA-H&PT 1(1,0)
Radiobiology: PR: RTE 3367C. A study of the effects of ionizing radiation on biologic systems. The responses at the cellular and total organism level are investigated.

RTE 4473 HPA-H&PT 3(3,0)
Quality Improvement: PR: Registered technologist or Senior standing. The study of quality improvement and quality control from the perspective of radiology services.

RTE 4563 HPA-H&PT 2(2,0)
Special Radiographic Procedures: PR: RTE 3513C or C.I. Principles of nonvascular invasive procedures, including myelography, cholangiography, hysterosalpingography, and bronchography.

RTE 4573 HPA-H&PT 3(3,0)
Advanced Imaging Modalities: PR: RTE 3563 or C.I. A study of the physical principles and applications of computed tomography, digital imaging, interventional radiography, mammography, ultrasound, magnetic resonance imaging, and nuclear medicine.

RTE 4763 HPA-H&PT 3(3,0)
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.

RTE 4782 HPA-H&PT 2(2,0)
Pathophysiology: PR: C.I. The study of radiologic science in the diagnosis and treatment of disease.

RTE 4814L HPA-H&PT 5(0,20)
Clinical Education II: PR: RTE 3804. Supervised clinical practice in radiographic/fluoroscopic procedures with emphasis on examinations of the chest, abdomen, extremities and shoulder girdle.

RTE 4824L HPA-H&PT 6(0,24)
Clinical Education III: PR: RTE 4814. Supervised clinical practice in radiographic/fluoroscopic procedures with emphasis on examinations of the pelvis, thoracic cavity, vertebral column and portable and surgical radiography.

RTE 4834 HPA-H&PT 4(0,16)
Clinical Education IV: PR: RTE 4824. Supervised clinical practice in radiographic/fluoroscopic procedures with emphasis on examinations of the cranium, facial bones, and special procedures.

RTE 4844 HPA-H&PT 4(0,16)
Clinical Education V: PR: RTE 4834. Supervised clinical practice in radiographic/fluoroscopic procedures with emphasis on surgical and special procedure examinations.

RTE 4854 HPA-H&PT 2(0,8)
Advanced Clinical Practicum: PR: RTE 4824. Supervised clinical experience and/or practice in computed tomography, interventional, vascular, and magnetic resonances imaging.

RTE 4903 HPA-H&PT 2(0,8)
Directed Study in Radiologic Education: PR: EVT 3371 or EDG 4323 or C.I. Directed activity in classroom instruction in radiologic technology.

RTV 3000 AS-R/TV 3(3,0)
Foundations of Broadcasting: Nature of
the media, the mechanics of operation, history, economics, programming, and internal and external control.

**RTV 3200 AS-R/TV 3(3,0)**
Production Fundamentals and Aesthetics of Electronic Media: PR: RTV 3000 or C.I. Technical and creative concepts of analog and digital electronic media production for radio, television, and multimedia delivery systems.

**RTV 3210 AS-R/TV 4(1,3)**
Radio Production: PR: Majors only, 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 AS-R/TV 3(2,1)**
Lighting for Video: PR: Majors only, RTV 3200. Basic lighting techniques for both studio and location, single and multiple-camera video production.

**RTV 3231C AS-R/TV 4(1,3)**
Broadcast Announcing and Performance: PR: RTV Majors only, RTV 3210 or RTV 3220 or RTV 3260C or RTV 4270. Communication problems on camera and microphone. Development of performance skills in announcing, interviewing, narrating, and reporting.

**RTV 3260C AS-R/TV 4(4,3)**
Single Camera Video Production and Editing: PR: RTV 3200, RTV Major. Technical and aesthetic requirements of analog and digital single-camera video production and editing, including techniques for electronic news gathering (ENG) and electronic field production (EFP).

**RTV 3263C AS-R/TV 3(3,3)**
Advanced Video Post-Production: PR: RTV 3260C, RTV Major. Advanced post-production techniques for analog and digital video, including A/B roll time code editing, digital video effects, electronic graphics, and non-linear video editing systems.

**RTV 3280C AS-R/TV 3(3,1)**

**RTV 3301 AS-R/TV 3(3,0)**

**RTV 3304 AS-R/TV 3(3,0)**
Electronic Journalism II: PR: RTV 3301, RTV 3260C, and RTV Major. Newswriting and newsgathering strategies learned in RTV 3301 are integrated into a newsgathering context for actual production of analog and digital radio and television news packages.

**RTV 3501 AS-R/TV 3(1,2)**
Broadcast Copywriting: PR: RTV Majors only, Grammar Proficiency Examination and School Typing Exam. Preparation of written public service and commercial copy for radio and television.

**RTV 3810 AS-R/TV 3(2,1)**
Broadcast Promotion: PR: RTV Majors only, 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 AS-R/TV 1(0,3)**
Television Practicum: PR: RTV Majors only, RTV 3200 and C.I. Primarily an activity course. Student will serve in some position of responsibility for UCF News or other TV activity. Can be repeated.

**RTV 4206 AS-R/TV 4(1,3)**
Television Directing: PR: RTV Majors only, RTV 3200 and RTV 3260C. Preparation and direction of programs, with emphasis on dramatic values of composition.

**RTV 4270 AS-R/TV 3(2,1)**
Radio Production and Programming: PR: RTV Majors only, RTV 3200 or C.I. The study and production of current radio formats and their effects on today's radio listener.

**RTV 4320C AS-R/TV 3(1,3)**
Television News: PR: RTV Majors only, RTV 3200 or C.I. Practical application of TV news theory.

**RTV 4403 AS-R/TV 3(3,0)**
Radio, Television and Society: PR: RTV Majors only, RTV 3000. A study of the impact of electronic media upon the habits, customs, and thinking of our times. Considerations of internal media problems.

**RTV 4503 AS-R/TV 3(3,0)**
Sports Programming on Broadcast and Cable: PR: RTV 3000 or C.I. An examination of the factors that determine how sporting events are constructed for programming on broadcast stations and cable systems.

**RTV 4505 AS-R/TV 3(1,1)**
Program Issues for TV & Motion Pictures: PR: RTV 3000 or FIL 3400. An examination of program development theories, strategies and issues in the television and motion picture industries.

**RTV 4700 AS-R/TV 3(3,0)**
Regulation of Broadcasting: PR: RTV Majors only, RTV 3000. Federal, state, local and self-regulatory agencies and practices which govern electronic media.

**RTV 4800 AS-R/TV 3(3,0)**
Broadcast Management: PR: RTV Majors only, RTV 4700. Examination of broadcast management problems in station operations at local, regional, and national levels.

**RUS 1120 AS-LANG 4(4,1)**
Elementary Russian Language and Civilization I: Introduces the student to Russian culture through the major language skills: listening, speaking, reading and writing. Open only to students with no experience in this language.

**RUS 1121 AS-LANG 4(4,1)**
Elementary Russian Language and Civilization II: PR: RUS 1120 or equivalent. Continuation of RUS 1120.

**RUS 2210 AS-LANG 3(3,0)**
Intensive Russian Conversation: PR: One year of Russian or equivalent. Practical use of the language, leading toward fluency and correctness in speaking.

**RUS 2230 AS-LANG 3(3,1)**
Intermediate Russian Language and Civilization I: PR: RUS 1121 or equivalent. Development of language skills and cultural knowledge at the intermediate level.

**RUS 2231 AS-LANG 3(3,1)**
Intermediate Russian Language and Civilization II: PR: RUS 2230 or equivalent. Continuation of RUS 2230, with emphasis on Russian civilization.

**RUS 3240 AS-LANG 3(3,0)**
Russian Conversation: PR: RUS 2231 or equivalent. Development of skills in conversation and comprehension through practice.

**RUS 3500 AS-LANG 3(3,0)**
Russian Culture: PR: RUS 1120 or C.I. Introduction to the main epochs and events in the history of Russian culture with...
particular emphasis on customs, traditions, and the arts.

RUS 3760  AS-LANG  3(3,0)
Advanced Russian Oral Communication: PR: RUS 2231 or equivalent. Vocabulary building with systematic training in diction and location. Speeches and oral presentations as well as production and delivery of real-life dialogues.

SCE 3310  ED-IP  3(3,0)
Teaching Science in Elementary School: PR: Junior standing or C.I. Selected concepts; organizing for instruction; techniques; evaluation procedures.

SCE 4023  ED-IP  3(3,0)
Teaching Science and Technology to Young Children: Provides the knowledge and skills needed to plan and implement a discovery science/design technology program for young children in an integrated, interactive curriculum.

SCE 4360  ED-IP  4(3,2)
Science Instructional Analysis: PR: EDG 4323 or C.I. Course objectives for a school curriculum and methods and materials for the middle grades and high school.

SCE 5716  ED-IP  3(3,0)

SCE 5825  ED-IP  3(3,0)
Space Science for Educators: PR: Senior standing or C.I. Introduction to space science, manned space flight, and space education curriculum.

SLS 1501  ED-IP  3(2,1)
Strategies for Success in College: This course is designed to address the development of life-skills necessary for the contemporary student to appropriately adjust to college requirements that lead to self-mastery and the total concept of lifetime wellness.

SLS 2311  HPA-M&M  1(0,2)
Overview of Select Medical Careers: An overview of the pre-health professions process for careers in medicine, dentistry, veterinary medicine, optometry, pharmacy, podiatry, and chiropractic. Graded "S" or "U."

SOP 2772  AS-PSYCH  3(3,0)

SOP 3004  AS-PSYCH  3(3,0)

SOP 3723  AS-PSYCH  3(3,0)
Cross Cultural Psychology: PR: PSY 2013. Exploration of theories, issues, and research concerned with the psychological understanding of under-represented minority groups.

SOP 3724  AS-PSYCH  3(3,0)
The Psychology of Racial Prejudice: 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.

SOP 3742  AS-PSYCH  3(3,0)
Psychology of Women: PR: PSY 2013. Examination of the psychological impact of changing sex roles on women in modern society. Topics include child rearing, working women, and sex differences in personality and cognition.

SOP 3784  AS-PSYCH  3(3,0)
Psychology of Diversity: PR: PSY 2013. A review of the contributions of psychology to the understanding of human diversity related to ethnic background, gender, sexuality, and belief systems.

SOP 5059  AS-PSYCH  3(3,0)
Advanced Social Psychology: PR: SOP 3004 and graduate status, or C.I. The major findings and theories in social psychology including an in-depth review of relevant research.

SOW 3104  HPA-SOWK  3(3,0)

SOW 3111  HPA-SOWK  3(3,0)

SOW 3203  HPA-SOWK  3(3,0)
Social Welfare and Community Resources: Study of social welfare, programs and services, including forces affecting changes in societal responses to human needs. Open to non-majors and pending social work majors.

SOW 3300  HPA-SOWK  3(2,1)
Practice I: Generalist Practice in Social Work: Study of social work functions, knowledge, values, and skills. Development of ability to use a generalist model of practice.

SOW 3352  HPA-SOWK  3(1,2)
Practice II: Interpersonal Skills in Social Work: PR or CR: SOW 3300. Study and practice of interviewing, group leadership, written communication, and oral presentations, in consensual as well as conflictual contexts of social work.

SOW 3401  HPA-SOWK  3(3,0)
Social Work Research: PR: CGS 1060C. Study of quantitative and qualitative methods of building knowledge for social work and the ethical use of research in professional practice.

SOW 3420  HPA-SOWK  3(2,1)
Social Work with Minorities: PR: SOW 3300, SOW 3203, and SOW 3104. Study of oppressed groups and relevant social work interventions; skill development in work with, and in behalf of, people of minority groups.

SOW 4232  HPA-SOWK  3(3,0)

SOW 4341  HPA-SOWK  3(1,2)
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.

SOW 4343  HPA-SOWK  3(1,2)
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.

SOW 4431  HPA-SOWK  3(2,1)
Evaluating Social Work Practice and Service Programs: PR: SOW 3401, SOW 3300. The study of systematic data collection and of measurement of change in individuals, families, groups, programs, and communities.
Diverse Client Populations:

- Study of societal responses to human needs, forces shaping social welfare systems; introduces frameworks for analyzing social policies and services

- Social Work Practice: Social Work Practice I: Generalist Practice: Study of social work functions, knowledge, values, roles and skills; the use of a generalist model of practice.

- Social Work Practice II: Intervention Approaches: Study of selected social work theories, strategies, and techniques for helping people and improving system responsiveness to human needs.

- Studies in Urban Social Work Practice: Analysis of one or more urban practice issues and approaches. May be repeated for credit.

- Clinical Supervision: Supervisory theory and practice in clinical settings.

- Social Work Research: Study of group research designs in social work; quantitative analyses; and related ethical issues.

- Evaluating Social Work: Study of single case designs in social work; recording methods; behavioral and standardized measures; applications to individuals, families, groups, programs, communities.

- Field Education I: Generalist Practice: CR: SOW 5305. Supervised practice of social work in an agency for 224 clock hours.

- Field Education II: Generalist Practice II: Continuation of SOW 5302 Generalist Field Education I in the same field agency for 224 clock hours.

- Generalist field Education II: CR: SOW 5306. Continuation of SOW 5302 Generalist Field Education I in the same field agency for 224 clock hours.

- Social Work Practice in Mexican Culture: CR: C.I. The practice of social work in Mexican culture through cultural immersion, seminars, field visits and language instruction.

- Social Work with Women: Alternative approaches to the treatment of women in the urban setting.

- Child Abuse: Treatment and Prevention:

The social worker's role and interventions with victims of child abuse and their family members.

- Strategies in Employee Assistance Programs: Techniques for establishing, providing, and evaluating services to people with problems which affect job performance.

- Interventions with Substance Abusers: Strategies for working with persons who abuse drugs, alcohol, and other substances.


- Introduction to Communicative Disorders: Etiology, symptoms, and methods of diagnosing and treating communicative disorders. For beginning and prospective majors in communicative disorders.

- Introduction to Communicative Disorders: Etiology, symptoms, and methods of diagnosing and treating communicative disorders. For beginning and prospective majors in communicative disorders.

- Clinical Observation: CR: SPA 3550. Observe a variety of cases in speech pathology and audiology in the university clinic over a semester for a total of 25 hours.

- An introduction to the anatomical, physiological, and physical elements underlying the communication process.

- Physiological Bases of Speech and Hearing: CR: 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. Students will have practical experiences in transcription of normal and deviant speech.

Students obtain experience analyzing live, videotaped diagnosis and therapy sessions.

SPA 3621 HPA-COMD 3(3,0) Introduction to Signed English and Culture of the Deaf: Vocabulary and grammar through introductory level. Conceptual basis of ASL discussed.

SPA 4011 HPA-COMD 3(3,0) Fundamentals of Speech and Hearing Science: Lectures and demonstrations in basic acoustics and speech acoustics. Measurement of sound level and resonance. Discussion of vocal frequency, speech duration and intensity, spectrographic analysis, wave composition, speech recognition, and voice quality.

SPA 4032 HPA-COMD 3(3,0) 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.


SPA 4251L HPA-COMD 1(0,2) Organic Speech Disorders Laboratory: Students will have practical experience in observations of organic speech disorders.

SPA 4310 HPA-COMD 3(3,0) Audiology II: PR: SPA 4032. An overview of medical aspects of hearing loss, electrophysiological audiometry, and other differential diagnostic testing.


SPA 4554 HPA-COMD 3(3,0) Therapeutic Communication: Practical interviewing and counseling in the area of communicative disorders.

SPA 4557 HPA-COMD 3(3,0) Augmentative Communication Systems: PR: LIN 3710, SPA 4032. Students will learn the rudiments of nonverbal communication systems, for example, Bliss, Rebus, Manual Singing, Language Boards, and finger spelling.

SPA 4612 HPA-COMD 3(3,0) Introduction to American Sign Language: Development of ASL vocabulary and grammar. Deaf culture, literature, research examined.

SPA 4613 HPA-COMD 3(3,0) Intermediate American Sign Language: Expansion of ASL vocabulary with increased development of knowledge concerning deaf culture.


SPA 4941 HPA-COMD 1(1,1) Practicum in Communicative Disorders: PR: SPA 4032; Graduate status or C.I. Students will have practical experience in diagnosis and treatment of articulation disorders.

SPA 5120 HPA-COMD 4(4,3) Physiological Acoustics: PR: SPA 4032; Graduate status or C.I. Lectures, readings, and experiments pertaining to the subjective reception of sound.

SPA 5225 HPA-COMD 3(3,0) 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.

SPA 5225L HPA-COMD 1(0,2) Fluency Disorders Laboratory: PR: Graduate status or C.I. Practical application of clinical skills in fluency disorders.

SPA 5236 HPA-COMD 3(3,0) Speech Problems in Adults: Motor Speech Disorders: PR: Graduate status or C.I., SPA 4251. A study of dysarthrias, apraxias, and other motor speech disorders in adults associated with neurological problems, brain injury, systemic disease and aging.

SPA 5307 HPA-COMD 3(3,0) Differential Diagnosis of Auditory Disorders: PR: SPA 4032; Graduate status or C.I. Clinical techniques in pure tone speech, acoustic impedance, and electrophysiologic response audiometry.

SPA 5327 HPA-COMD 4(4,0) 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.

SPA 5404 HPA-COMD 3(3,0) Language Disorders: Preschool: PR: Graduate status or C.I., LIN 4710C, SPA 4400C. Graduate students will apply their knowledge of the normal processes of language development to the diagnosis and intervention of communicative impairments of infants and toddlers.

SPA 5553L HPA-COMD 1(0,4) Differential Diagnosis in Speech and Language Laboratory: PR: SPA 6204, SPA 6403, SPA 6211, SPA 5805. Students will be assigned to diagnostic teams in which they will apply the techniques presented in SPA 5553. Experiences will include test administration, interviewing, writing of diagnostic reports, and oral presentations with staffings.

SPA 5570 HPA-COMD 3(3,0) 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.

SPA 5805 HPA-COMD 3(3,0) 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.

SPC 1016 AS-COMM 3(3,0) Oral Communication for the Engineering and Technical Professions: The preparation and presentation of complex technical data in public speaking situations.

SPC 1600C AS-COMM 3(1,2) Fundamentals of Oral Communication: Use of the body and voice; participation in various speaking situations; planning, organizing, and delivering public speeches.

SPC 1600H AS-COMM 3(3,0) Honors Fundamentals of Oral Communication: PR: University Honors
Program. Same as SPC 1600C with honors-level content.

SPC 3301 AS-COMM 3(1,2) 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.

SPC 3425 AS-COMM 3(2,1) 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.

SPC 3445 AS-COMM 3(3,0) Leadership Through Oral Communication: PR: COM 3120. A theoretical and practical investigation of leadership in oral communication situations, principles of parliamentary law, and approaches to problem solving.

SPC 3513 AS-COMM 3(1,2) Argumentation and Debate: PR: SPC 1600C or C.I. Study and practice in the preparation and delivery of argumentative speeches emphasizing argument, evidence, and organization.

SPC 3602 AS-COMM 3(1,2) Advanced Public Speaking: PR: SPC 1600C or C.I. Advanced training in selecting and organizing materials for various types of speeches. Practice in thinking and speaking before audiences.

SPC 4331 AS-COMM 3(3,0) 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.

SPC 4350 AS-COMM 3(3,0) 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.

SPC 4426 AS-COMM 3(3,0) Group Dynamics: PR: SPC 3425. A study of human behavior in group situations.

SPC 4540 AS-COMM 3(3,0) Attitudes and Communication: A survey of the immediate and direct ways in which persuasive communications and social groups come to influence attitudes.

SPC 5200 AS-COMM 3(3,0) 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.

SPN 1120 AS-LANG 4(4,1) Elementary Spanish Language and Civilization I: Introduces the student to Spanish culture through the major language skills: listening, speaking, reading and writing. Open only to students with no experience in this language.

SPN 1121 AS-LANG 4(4,1) Elementary Spanish Language and Civilization II: PR: SPN 1120 or equivalent. Continuation of SPN 1120.

SPN 1130H AS-LANG 4(4,1) Honors Elementary Spanish Language and Civilization I: Introduces the student to Spanish culture through the major language skills: listening, speaking, reading and writing. Open only to students with no experience in this language. Honors-level content.

SPN 1131H AS-LANG 4(4,1) Honors Elementary Spanish Language and Civilization II: PR: SPN 1120H or equivalent. Same as SPN 1121 with honors-level content.

SPN 1170 AS-LANG 8(3,10) Elementary Spanish Study Abroad: Elementary Spanish language and civilization taught in the native environment.

SPN 2140 AS-LANG 3(3,0) Business Spanish I: PR: SPN 2211 or equivalent. Emphasis on communicative skills in a professional setting. (Does not fulfill University foreign language requirement.)

SPN 2211 AS-LANG 3(1,1) Intermediate Spanish Language and Civilization I: PR: SPN 1121 or equivalent. Development of language skills and cultural knowledge at the intermediate level.

SPN 2213 AS-LANG 3(3,1) Intermediate Spanish Language and Civilization II: PR: SPN 2220 or equivalent. Continuation of SPN 2213 with emphasis on Spanish civilization.

SPN 2240 AS-LANG 3(3,1) Intensive Spanish Conversation: PR: One year of Spanish or equivalent. Practical use of the language, leading toward fluency and correctness in speaking at the intermediate level.

SPN 2241 AS-LANG 3(3,0) Spanish Conversation: PR: SPN 2221 or equivalent. Development of skills in conversation and comprehension through practice.

SPN 2340 AS-LANG 3(3,0) Spanish for Native Speakers: PR: Must be a native speaker. Intensive Spanish for native speakers who have had little or no formal training in the language.

SPN 2511 AS-LANG 3(3,0) Modern Spanish Civilization Abroad: PR: SPN 1120 & 1121. This intensive course will focus on modern Spanish culture using examples from present day society. Cultural visits and realia are essential components of this course.

SPN 3141 AS-LANG 3(3,0) Business Spanish II: PR: C.I. Continuation of Business Spanish I.

SPN 3142 AS-LANG 3(3,0) Business Spanish III: PR: C.I. Continuation of Business Spanish II.

SPN 3300 AS-LANG 3(3,0) Advanced Spanish Grammar and Composition: PR: SPN 2231 or equivalent. Advanced Spanish grammatical topics, idiomatic expressions, and continued development of writing skills based on the newly acquired concepts.

SPN 3341 AS-LANG 3(3,0) Advanced Spanish for Native Speakers: PR: SPN 2340 or C.I. This course is the continuation of SPN 2340 geared towards native speakers and will complete the remaining grammatical topics as well as emphasize composition skills.

SPN 3343 AS-LANG 3(3,0) Advanced Rhetoric for Native Speakers: PR: Third year level oral proficiency. Systematic study of Spanish grammar as applied to rhetoric in standard Spanish for native speakers only.

SPN 3402 AS-LANG 3(3,0) Practice in Modern Spanish Grammar: PR: SPN 2241 or 3420. This intensive Spanish course will provide the advanced student with practice and drill in modern Spanish using native texts.
SPN 3420 AS-LANG 3(3,0)
Spanish Composition: PR: SPN 2231 or equivalent. Development of skills in composition.

SPN 3512 AS-LANG 3(3,0)
Contemporary Spanish Culture Abroad: PR: SPN 3241 or 3420. This course will focus on contemporary Spanish culture presented through classroom lectures and discussions, assigned reading and scheduled activities.

SPN 3760 AS-LANG 3(3,0)
Advanced Spanish Oral Communication: PR: SPN 2231 or SPN 2240 or equivalent. Vocabulary building with systematic training in diction and pronunciation. Speeches and oral presentations as well as production and delivery of real-life dialogues.

SPN 3800 AS-LANG 3(3,0)
Spanish Translation and Interpretation: PR: Completion of 2000 level sequence or equivalent. Introduction to translation and interpretation, practical applications of theory applied to professional written and audio texts from Spanish to English and from English to Spanish.

SPN 3850 AS-LANG 3(3,0)
Structure of the Spanish Language: PR: SPN 3420. Linguistic theory applied to analysis of Spanish language. Includes systematic study of sound patterns, semantics, word formations, and socialization.

SPN 3852 AS-LANG 3(3,0)

SPN 3933 AS-LANG 1(1,0)
Spanish Across the Curriculum: PR: SPN 2231 or C.I. CR: concurrent enrollment in a designated course. Improvement of skills in Spanish within the student’s major or minor. Open to students in all colleges. May be repeated for credit.

SPN 4143 AS-LANG 3(3,0)
Business Spanish IV: PR: C.I. Advanced course in business terminology and development of advanced language skills.

SPN 4382 AS-LANG 3(3,0)
Central American Literature: PR: SPW 3131. This course familiarizes the student with literary works of prominent writers from Central America. It covers the different literary periods within Central America literary history. Taught in Spanish.

SPN 4410 AS-LANG 3(3,0)
Advanced Spanish Conversation: PR: SPN 2241. Advanced conversation on a wide variety of topics from various disciplines: literature, art, psychology, philosophy, music, business, and the sciences.

SPN 4421 AS-LANG 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 4510 AS-LANG 3(3,0)
Spanish Civilization and Culture: PR: SPN 2241 or SPN 3420. A study of Spanish civilization and culture from Pre-Roman times to the present. Conducted in Spanish.

SPN 4520 AS-LANG 3(3,0)
Latin American Civilization and Culture: PR: SPN 2241 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 4780 AS-LANG 3(3,0)
Spanish Phonetics: PR: SPN 2241 and SPN 3420. Students will learn the basic principles of Spanish pronunciation and perfect the correct pronunciation of Spanish through intensive practice and oral drill.

SPN 4800 AS-LANG 3(3,0)
Spanish-American Syntax: PR: SPN 2241 and SPN 3420 or C.I. 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.

SPN 4801 AS-LANG 3(3,0)
Spanish Morphosyntax: PR: SPN 3100 or 3101 or 3130 or 3131 or 3420. Emphasizes the structure as well as the capacity for recognizing the differences between semantics, morphology, syntax, and phonology in the Spanish language, as well as the use and correct application of criterion when analyzing texts. Taught in Spanish.

SPN 5502 AS-LANG 3(3,0)
Hispanic Culture of the United States: PR: Graduate Standing or C.I. An analysis of the Hispanic culture of the United States, past and present.

SPN 5505 AS-LANG 3(3,0)
Spanish Peninsular Culture and Civilization: PR: Graduate Standing or C.I. An analysis of the salient characteristics of Spanish culture and civilization.

SPN 5506 AS-LANG 3(3,0)
Spanish American Culture and Civilization: PR: Graduate Standing or C.I. An analysis of the salient characteristics of Spanish American culture and civilization.

SPN 5705 AS-LANG 3(3,0)
Introduction to Spanish Linguistics: PR: Graduate Standing or C.I. An introduction to main concepts and methods of analyses focusing on Spanish morphology, syntax, semantics, and phonology as well as dialectology and sociolinguistics.

SPN 5825 AS-LANG 3(3,0)
Spanish Dialectology: PR: Graduate Standing or C.I. This course is a survey of the diversity found within the Spanish language with respect to phonological constraints, morphosyntax, second language influences, and historical development.

SPN 5845 AS-LANG 3(3,0)
History of the Spanish Language: PR: Graduate Standing or C.I. An overview of linguistic characteristics of Latin and its evolution into Spanish with historical development of phonetic, morphological, and syntactic properties.

SPN 5920 AS-LANG 3(3,0)
AP Spanish Language: Participants will enhance their knowledge of the language and culture of Spanish-speaking peoples and develop further proficiency in listening, comprehension, speaking, reading, and writing.

SPT 3809 AS-LANG 3(3,0)
Medical Spanish Translation/Interpretation: PR: SPN 2241 and SPN 3420. The basic Spanish terminology, techniques and ethics in the field of medical translation and interpretation.

SPT 3831 AS-LANG 3(3,0)
Spanish Legal Translation and Interpretation: PR: SPN 3420 and SPN 3421. The terminology, procedures and ethics required to be a Spanish language court interpreter and translator in the legal field. May be repeated for credit.

SPW 3000H AS-LANG 3(3,0)
Nobel Prize Literature: Spain and Latin America: PR: Honors, Junior standing or C.I. Students will analyze, discuss and research English translations of Spanish
and Latin American Nobel-Prize-Winning
writers. Through readings, students will
explore the universality of Spanish
literature.

SPW 3100  AS-LANG  3(3,0)
Survey of Spanish Literature I: PR: SPN
2231 or equivalent. Major literary currents
and works from the Middle Ages through
the Eighteenth century.

SPW 3101  AS-LANG  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-LANG  3(3,0)
Survey of Latin-American Literature I:
PR: SPN 2231 or equivalent. Main literary
currents and works from the colonial period
to Nineteenth Century Romanticism.

SPW 3131  AS-LANG  3(3,0)
Survey of Latin-American Literature II:
PR: SPN 2231 or equivalent. Main literary
currents and works of the Nineteenth
century from Realism to the present.

SPW 3320  AS-LANG  3(3,0)
Modern Hispanic Theatre Workshop I:
PR: C.I. Introduction to fundamental actor's
technique and practice in Spanish. Short
scenes will be performed in class.

SPW 3321  AS-LANG  3(3,0)
Modern Hispanic Theatre Workshop II:
PR: SPW 3320. Participation in a theatre
production of a play in Spanish. Open to
majors in Spanish, Theatre and any
technical performance.

SPW 3370  AS-LANG  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 4272  AS-LANG  3(3,0)
20th Century Spanish Novel: PR: SPN
3101 or 3131. Major works by the leading
authors of the 20th century. Texts selected
are studied not only for their aesthetic
value, but also in terms of their historical
and cultural significance.

SPW 4310  AS-LANG  3(3,0)
Golden Age Drama: PR: SPW 3100. A
study of the drama of the Golden Age, with
special emphasis on Lope, Tirso, Alarcon,
and Calderon. The controversies of the
Spanish theatre and its influence abroad are
examined.

SPW 4322  AS-LANG  3(3,0)
Contemporary Iberian Theatre: PR:
SPW 3101 or CI. A study of the major
playwrights and tendencies in
contemporary Iberian theatre.

SPW 4364  AS-LANG  3(3,0)
Latin-American Narrative/Essay: PR:
SPW 3100 or SPW 3130 or SPW 3370 or
SPW 3310 or SPW 3370. Study of Latin-American
fiction/essay (changing topics by
semester) with emphasis in 20th century
texts, contrasting techniques, procedures,
and literary theories. Course could be
repeated for credit when topic changes.

SPW 4381  AS-LANG  3(3,0)
Latin-American Theatre/Poetry: PR:
SPW 3100 or SPW 3101 or SPW 3130 or
SPW 3131 or SPW 3370. Study of
Latin-American theatre/poetry (changing
topics by semester) with emphasis in 20th
century texts, contrasting techniques,
procedures, and literary theories. Course
could be repeated for credit when topic
changes.

SPW 4450  AS-LANG  3(3,0)
Spanish Literary Theory: PR: SPN 3420
or equivalent. A study of textual criticism
with emphasis in the theory of genre.

SPW 4460  AS-LANG  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 4600  AS-LANG  3(3,0)

SPW 4720  AS-LANG  3(3,0)
A study of the generation's main authors
and their works.

SPW 4730  AS-LANG  3(3,0)
Hispanic Literature of the United States:
PR: SPN 2241 and SPN 3420. Reading and
study of outstanding works written by
Hispanic writers of the United States.

SPW 4770  AS-LANG  3(3,0)
Caribbean Spanish Literature: PR: SPN
2241 and SPN 3420 or CI. An overview of
the literature of the Spanish-speaking
Caribbean countries from colonial times to
the present.

SPW 4772  AS-LANG  3(3,0)
Black Presence in Contemporary Latin
American Literature: PR: SPN 3341 or
CI. Analysis and discussion of
representative contemporary work of
authors who have included the black
character as part of their narrative.

SPW 5805  AS-LANG  3(3,0)
Spanish Graduate Studies Research: PR:
Graduate student in Spanish M.A. program.
The tools needed for research in Spanish
linguistics, literary criticism, and culture
are taught along with historical and
contemporary literary criticism.

SPW 5825  AS-LANG  3(3,0)
Literary Theory Pro-Seminar: PR:
Graduate Standing or C.I. A study of the
concepts and methods of literary criticism
as they apply to Spanish and Spanish
American literature. May be repeated for
credit.

SSE 3312  ED-IP  3(3,0)
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 4361  ED-IP  4(3,2)
Social Science Instructional Analysis:
PR: EDG 4323 or C.I. Study of
instructional programs in social sciences;
objectives; materials; techniques;
oraganization of instruction; evaluation
procedures; current research for the middle
grades and high school.

SSE 5115  ED-IP  3(3,0)
Methods in Elementary School Social
Science: PR: EDG 4323. Study of
instructional programs in social sciences;
objectives; materials; techniques;
current research; and their application in
elementary school setting.

STA 1060  AS-STAT  3(3,0)
Basic Statistics Using Microsoft Excel:
Applications of Excel: manipulating data;
single variable graphs and statistics;
scatterplots; probability distributions;
statistical inference.

STA 2014  AS-STAT  3(3,0)
Principles of Statistics: Introduction to
statistical concepts in modern society. Basic
principles, frequency distributions,
measures of location and dispersion,
probability, statistical inference. Course is
graded with an "A," "B," "C," "NC" and
"F."

STA 2023  AS-STAT  3(3,0)
Statistical Methods I: PR: MAC 1105 or
MGF 1203. First methods course
introducing probability and statistical
inference, including estimation, hypothesis
testing, binomial and normal distributions,
sample size.
STA 2023H AS-STAT 3(3,0)
Honors Statistical Methods I: PR: Honors Program Student; Calculus desired by not necessary. Same as STA 2023 with honors-level content.

STA 3032 EN-IEMS 3(3,0)
Probability and Statistics for Engineers: PR: MAC 2312 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.

STA 3096 AS-STAT 3(3,0)
Statistical Graphics: PR: STA 2023 or STA 3032 and a knowledge of a programming language. Principles of graph construction, graphical perception, graphical methods, computer programs for graph construction.

STA 4102 AS-STAT 3(3,0)
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.

STA 4163 AS-STAT 3(3,0)
Statistical Methods II: PR: STA 2023 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.

STA 4164 AS-STAT 3(3,0)
Statistical Methods III: PR: STA 4163. A continuation of STA 4163, including further study of regression, analysis of variance and covariance and multiple comparisons.

STA 4165 AS-STAT 4(4,0)
Statistical Methods II with Computer Emphasis: PR: STA 2023 or STA 3032. Methods for analyzing data, design of experiments nonparametric methods, categorical analysis, model building, covariance analysis, strong emphasis on use of a computer package.

STA 4173 AS-STAT 3(3,0)
Biostatistical Methods: CR: STA 4163. Introduction to the application of statistical principles and methods to problems in medical, biological, and health sciences.

STA 4222 AS-STAT 3(3,0)

STA 4321 AS-STAT 3(3,0)
Statistical Theory I: PR: STA 2023 or STA 3032; CR: MAC 2313. Probability axioms, discrete and continuous sample spaces, conditional probability, independence, one-dimensional random variables, moment generating functions, transformations, jointly distributed random variables.

STA 4322 AS-STAT 3(3,0)

STA 4502 AS-STAT 3(3,0)
Nonparametric Statistical Methods: PR: STA 2023 or STA 3032. Distribution-free tests on location and dispersion, goodness of fit tests, tests of independence, measures of association, nonparametric analysis of variance.

STA 4664 AS-STAT 3(3,0)
Statistical Quality Control: PR: STA 2023 or STA 3032. Statistical concepts and methods applied to the control of quality of manufactured products.

STA 4852 AS-STAT 3(3,0)

STA 5156 EN-IEMS 3(3,0)
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.

STA 5205 AS-STAT 3(3,0)
Experimental Design: PR: STA 4164, STA 5206 or STA 5156. Construction and analysis of designs for experimental investigations. Blocking, randomization, replication; Incomplete block designs; factorial and fractional designs; design resolution.

STA 5206 AS-STAT 3(3,0)
Statistical Analysis: PR: STA 2023; not open to students who have completed STA 4164. Data analysis; statistical models; estimation; tests or hypotheses; analysis of variance, covariance, and multiple comparisons; regression and nonparametric methods.

STA 5505 AS-STAT 3(3,0)
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.

STA 5825 AS-STAT 3(3,0)

STA 5940 AS-STAT 1(1,0)
Statistical Advice for Researchers: PR: C.I. Discussion of student-supplied statistical problem, data sources, sampling techniques, computer package usage, analysis, interpretation. May be repeated for credit.

SUR 2101C EN-CEE 3(2,3)
Surveying: PR: MAC 2311 and Junior standing. Theory and field practice in surveying measurements and the reduction and adjustment of field data.

SYA 3110 AS-SOC/AN 3(3,0)
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 AS-SOC/AN 3(3,0)
Modern Sociological Thought: PR: SYG 2000. A study of major European and American contributors to modern sociology since World War II.

SYA 3300 AS-SOC/AN 4(3,2)
Research Methods: PR: SYG 2000 and SYA 3400 (may be taken concurrently). Emphasis on types of sociological data collections, sampling techniques, grant proposal development, critical evaluation of social research, and relationship between theory and social research.

SYA 3400 AS-SOC/AN 4(3,1)
Research Methods and Statistics: PR: SYG 2000 and one other sociology course.
for standard General Sociology.

SYG 2010 AS-SOC/AN 3(3,0) Social Problems: Analysis of major social problems such as mental disorders, sexual deviance, racial discrimination, poverty, community disorganization, and violence.


SYO 3360 AS-SOC/AN 3(3,0) Social Organization and Human Relations: Analysis of business, government, and organizational life. Topics include organizational theory, social systems, social structure, effects of technology, motivation, leadership, decision-making, and human relations.

SYO 3410 AS-SOC/AN 3(3,0) Sociology of Mental Illness: A sociological examination of mental illness as a social problem; legal aspects of mental illness, and the mental health professions.

SYO 3510 AS-SOC/AN 3(3,0) Sociology of Deviant Behavior: PR: SYG 2000 or C.I. Sociological examination of the types of, and societal reactions to, deviant behavior with special emphasis on stigmatization.

SYO 3540 AS-SOC/AN 3(3,0) Sociology of Murder: PR: SYG 2000, junior standing, or C.I. An analytical study of murder in the U.S.; topics include different types of homicides, offenders, victims, and circumstances.

SYO 3550 AS-SOC/AN 3(3,0) Juvenile Delinquency: Types of delinquency behavior found among juveniles; possible causes and ways society attempts to treat the various forms of delinquency.

SYO 3560 AS-SOC/AN 3(3,0) Sociology of Alcoholism: Introduction to the nature of alcoholism and review of its impact on society.

SYO 4400 AS-SOC/AN 3(3,0) Sociology of Alcoholism: Introduction to the nature of alcoholism and review of its impact on society.

SYO 4400 AS-SOC/AN 3(3,0) 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.

SYP 3300 AS-SOC/AN 3(3,0) 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.


SYP 3511 AS-SOC/AN 3(3,0) Sociology of Murder: PR: SYG 2000, Junior standing, or C.I. An analytical study of murder in the U.S.; topics include different types of homicides, offenders, victims, and circumstances.

SYP 3520 AS-SOC/AN 3(3,0) 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.

SYP 3530 AS-SOC/AN 3(3,0) Juvenile Delinquency: Types of delinquency behavior found among juveniles; possible causes and ways society attempts to treat the various forms of delinquency.

SYP 3540 AS-SOC/AN 3(3,0) Sociology of Law: The relationship between law and society, including the functions of law and its organization, social and economic consequences, jury selection, and modern trends.

SYP 3551 AS-SOC/AN 3(3,0) Sociology of Alcoholism: Introduction to the nature of alcoholism and review of its impact on society.

SYP 3602 AS-SOC/AN 3(3,0) Sociology of Alcoholism: Introduction to the nature of alcoholism and review of its impact on society.

SYP 3620 AS-SOC/AN 3(3,0) Sociology of Alcoholism: Introduction to the nature of alcoholism and review of its impact on society.
SYP 3630 AS-SOC/AN 3(3,0)
Sociology of Popular Culture: PR: Junior Standing or C.I. Examines the relationship between contemporary popular culture and social institutions, collective identities, social change, gender, ethnicity and age.

SYP 3650 AS-SOC/AN 3(3,0)
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.

SYP 4000 AS-SOC/AN 3(3,0)

SYP 4323 AS-SOC/AN 3(3,0)
Social Systems and Diversity: PR: SYG 2000, junior standing. The formation of social systems in response to social problems and the implementation of public policy. Emphasis on diverse perspectives and ethical positions and their effect on the form and effectiveness of social systems.

SYP 4521 AS-SOC/AN 3(3,0)
Criminal Victimization in Society: PR: SYG 2000, Junior standing, or C.I. A study of crime victims in society; topics include issues related to victimology such as victimization risks and societal treatment of victims.

SYP 4536 AS-SOC/AN 3(3,0)
Gangs and Society: PR: SYG 2000, Junior Standing, or C.I. A study of gangs in the U.S.; topics include types of gangs, gang members, activities, group processes, and societal responses to gangs.

SYP 4550 AS-SOC/AN 3(3,0)

SYP 4730 AS-SOC/AN 3(3,0)
Sociology of Aging: Sociological aspects of aging in America.

SYP 4734 AS-SOC/AN 3(3,0)
Minority Aging: PR: SYG 2000 or SYD 3700 or SYP 4730 or C.I. A sociological examination of older populations within minorities: ethnic minorities, women, and gay men and lesbians.

SYP 4810 AS-SOC/AN 3(3,0)
Women in Contemporary Society: PR: SYG 2000 or WST 3010. Examination and evaluation of the status of women in the context of the major social institutions (e.g., family, education, religion, economy and polity.)

SYP 5526 AS-SOC/AN 3(3,0)
Sociological Criminology: PR: Graduate Standing or C.I. To examine current sociological knowledge and research on various issues in Criminology, and to further students' skills in developing/conducting research projects.

SYP 5562 AS-SOC/AN 3(3,0)
Seminar on Domestic Violence: Theory, Research and Social Policy: PR: Graduate status or C.I. A sociological examination and evaluation of theories, empirical research and social policy related to the study of domestic violence.

TAX 2000 BA-ACCT 3(3,0)
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.

TAX 4001 BA-ACCT 3(3,0)
Federal Income Tax I: PR: Junior standing and ACQ 3101 with a grade of "C" or better or C.I. Concepts and methods of determining taxable income of individuals, and selected topics.

TAX 5015 BA-ACCT 3(3,0)
Federal Income Tax II: PR: ACQ 3111, TAX 4001, and meet graduate school admission requirements. Concepts and methods of determining taxable income for partnerships and corporations, and selected topics.

THE 1020 AS-THEA 3(3,0)
Theatre Survey: Overview of the art and craft of the theatre. Restricted to non-majors.

THE 1020H AS-THEA 3(3,0)

THE 2000 AS-THEA 3(3,0)
Survey of Theatre: PR: Theatre major or departmental consent. Overview of the art and craft of theatre.

THE 2071C AS-FILM 3(2,2)
Cinema Survey: A broad cultural approach to the study of cinema.

THE 2090 AS-THEA 1(0,20)
Theatre Production/Performance I: PR: B.A. Theatre major or C.I. Non-majors require departmental permission. Participation in UCF Theatre productions.

THE 2091 AS-THEA 1(0,20)
Theatre Production/Performance II: PR: THE 2090, B.A. Theatre major or C.I. Participation in UCF Theatre productions. Required of all BA theatre majors. Not restricted to theatre majors, but requires departmental consent.

THE 2261 AS-THEA 3(3,0)
Technical Theatre Production: PR: THE 1020, Restricted to B.A. Theatre majors. The history, theory and practice of all areas of technical theatre production. Required of all BA theatre majors.

THE 2271 AS-THEA 3(3,0)
Performance Studies: PR: Restricted to B.A. Theatre majors. An overview of the techniques, theories, practices, and training of the acting profession from Greek to Modern Performance Art.

THE 3085 AS-THEA 3(3,0)
Theatre Careers-marketing yourself in the theatre: PR: B.F.A. Theatre majors, Junior standing. Career building. Knowledge, skills and techniques needed by students seeking Theatre careers. Topics include: contracts, unions, agents, networking, industry protocol, resumes/letters, photographs, auditions, portfolios, interviews.

THE 3092 AS-THEA 1(0,20)
Theatre Production/Performance III: PR: THE 2091, B.A. Theatre major or C.I. Participation in UCF Theatre productions. Required of all BA theatre majors. Not restricted to theatre majors, but requires departmental consent.

THE 3110 AS-THEA 3(3,0)
Theatre History I: PR: THE 1020 or THE 2000, and THE 3303 or TPP 3650, Theatre majors or departmental consent. The development of theatre arts from prehistory through the seventeenth century.

THE 3111 AS-THEA 3(3,0)
Theatre History II: PR: THE 3110, Theatre major or departmental consent. Theatre arts from the seventeenth century to the present.

THE 3230 AS-THEA 3(3,0)
Commonality within Cultural Diversity Experienced through Theater: PR: THE 1020. Through the study of dramatic literature, this course explores the commonality of human experience among various cultural groups.
THE 3243 AS-THEA 3(3,0)

THE 3303 AS-THEA 3(3,0)
Play Analysis: PR: Restricted to B.A. Theatre majors or departmental consent. A lecture course providing an overview of different elements found in the world of the play and the written text. Emphasis on theory and structure.

THE 3305 AS-THEA 3(3,0)

THE 3306 AS-THEA 3(3,0)
Dramatic Literature II: PR: THE 3305, Theatre major or departmental consent. Playscripts from Restoration to Mid-20th Century.

THE 4093 AS-THEA 1(0,20)
Theatre Production/Performance IV: PR: THE 4093 (Theater Prod/Perf III), B.A. Theatre major or C.I. Participation in UCF Theatre productions. Required of all BA theatre majors. Not restricted to theatre majors, but requires departmental consent.

THE 4094 AS-THEA 1(0,20)
Theatre Production/Performance V: PR: THE 4094 (Theater Prod/Perf IV), B.A. Theatre major or C.I. Participation in UCF Theatre productions. Required of all BA theatre majors. Not restricted to theatre majors, but requires departmental consent.

THE 4096 AS-THEA 1(0,20)
Theatre Production/Performance VI: PR: THE 4096, Theatre Major or C.I. Participation in UCF Theatre productions. Not restricted to Theatre majors but requires departmental consent.

THE 4097 AS-THEA 1(0,20)
Theatre Production/Performance VII: PR: THE 4097, Theatre Major or C.I. Participation in UCF Theatre productions. Not restricted to Theatre majors but requires departmental consent.

THE 4098 AS-THEA 1(0,20)
Theatre Production/Performance VIII: PR: THE 4098, Theatre Major or C.I. Participation in UCF Theatre productions.

THE 4307 AS-THEA 3(3,0)

THE 4372 AS-THEA 3(3,0)

TPA 2210 AS-THEA 3(3,6)

TPA 2211 AS-THEA 3(3,6)

TPA 2220 AS-THEA 3(2,2)
Stage Lighting: PR: TPA 2211. Restricted to B.F.A. Theatre majors or B.A. Theatre majors with Departmental consent. Study of basic electricity, optics, lighting equipment and control, and stage lighting techniques and practices. Service on a lighting crew as required. Required of all technical theatre/design majors.

TPA 2248C AS-THEA 2(2,2)

TPA 2290 AS-THEA 1(0,20)
Theatre Production/Performance I: PR: Not restricted to Theatre majors but requires Departmental consent. Participation in Theatre Production. Required of all B.F.A. technical theatre/design majors.

TPA 2291 AS-THEA 1(0,20)
Theatre Production/Performance II: PR: TPA 2290, open to non-Theatre majors with Departmental consent. Participation in Theatre Production. Required of all B.F.A. technical theatre/design majors.

TPA 3043C AS-THEA 3(3,1)
Costume History I: PR: THE 3110, Theatre major or departmental consent. Costume Fashion from ancient Egypt to the mid 17th century, including basic period silhouette, costume parts and accessories.

TPA 4097 AS-THEA 3(3,0)
Contemporary trends in plays and theatre production in the late 20th century.

TPA 3060 AS-THEA 3(2,2)
Scene Design I: PR: TPA 2211 and two semesters of art. Restricted to B.F.A. Theatre majors or B.A. Theatre majors with Departmental consent. Lecture/laboratory application of the fundamentals of design, composition, color theory, drafting, perspective drawing and rendering as they relate to scenic design. Required of all technical theatre/design majors.

TPA 3061 AS-THEA 3(2,2)
Scene Design II: PR: TPA 3060. Restricted to B.F.A. technical Theatre/design majors or Departmental consent. Continuation of TPA 3061. An intensive, practical scenic design course dealing with various theatrical styles, genres, multiple and simultaneous settings. Includes script analysis and project design work with an emphasis on visualization of design concepts through models and scenic renderings. Required of all B.F.A. technical theatre/design majors.

TPA 3077 AS-THEA 2(2,2)
Scene Painting: PR: TPA 2211. Restricted to B.F.A. technical Theatre design majors or Departmental consent. Study of the art and craft of painting for the theatre. Research into period designs and execution of examples selected from a variety of styles. Required of all B.F.A. technical theatre/design majors.

TPA 3197 AS-THEA 3(0,30)
Summer Theatre Studio/Tech/Design: PR: Departmental consent. Study, analysis, and execution of technical/design aspects for playscripts produced on UCF mainstage.

TPA 3208 AS-THEA 2(2,2)
Theatre Drafting: PR: TPA 2210. The fundamentals of hand drafting in theatre design and production.

TPA 3216C AS-THEA 3(3,4)
Stagecraft III: PR: TPA 2211, BFA Design/tech or Stage Management major. A continuation of TPA 2211 with emphasis on special projects.

TPA 3221 AS-THEA 3(2,2)
Lighting Design: PR: TPA 2220. Restricted to B.F.A. Theatre majors or B.A. Theatre majors with Departmental consent. Continuation of Stage TPA 2220. Lecture/laboratory with emphasis on lighting design theory, style and individual lighting design projects. Required of all
B.F.A. technical theatre/design majors.

TPA 3230 AS-THEA 3(2,2)
Costume Construction: PR: TPA 2210. Restricted to B.F.A. Theatre majors or B.A. Theatre majors with Departmental consent. Lecture/laboratory study of the basic techniques used in the drafting, cutting, fitting, and construction of stage costumes. Required of all technical theatre/design majors.

TPA 3249 AS-THEA 2(2,2)
Advanced Makeup Techniques: PR: TPP 2248. Restricted to B.F.A. Theatre majors or B.A. Theatre majors with Departmental consent. Lecture/laboratory study of basic techniques needed for the creation of stage and film prosthetics and masks.

TPA 3250 AS-THEA 2(2,0)
CADD for Theatre: PR: TPA 2210, TPA 3060. Restricted to B.F.A. Theatre majors or Departmental consent. Projects oriented course covering fundamental material in computer aided drafting and design and its application for Theatre. Required of all technical theatre/design majors.

TPA 3251 AS-THEA 2(2,0)
Advanced CADD for Theatre: PR: TPA 3250. Restricted to B.F.A. Theatre majors or Departmental consent. Continuation of TPA 3250 with special emphasis placed on 3-Dimensional aspects and applications of computer aided drafting and design for Theatre.

TPA 3260 AS-THEA 3(3,0)
Sound Design for the Theatre: PR: THE 1020, TPA 2204. Exploration of the aesthetic and technological aspects of sound as they relate to the art and craft of theatre.

TPA 3295 AS-THEA 3(0,30)
Theatre Studio/Tech/Design: PR: Junior standing, Theatre major or C.I. Study, analysis and execution of technical/design aspects for playscripts produced on UCF mainstage.

TPA 3601 AS-THEA 2(3,0)
Stage Management: PR: TPP 2110, THE 2300, TPA 2200, TPA 2204. Restricted to Theatre majors or departmental consent. Examination of the importance, function, and responsibilities of the stage manager prior to, during and after performance. Introduction to the fundamentals of stage management as related to Departmental productions as well as professional union requirements. Required of all B.F.A. Stage Management majors.

TPA 4041C AS-THEA 3(2,2)
Costume Design II: PR: TPA 3040. A continuation of Costume Design I. Costume Design including research, color, body types, and fabric to generate costume design sketches for theoretical play productions.

TPA 4049 AS-THEA 3(2,2)
Costume Design: PR: TPA 2211, 3043 and two semesters of art. Restricted to B.F.A. Theatre majors. Lecture/laboratory application of the fundamentals of design, composition, color theory, and figure drawing as they relate to costume design. Includes script/character analysis and project design work with an emphasis on visualization of design concepts and costume renderings. Required of all B.F.A. technical theatre/design majors.

TPA 4293 AS-THEA 1(0,20)

TPA 4294 AS-THEA 1(0,20)
Theatre Production/Performance IV: PR: TPA 4293, B.A. Theatre major or C.I. Participation in UCF Theatre productions. Required of all BA theatre majors. Not restricted to theatre majors, but requires departmental consent.

TPA 4295 AS-THEA 1(0,20)
Theatre Production/Performance V: PR: TPA 4294, B.A. Theatre major or C.I. Participation in UCF Theatre productions. Required of all BA theatre majors. Not restricted to theatre majors, but requires departmental consent.

TPA 4296 AS-THEA 1(0,20)
Theatre Production/Performance VI: PR: TPA 4295. Participation in UCF Theatre productions. Required of all B.F.A. Design/Tech and Stage Management majors, not restricted to Theatre majors but requires departmental consent.

TPA 4297 AS-THEA 1(0,20)
Theatre Production/Performance VII: PR: TPA 4296. Participation in UCF Theatre productions. Required of all B.F.A. Design/Tech and Stage Management majors, not restricted to Theatre majors but requires departmental consent.

TPA 4298 AS-THEA 1(0,20)
Theatre Production/Performance VIII: PR: TPA 4297. Participation in UCF Theatre productions. Required of all B.F.A. Design/Tech and Stage Management majors, not restricted to theatre majors, but requires departmental consent.

Theatre majors, not restricted to theatre majors, but requires departmental consent.

TPA 4400 AS-THEA 3(3,0)
Theatre Management: PR: TPA 2211. Restricted to theatre majors or Departmental consent. Study of the development, organization, management, funding, and promotion of theatre programs. Additional emphasis placed on management theory and style.

TPA 4602 AS-THEA 2(3,0)
Advanced Stage Management: PR: TPA 3601. Focus on the skills necessary for stage managers in the highly technical world of contemporary entertainment. Required of all B.F.A. Stage Management majors.

TPA 4940 AS-THEA 6(0,40)
Technical Theatre/Design Internship: PR: Restricted to B.F.A. technical Theatre/design majors. The internship is subject to Departmental approval. Off-campus internship programs provide opportunity for practical work in professional theatre. Contact the Departmental office for specific requirements.

TPP 1312 AS-THEA 3(2,15)
Workshop Studio Theatre: PR: TPP 3172C, TPP 2191, TPP 3310C, TPA 3601, and a 3.5 in TPP 4311. Exploring the various aspects of mounting a one-act play, including play analysis, research, staging techniques, and other areas of directing for advanced directors. May be repeated for credit.

TPP 2110 AS-THEA 3(3,0)

TPP 2170C AS-THEA 3(2,2)
Acting II - Fundamentals: PR: TPP 2100, DAA 2200, TPP 3650, THE 1020, TPP 2710 or MUT 1001, BFA Performance/Musical Theatre major. The basic techniques of acting, with emphasis on characterization and character development.

TPP 2185 AS-THEA 3(3,0)
Acting for Non-majors: Basic introduction to the fundamentals of acting with emphasis upon the development of imagination, self-awareness, sense, memory, improvisation, and the ability to execute basic stage tasks.
TPP 2190 AS-THEA 1(0,20)

TPP 2191 AS-THEA 1(0,20)

TPP 2710C AS-THEA 2(2,2)

TPP 3172C AS-THEA 3(2,2)

TPP 3192 AS-THEA 1(0,20)

TPP 3197 AS-THEA 3(0,30)
Summer Theatre/Performance: PR: Open to non-Theatre majors with departmental consent. Participation in UCF Summer Theatre Productions.

TPP 3223 AS-THEA 3(3,0)
Marketing yourself in theatre: PR: B.F.A. Theatre major, Junior standing. Exploration and assimilation of successful marketing techniques needed to secure employment in Theatre or related segments of the entertainment industry.

TPP 3250 AS-THEA 3(3,0)

TPP 3310C AS-THEA 3(2,2)
Directing I: PR: TPP 2261 or TPP 2211, THE 3111, THE 3306, Junior standing, Theatre major. Principles and techniques of play direction to include script selection, directorial analysis, casting, composition/picturization, blocking, tempo, and rehearsal planning.

TPP 3510C AS-THEA 2(2,2)

TPP 3511C AS-THEA 2(2,2)

TPP 3512C AS-THEA 2(2,2)

TPP 3650 AS-THEA 3(3,0)

TPP 3711C AS-THEA 2(2,2)

TPP 3712C AS-THEA 2(2,2)

TPP 3730C AS-THEA 2(2,2)
Voice Production IV: PR: TPP 3712, or TPP 4142C or TPP 3XXX (Musical Theatre Voice II), B.F.A. performance theatre majors. Continuation of Voice Production III; the analysis and sounds of foreign dialects and regional accents; study of stage voice for age and character roles.

TPP 3952 AS-THEA 3(0,30)
Studio Performance: PR: Junior standing or C.I. Not restricted to Theatre majors but requires department consent. Studio performance provides the specific application of the theatre artist's training to full scale theatre productions. May be repeated for credit.

TPP 4140C AS-THEA 3(2,2)

TPP 4142C AS-THEA 3(2,2)

TPP 4193 AS-THEA 1(0,20)

TPP 4194 AS-THEA 1(0,20)

TPP 4195 AS-THEA 1(0,20)

TPP 4196 AS-THEA 1(0,20)

TPP 4198 AS-THEA 1(0,20)

TPP 4265C AS-THEA 3(2,2)
Acting VI - Acting for TV/Film: PR: TPP 4142, TPP 4531C, TPP 3730C. Restricted to B.F.A. Theatre Performance majors. Lecture/laboratory study designed to expose the student to practical techniques.
of television and film acting. Extensive studio work.


TPP 4940 AS-THEA 6(0,40) Theatre Performance Internship: PR: Restricted to B.F.A. Theatre performance majors, the internship is subject to Departmental approval. Off-campus internship programs provide opportunity for practical work in professional theatre. Contact the Departmental office for specific requirements. Required of all B.F.A. theatre performance majors.

TSL 5141 AS-LANG 3(3,0) ESOL Strategies: This course will survey cross-cultural communication and understanding, testing and evaluation, curriculum and methods of teaching ESOL to meet the needs of limited English proficient students.

TSL 5345 ED-IP 3(3,0) Methods of ESOL Teaching: This course is designed to develop understanding, knowledge and skills of the current methods used in the teaching of ESOL.

TSL 5525 ED-IP 3(3,0) ESOL Cultural Diversity: This course is designed to identify major cultural groups represented by the LEP population in Florida schools and to understand their special needs.


TTE 4601C EN-CEE 3(2,2) Urban Systems Design: PR: TTE 4004. Project course on design of transportation and urban systems using engineering design methodologies.

TTE 5204 EN-CEE 3(3,0) Traffic Engineering: PR: TTE 4004. Study of operator and vehicle characteristics, and design for street capacity, signals, signs, and markings.


TTE 5700 EN-CEE 3(3,0) Railroad Engineering: PR: TTE 4004 and C.I. The major technical factors in location, construction, maintenance, and operation of railroad transportation systems.

TTE 5805 EN-CEE 3(3,0) Geometric Design of Transportation Systems: PR: TTE 4004. Study of geometric and construction design elements in the engineering of transportation systems.

TTE 5835 EN-CEE 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.

VIC 3001 AS-R/TV 3(3,0) Visual Communication: A study of the visual system of man and the influences of the visual media on modern society.

WOH 2012 AS-HIST 3(3,0) World Civilization I: A topical approach to the study of the rise and decline of world civilizations from the first attempts to the great civilizations of medieval times.

WOH 2012H AS-HIST 3(3,0) World Civilization I - Honors: PR: Honors Program. The rise and decline of world civilizations from antiquity to the great civilizations of medieval times. Honors content.

WOH 2022 AS-HIST 3(3,0) World Civilization II: Rise of modern civilization from 1500 to the present, with an emphasis on the confrontation between the Western and non-Western spheres of civilization.

WOH 2022H AS-HIST 3(3,0) World Civilization II - Honors: PR: Honors Program. Rise of modern civilization from 1500 to the present, with an emphasis on the confrontation between the Western and non-Western spheres of civilization. Honors content.

WST 3010 AS-WOM 3(3,0) Introduction to Women's Studies: PR: ENC 1102 or C.I. Interdisciplinary course introducing students to key issues and problems regarding women and gender relations in past and present societies.

WST 3930H AS-WOM 3(3,0) Honors Undergraduate Thesis I: PR: Honors Program.

WST 4902 AS-WOM 1(1,0) Researching Women and Gender: PR: WST 3010 or C.I. Introduces students to scholars and research in a variety of areas pertaining to the study of women and gender relations.

WST 4903H AS-WOM 3(3,0) Honors Directed Readings I: PR: Honors program.

WST 4904H AS-WOM 3(3,0) Honors Directed Readings II: PR: Honors Program.

WST 4970H AS-WOM 3(3,0) Honors Undergraduate Thesis II: PR: Honors Program.


ZOO 3701C HPA-M&M 2(1,2) Dissection Techniques: PR: ZOO 3733. A course designed to focus on select dissection techniques to aid students in the preparation of three-dimensional preparation material (specimens).


ZOO 4205C AS-BIOL 4(3,3)

ZOO 4310C AS-BIOL 4(2,6)
Vertebrate Evolution & Ecology: PR: BSC 2010C, BSC 2011C, PCB 3043, PCB 3063 or C.I. Vertebrate evolution and ecology, based on the paleontological and ecological literature. The laboratory places heavy emphasis on classification/identification and field work.

ZOO 4603C AS-BIOL 5(3,4)
Embryology/Development: PR: PCB 3063 and PCB 3023 or PCB 3523 or C.I. Concepts of developmental processes. Emphasis on mechanisms underlying vertebrate development.

ZOO 4744 HPA-M&M 3(3,0)
Neurobiology: PR: BSC 2010. Biological principles governing the physiology of the nervous system including electrical properties, chemical signaling, cellular composition, development, injury and regeneration.

ZOO 4753C HPA-M&M 4(3,3)
Vertebrate Histology: PR: ZOO 3733C. Microanatomical detail plus appropriate developmental and functional considerations of major cell types, primary tissues, organs, and organ systems. Survey of modern animal-tissue microtechnique.

ZOO 4880C AS-BIOL 4(2,8)
Fisheries Management: PR: BSC 2010C and BSC 2011C, or C.I. Fisheries management of freshwater environments to include identification, sampling methods, farming and hatchery operations, propagation and population estimates.

ZOO 5456C AS-BIOL 4(2,6)
Ichthyology: PR: ZOO 2303C or C.I. Introduction to the biology of the fishes, their classification, evolution, and life histories.

ZOO 5463C AS-BIOL 4(2,6)
Herpetology: PR: 6 hours of zoology or C.I. Introduction to the biology of the amphibians and reptiles, their classification, evolution, and life histories.

ZOO 5475C AS-BIOL 4(2,6)
Ornithology: PR: 6 hours of zoology or C.I. Introduction to the biology of birds, their classification, evolution, and life histories.

ZOO 5486C AS-BIOL 4(2,6)
Mammalogy: PR: 6 hours of zoology or C.I. Introduction to the biology of mammals, their classification, evolution, and life histories.

ZOO 5745C HPA-M&M 4(3,3)
Essentials of Neuroanatomy: PR: Human/Comparative Anatomy, or Human/Animal Physiology or C.I. Fundamental concepts of both morphological and functional organization of the nervous system. Primary emphasis on human structure.

ZOO 5815 AS-BIOL 4(4,0)
Zoogeography: PR: 8 hours of zoology or C.I. Principles and concepts concerning regional patterns of animal distributions of the world, both past and present.
HONORARY DEGREES AWARDED BY UCF

<table>
<thead>
<tr>
<th>Date</th>
<th>Degree Type</th>
<th>Name</th>
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<tbody>
<tr>
<td>December, 1969</td>
<td>Doctor of Engineering Science</td>
<td>Kurt H. Debus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>William H. Dial</td>
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<tr>
<td>June, 1970</td>
<td>Doctor of Applied Science</td>
<td>John W. Young</td>
</tr>
<tr>
<td>March, 1973</td>
<td>Doctor of Public Service</td>
<td>Louis C. Murray</td>
</tr>
<tr>
<td>August, 1974</td>
<td>Doctor of Professional Engineering</td>
<td>Fred Elmo Clayton</td>
</tr>
<tr>
<td>August, 1978</td>
<td>Doctor of Business Administration</td>
<td>Richard F. Livingston</td>
</tr>
<tr>
<td>June, 1979</td>
<td>Doctor of Engineering Science</td>
<td>Albert F. Hegenberger</td>
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<tr>
<td></td>
<td></td>
<td>Lee R. Scherer</td>
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<tr>
<td>December, 1979</td>
<td>Doctor of Humane Letters</td>
<td>Joseph D. Duffey</td>
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<tr>
<td>August, 1980</td>
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<td>Thelma Vivian Jackson Dudley</td>
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<td></td>
<td></td>
<td>Howard Phillips (Posthumous)</td>
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<tr>
<td>December, 1981</td>
<td>Master of Letters</td>
<td>Gene Burns</td>
</tr>
<tr>
<td>April, 1982</td>
<td></td>
<td>Andrew Duda, Jr.</td>
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<tr>
<td></td>
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<td>Ferdinand Duda</td>
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<td>John Duda</td>
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<td></td>
<td>Robert J. Whalen</td>
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<tr>
<td>July, 1982</td>
<td>Doctor of Public Service</td>
<td>Mary Jo Stroud Davis</td>
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<td></td>
<td></td>
<td>William E. Davis</td>
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<tr>
<td>December, 1982</td>
<td>Doctor of Engineering Science</td>
<td>Joseph A. Boyd</td>
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<tr>
<td>July, 1983</td>
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<td>J.W. Hubler</td>
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<tr>
<td>December, 1984</td>
<td></td>
<td>Charles Wadsworth</td>
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<tr>
<td>June, 1985</td>
<td>Doctor of Laws</td>
<td>Allan E. Gotlieb</td>
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<tr>
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<td>George J. Becker, Jr.</td>
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<td>Jerry Collins</td>
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<td>D. Robert Graham</td>
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<td>Walter O. Lowrie</td>
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<td>William C. Schwartz</td>
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<tr>
<td>March, 1986</td>
<td>Doctor of Letters</td>
<td>Isaac Bashevis Singer</td>
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<tr>
<td>October, 1988</td>
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<td>Elie Wiesel</td>
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<tr>
<td>December, 1988</td>
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<td>Sven Caspersen</td>
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<td>John D. Holloway</td>
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<td>Wolfgang-Detlef Petri</td>
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<tr>
<td>May, 1989</td>
<td>Doctor of Humane Letters</td>
<td>David Albertson</td>
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<td>Frank M. Hubbard</td>
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<td>Charles N. Millican</td>
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<tr>
<td>May, 1990</td>
<td>Doctor of Public Service</td>
<td>James C. Robinson</td>
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<td>Helen Harris Perlman</td>
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<tr>
<td>May, 1991</td>
<td>Doctor of Science</td>
<td>Roald Hoffman</td>
</tr>
<tr>
<td>May, 1992</td>
<td>Doctor of Humane Letters</td>
<td>Robert A. Bryan</td>
</tr>
<tr>
<td>May, 1993</td>
<td>Doctor of Commercial Science</td>
<td>Buell G. Duncan, Jr.</td>
</tr>
<tr>
<td>May, 1995</td>
<td>Doctor of Engineering Science</td>
<td>Norman R. Augustine</td>
</tr>
<tr>
<td>December, 1995</td>
<td>Doctor of Humane Letters</td>
<td>Jesse Stone</td>
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<tr>
<td>December, 1996</td>
<td></td>
<td>Richard A. &quot;Dick&quot; Nunis</td>
</tr>
<tr>
<td>May, 1997</td>
<td>Doctor of Public Service</td>
<td>Maxwell C. King</td>
</tr>
<tr>
<td>May 1997</td>
<td></td>
<td>Joe. R. Lee</td>
</tr>
<tr>
<td>August, 1998</td>
<td>Doctor of Humane Letters</td>
<td>Trevor Colbourn</td>
</tr>
<tr>
<td>December, 1998</td>
<td></td>
<td>Linda W. Chapin</td>
</tr>
</tbody>
</table>
The date indicates the first year of employment at the University of Central Florida.

APPLEGATE, JANUSZ, Associate Professor of Engineering (1998), Ph.D. (Warsaw University of Technology)


ABBOTT, DAVID W., Associate Chair and Professor of Psychology (1968), B.A., M.S., Ph.D. (University of Massachusetts)

ABDEL-ATY, MOHAMED, Assistant Professor of Engineering (1995), B.S.C.E., M.S.C.E., Ph.D. (University of California at Davis)

ABEL, EILEEN M., Assistant Professor of Social Work (1978), A.B., M.S.W. (University of Maryland)

ABRAM, CHARLIE, Assistant Professor (1996), B.F.A., M.F.A. (University of Mississippi)

ACIERNO, LOUIS J., Professor of Health Sciences (Cardiopulmonary Science) (1979), B.S., M.D. (Georgetown University)

ADAMS, CAROLE, Director of Women's Studies and Associate Professor of History (1993), B.A., M.A., Ph.D. (Harvard University)

ADICKS, RICHARD R., Professor of English (1968), B.A.E., M.A., Ph.D. (Tulane University)

AGARWAL, RAJSHREE, Assistant Professor of Psychology (1996), B.Sc., M.B.A., M.F.A., M.A.L.I.S. (State of New York at Stony Brook)

AJAYI, RICHARD A., Associate Professor of Finance (1996), B.Sc., M.B.A., Ph.D. (Temple University)

AL-DEEK, HAITHAM M., Associate Professor of Engineering (1992), B.C.E., M.S., Ph.D. (University of California at Berkeley), P.E. (University of Florida)

ALLEN, FRANK R., Associate Director Libraries (1998), B.A., B.S., M.B.A., M.S. (University of Tennessee)

ALLEN, JANET S., Associate Professor, Instructional Programs (1992), B.S., M.Ed. (University of Maine)

ALLEN, JEFFERY W., Associate Professor of Marketing (1990), B.S., M.B.A., D.B.A. (University of Kentucky)

ALLEN, KAY WILLIAMSON, Associate Professor of Education (1990), B.S., M.Ed., Ph.D. (University of South Carolina)

ALLEN, WILLIAM, Lecturer of Computer Science (1996), B.S., M.S. (University of Central Florida)

ALMEIDA, JOHN A., Assistant Professor of Music (1997), B.M., M.A. (Appalachian State University)


ANDREWS, LARRY C., Professor of Mathematics and Electrical and Computer Engineering (1973), B.S., M.S., Ph.D. (Michigan State University)

ANGELOPOULOS, THEODORE, Associate Professor of Education (1998), B.S., M.S., Ph.D. (University of Pittsburgh)

ANTONY, JOBY M., Associate Professor of Mathematics (1970), B.S., M.A.M., Ph.D. (North Carolina State University)

APPLEGATE, BRANDON, Assistant Professor of Criminal Justice (1996), Ph.D. (University of Cincinnati)

APPLEN, J.D., Assistant Professor of English (1997), B.S., M.F.A., Ph.D. (University of Arizona)

ARMACOST, ROBERT L., Associate Professor of Engineering (1991), B.S., M.S.O.R., D.Sc. (George Washington University)

ARMSTRONG, JOHN H., Associate Professor of Education (1970), B.S., M.S., Ed.D. (Oklahoma State University)

ARMSTRONG, LEE H., Professor of Mathematics (1968), B.A., M.S., Ph.D. (Florida State University)

ARNOLD, MARK, Assistant Professor of Marketing (1997), B.A., M.B.A., Ph.D. (Saint Louis University)

ASHLEY, ROBERT A., Program Director and Instructor (1984), B.S., M.S. (Florida International University)

ATKINS, SANDRA, Assistant Professor of Education (1996), B.S., M.S., Ph.D. (Florida State University)

ATKINSON, STANLEY M., Associate Professor of Finance (1991), B.B.A. M.B.A., D.B.A. (Mississippi State University)

AUXTIN, CURTIS, Assistant Professor of History (1997), B.A., M.A., Ph.D. (Mississippi State University)

BAGLEY, GEORGE M., Assistant Professor of Communication (1994), B.A., M.A. (University of Utah)

BAILEY, CHARLES D., Professor of Accounting (1991), B.B.A., M.B.A., M.P.A., Ph.D. (Georgia State University)

BAIRD-OLSON, KARREN, Assistant Professor of Sociology (1997), B.S., M.A., Ph.D. (University of New Mexico)

BAKER, BARRY B., Director of Libraries (1997), B.A., M.L.S. (Louisiana State University)

BALADO, CARL, Associate Professor of Education (1987), B.A., M.L.S., Ed.D. (Florida Atlantic University)

BALLANTYNE, JOHN, Associate Professor of Forensic Science (1998), B.S., M.S., Ph.D. (State University of New York at Stony Brook)

BALLARD, R. ROCHELLE, Associate University Librarian (1989), B.S., M.L.S., C.A.S. (University of Pittsburgh)

BANDY, DALTON D., Chairholder, C.G. Avery Professorship, and Professor of Accounting (1985), B.S., M.B.A., Ph.D. (The University of Texas at Austin)

BARFIELD II, RUFUS, Assistant Professor of Communication (1998), B.A., M.A., Ph.D. (Howard University)

BARLOW, NADINE G., Instructor of Astronomy (1996), B.S., Ph.D. (University of Arizona)

BARNES, BETH, Senior Executive Assistant to the President and Associate Professor of English (1968), B.A., M.A., Ph.D. (University of North Carolina at Chapel Hill)

BARR, CAROL J., Director of Health Information Management Program and Assistant Professor of Health Information Management (1986), B.S., M.A. (University of Central Florida)

BARRINGER, BRUCE, Assistant Professor of Management (1993), B.S., M.B.A., Ph.D. (University of Missouri-Columbia)

BARSCH, KARL-HEINRICH, Associate Professor of Foreign Languages and Literatures (1977), B.A., M.A., Ph.D. (University of Colorado)

BARTKEVICUS, JOCELYN, Assistant Professor of English (1994), B.A., M.A., Ph.D. (University of Iowa)


BASS, MICHAEL, Professor of Physics (1988), B.S., M.S., Ph.D. (University of Michigan)

BASSIOUNI, MOSTAFA, Professor of Computer Science (1981), B.S., M.S., Ph.D. (Pennsylvania State University)

BASS, CAROL M., Assistant Professor of Legal Studies (1992), B.A., M.A., J.D. (New York Law School)
BATARSEH, ISSA E., Assistant Dean and Associate Professor of Engineering (1991), B.S., M.S., Ph.D. (University of Illinois at Chicago), P.E. (Florida)

BAUER, CHRISTIAN S., JR, Director of External Relations, College of Engineering, and Professor of Engineering (1970), B.S.I.E., M.S.E., Ph.D. (University of Florida), P.E. (Florida)

BAUMBACK, DONNA J., Professor of Education (1978), B.S., M.S., Ed.D. (Indiana University)

BEAR, MARY, Associate Professor of Nursing (1986), B.S.N., M.S.N., Ph.D. (University of Florida)

BEASLEY, DENISE, Visiting Instructor of Education (1994), B.S., M.Ed. (University of Central Florida)

BECKER, DONALD C., Assistant Professor of Criminal Justice (1976), B.A., M.Ed. (Wayne State University)

BEILE, PENNY M., Assistant University Librarian (1998), B.A., M.Ed., M.S.L.S. (University of Kentucky)

BEILER, ROSALIND J., Assistant Professor of History (1994), B.A., Ph.D. (University of Pennsylvania)

BELFIELD, KEVIN D., Associate Professor of Chemistry (1998), B.S., Ph.D. (Syracuse University)

BELKID, MADJID A., Associate Professor of Engineering (1979), B.S.E., M.S.E., Ph.D. (University of Central Florida), P.E. (Florida)

BELL, KATHLEEN, Associate Professor of English (1991), B.S., M.Ed., Ph.D. (Arizona State)

BENSON, CYNTHIA, Instructor of Political Science (1985), B.A., M.A. (Ohio University)

BERMAN, EVAN M., Associate Professor of Public Administration (1995), B.S., M.A., Ph.D. (George Washington University)

BERRINGER, ORVILLE M., Professor of Molecular Biology and Microbiology (1981), B.S., M.S., Ph.D. (University of Oregon)

BERRIOS, REYES M., Visiting Assistant Professor of Chemistry (1997), B.S., M.S., Ph.D. (University of Puerto Rico)

BERTETTA, GERALD S., Instructor of Physical Therapy (1996), B.A., M.S. (San Francisco State University)

BIEGEL, JOHN E., Professor of Engineering (1982), B.S.I.E., M.S.E.S., Ph.D. (Syracuse University), P.E. (Florida)

BIRAIMAH, KAREN L., Chair and Professor of Education (1985), B.A., M.A., M.S.Ed., Ph.D. (State University of New York at Buffalo)

BISHOP, DONNA M., Associate Professor of Criminal Justice (1995), B.A., M.A., Ph.D. (State University of New York-Albany)

BISHOP, PATRICIA J., Director of Graduate Studies and Professor of Engineering (1978), B.S.E., M.S.M.E., Ph.D. (Purdue University), P.E. (Florida)

BLAIR, TIMOTHY R., Professor of Education (1991), B.S., M.S., Ph.D. (University of Illinois)

BLANES, MARIA, Assistant Professor (1997), B.A., M.S.Ed., Ph.D.

BLaney, KATHY, Instructor of Medical Lab Science (1991), M.S. (University of Central Florida)

BLAU, BURTON I., Associate Professor of Psychology (1972), B.A., M.A., Ph.D. (Southern Illinois University)

BLEDSOE, CAROL, Coordinator and Instructor of Communication (1970), B.A., M.A. (University of Oklahoma)

BLEDSOE, ROBERT L., Chair and Professor of Political Science (1968), B.A., 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)

BLUM, RICHARD A., Professor of Motion Picture Technology (1993), B.A., M.S., Ph.D. (University of Southern California)

BOARDMAN, GARY C. MSG, Chief Instructor

BOBEK, DONNA D., Assistant Professor of Accounting (1997), B.B.A., Ph. D. (University of Florida)

BOGUMIL, WALTER A., JR, Associate Professor of Management (1972), B.S., M.B.A., Ph.D. (University of Georgia)

BOHM, ROBERT M., Professor of Criminal Justice (1995), A.B., M.A., Ph.D. (Florida State University)

BOLEN, JAY S., Associate Professor of Physics (1968), B.S., Ph.D. (University of South Carolina)

BOLLET, ROBERT M., Associate Professor of Education (1973), B.S., M.S., Ed.D. (Ball State University)

BORDE, STEPHEN, Associate Professor of Finance (1994), B.P.S., M.B.A., Ph.D. (Florida Atlantic University)

BORMAN, GLENN D., Associate Professor of Engineering (1984), B.S., M.S., Ph.D. (University of Arizona), P.E. (Florida)

BOSE, SUBIR K., Professor of Physics (1987), B.Sc., M.Sc., Ph.D. (University of Allahabad)

BOWERS, CLINT, Associate Professor of Psychology (1994), B.S., M.A., Ph.D. (University of South Florida)

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 Education (1985), B.A., M.Ed., Ph.D. (University of Wisconsin)

BRADFORD, RALPH E., Instructor of Political Science (1998), B.A., M.A. (University of Central Florida)

BRAIN, FRISCILLA V., Instructor in English (1984), B.A., M.A. (University of Central Florida)

BRAUN, BRADLEY M., Associate Professor of Economics (1986), B.S., M.A., Ph.D. (Tulane University)

BRENNAN, JOHN J., Professor of Physics (1968), B.S., M.S., Ph.D. (Georgia Institute of Technology)

BREWER, THOMAS, Assistant Professor of Education (1996), B.A., M.A., Ph.D. (Florida State University)

BRICE, ALEJANDRO, Assistant Professor of Communicative Disorders (1997), B.A., M.A., Ph.D. (University of Florida)

BRYHAN, ROBERT C., Professor of Mathematics and Computer Science (1970), B.S., M.S., Ph.D. (New York University)

BRODIE, LYMAN A., Assistant Dean, College of Arts & Sciences and Associate Professor of Music (1990), B.A., M.M.E. (University of North Texas)

BROPHY, JAMES C., Associate Professor of Psychology (1969), B.A., Ph.D. (Vanderbilt University)

BROTHEKTON, MARK W., Associate Professor of Theatre (1996), B.F.A., M.F.A. (Pennsylvania State University)

BROWN, KIMBERLY, VALERIE A., Associate Professor, Brevard Campus (1999)

BROWN, JACOB, Assistant Professor of Music (1988), B.M.E., M.M., D.M.A. (University of Illinois)
DZIEGIELIEWSKI, SOPHIA, Associate Professor of Social Work and BSW Coordinator (1997), B.A., MSW, Ph.D. (Florida State University)  
DZIUBAN, CHARLES D., Professor of Education (1970), B.S., M.Ed., Ph.D. (University of Wisconsin)  
EARNST, BRUCE A., Assistant Professor of Theatre (1996), B.A., M.M. (University of Miami)  
EASTEP, MARY ANN, Instructor of Criminal Justice (1995), B.A., M.S. (Shippensburg University of Pennsylvania)  
ECHAMBADI, RAJ, Assistant Professor of Marketing (1998), B.S., M.B.A., Ph.D. (University of Houston)  
EDWARDS, THOMAS J. III, Director, Radiologic Sciences Program and Associate Professor of Health Sciences (1980), RT (ARRT), B.S., B.S.R.T., M.A., Ed.D. (University of Central Florida)  
EHRLHART, LLEWELLYN M., Professor of Biology (1969), A.B., Ph.D. (Cornell University)  
ELLIAS, LUIS R., Professor of Physics (1988), B.A., M.S. Ph.D. (University of Wisconsin-Madison)  
ELLIS, E. TAYLOR, Associate Professor of Hospitality Management (1990), B.S., M.S., Ph.D. (Texas A&M University)  
ELSHEIMER, SETH R., Associate Professor of Chemistry (1985), B.S., Ph.D. (University of Florida)  
ELSHENNAWY, AHMAD K. M., Associate Professor of Engineering (1986), B.S., M.S., M.Eng., Ph.D. (Pennsylvania State University)  
ELSTON, JULIE A., Assistant Professor of Economics (1992), B.S., Ph.D. (University of Washington)  
ENCHELMAYER, KAREN B, Instructor of Physical Therapy (1997), B.S.O.T., M.P.T. (Baylor University)  
ENGREY, RAYMOND, Lecturer of Computer Science (1996), B.S., M.S. (University of Central Florida)  
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VICKERS, DAVID H., Chair and Associate Professor of Biology (1969), B.S., M.S., Ph.D. (Louisiana State University)
VILLADA, MYLLER SGT, Supply NCO
VITTES, M. ELLIOTT, Associate Professor of Political Science (1983), B.A., M.A., Ph.D. (University of Massachusetts)
von KALM, LAURENCE H., Assistant Professor of Biology (1996), B.S., Ph.D. (Monash University, Australia)
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WALLACE, RONALD L., Associate Professor of Anthropology (1975), B.A., M.A., Ph.D. (University of Florida)
<table>
<thead>
<tr>
<th>Name</th>
<th>Title and Institution</th>
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<tbody>
<tr>
<td>WHISLER, BRUCE A.</td>
<td>Associate Professor of Music</td>
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<tr>
<td>WEST, LARRY</td>
<td>Assistant Professor of Management</td>
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<tr>
<td>WHITE, KENNETH</td>
<td>Associate Professor of Economics</td>
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<tr>
<td>WEST, GAIL M.</td>
<td>Associate Professor of Education</td>
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<tr>
<td>WEBB, JACK L.</td>
<td>Associate University Librarian</td>
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<tr>
<td>WELKER, PATRICIA E.</td>
<td>Instructor of Health Sciences</td>
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<tr>
<td>WELLS, ROBERT C.</td>
<td>Assistant Professor of Criminal Justice</td>
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<td>WATTS, CHRISTOPHER</td>
<td>Associate Professor of Communicative Disorders</td>
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<tr>
<td>WAYSON, ROGER L.</td>
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<td>WELCH, JUDITH K.</td>
<td>Associate Professor of Accounting</td>
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<td>WELKER, PATRICIA E.</td>
<td>Instructor of Health Sciences</td>
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<td>WHITE, ROSEANN S.</td>
<td>Professor of Molecular Biology and Microbiology</td>
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<tr>
<td>WILSON, KENT E.</td>
<td>Associate Professor of Engineering</td>
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<tr>
<td>WILSON, WILLIAM S.</td>
<td>Visiting Assistant Professor of Sociology</td>
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<td>WISE, WILLIAM S.</td>
<td>Visiting Assistant Professor of Education</td>
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<tr>
<td>WOLF, J.</td>
<td>Associate Professor of Computer Science</td>
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<td>WOOD, ALEXANDER T.</td>
<td>Associate Professor of Education</td>
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<td>WORKMAN, DAVID A.</td>
<td>Associate Professor of Computer Science</td>
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<td>WORTON, WILLIAM</td>
<td>Associate Professor of Psychology</td>
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<tr>
<td>WOOSTEN, WILLIAM</td>
<td>Associate Professor of Psychology</td>
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<tr>
<td>WU, MIN-YOU</td>
<td>Professor of Engineering</td>
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<tr>
<td>WYCOFF, EDGAR B.</td>
<td>Associate Professor of Communication</td>
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<tr>
<td>XANDER, JAMES A.</td>
<td>Associate Professor of Economics</td>
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<tr>
<td>YEARWOOD, GLADSTONE</td>
<td>Associate Professor of Motion Picture Technology</td>
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<tr>
<td>YONETANI, AYAKO</td>
<td>Associate Professor of Music</td>
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<tr>
<td>YOUNG, BETH RAPP</td>
<td>Assistant Professor of English</td>
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<tr>
<td>YOUNG, DAVID</td>
<td>Visiting Instructor of Communication</td>
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<tr>
<td>YUAN, JIANN S.</td>
<td>Associate Professor of Engineering</td>
</tr>
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</table>

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TOWLE, HERBERT C., (1970), B.S.E., M.S.E., Ph.D. (University of Michigan), P.E. (Florida, New York)
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WALKER, LYNN W., (1967), B.A., M.A. (Florida State University)
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WRIGHT, BURTON, (1970), B.S., M.S., Ph.D. (Florida State University)
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COURTESY APPOINTMENTS

ADLER, ERIC LEON, Professor of Engineering Science
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ALI, ARSHAD, Professor of Biology
B.S., M.S., Ph.D. (University of Salford, England)

BARROS, NELIO P., Assistant Professor of Biology
B.S., M.C., Ph.D. (University of Miami)

BAUSHER, MICHAEL G., Research Associate of Molecular Biology and Microbiology
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BAYER, CYNTHIA A., Biological Research Associate
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BEESON, RICHARD, Associate Professor of Biology
B.S., Ph.D. (Oregon State University)

BINDELL, JEFFREY B., Research Professor of Materials Science
B.S., M.S., Ph.D. (Polytechnic Institute of Brooklyn)

BRADLEY, BONNIE, Clinical Faculty, Health Information Management

CAPRAUN, LYNN W., Clinical Faculty, Cardiopulmonary Sciences

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SAFRANKE, WILLIAM, Clinical Faculty, MLS, Department of Molecular Biology and Microbiology
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SALAS, EDUARDO, Associate Professor of Psychology
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SELSKY, CLIFFORD, Associate Professor of Chemistry
B.S., Ph.D., M.D. (Yale University)

SINGER, MICHAEL JAMES, Faculty Associate, Psychology
B.A., M.S., Ph.D. (University of Maryland)
AA: Associate of Arts Degree. A degree designed for transfer to an upper-division college or university. A Florida AA degree satisfies General Education at all Florida SUS Schools.

AE: Aerospace Engineering

AS: Associate of Science Degree. A broad based degree designed to prepare students to enter a wide variety of careers.

AS: Arts and Sciences. This abbreviation appears in the catalog listing of courses and refers to the College of Arts and Sciences.

ASAP: Academic Support and Advising Programs. Freshman advising offices and other academic support services.

Accreditation: Certification that the College or program has met established standards and is nationally recognized by appropriate accrediting agencies.

ACT: American College Testing Program is an assessment used for undergraduate admission purposes.

Add/Drop: The procedure used to alter class schedules after registration and through the first week of the semester. During this time, you can adjust your schedule by dropping or adding courses without penalty. Check class schedule for details.

Audit (course): Those wishing to attend classes without receiving academic credit.

Audit (degree): Computerized summary of progress toward completion of degree requirements to be used with academic advising and registration. Available at your advising office with a picture ID (See SASS Audit).

BA: Business Administration. This abbreviation appears in the catalog listing of courses and refers to the College of Business Administration.

Baccalaureate or Bachelors Degree: Completion of all university and major graduation requirements as certified by the university (BA is the Bachelor of Arts Degree and BS is the Bachelor of Science Degree).

Breaking Catalog: Loss of eligibility to follow graduation requirements in a specific catalog.

CAS: College of Arts and Sciences

Catalog: A resource of all academic policies and procedures, college and degree requirements, faculty and course descriptions. It is published yearly and is subject to change. Students must meet graduation requirements as published in a single catalog.

Catalog in Effect: The university catalog in effect at the time of a student’s first enrollment at UCF shall govern graduation prerequisites.

CI: Consent of Instructor.

Class Schedule: Booklet containing the anticipated courses to be offered for the upcoming term(s) and the specific times and days classes will be offered. Most current courses available on the web at (Reg Section Listing).

CLAST: College Level Academic Skills Test: The CLAST is a required statewide test which measures selected communication and mathematics skills. FTICs must take it after completing 18 semester hours. Transfers must take it during their first semester at UCF.

CLAST Alternative: Refers to another way of satisfying one or more subtests of the CLAST requirement other than taking the exam—through combination test scores (SAT or ACT) and specific course grades.

COBA: College of Business Administration.

COE: College of Education.

COHPA: College of Health and Public Affairs.

College: A collection of related academic departments. There are six colleges at the University of Central Florida. They are Arts and Sciences, Business Administration, Education, Engineering, Health and Public Affairs, and Honors.

Common Course Numbering: The Statewide Course Numbering System (SCNS) uses a course designation which consists of a 3-letter prefix and a 4-digit number and when necessary a one-letter laboratory (L) or lecture/laboratory © suffix. All courses assigned the same SCNS course identifier—prefix, same last three digit number, and suffix (if present)—have been judged to be equivalent, and should be considered automatically transferrable. The first digit of the four digit number is assigned by the institution, and indicates the level at which the course is offered. This digit does not affect the equivalency.

Common Program Prerequisite: The State of Florida has identified Common Program Prerequisites for all university programs. These prerequisites must be completed by all students going into that field of study, must be accepted by all state universities and applied toward the degree.

Contact hours: The number of hours the students meet in class.

Continuous Enrollment: Enrollment not interrupted by non-attendance for either consecutive fall and spring semesters, or consecutive spring, summer, and fall semesters. Continuous enrollment is automatically broken by the act of disqualification or exclusion and starts over with the next term of enrollment.

CR: Corequisite is an additional course that you must enroll in during the same term or in a prior term as the primary course you wish to take.

Credit Hour or Semester Hour: Every course taught is designated a total number of credit hours. The number of credit hours for a class reflects approximately the total hours a student spends per week in class. Most lecture courses are three credit hours and meet three hours each week. Expect to spend at least two hours of study time outside of class for every hour your spend in class. 1 semester hour equals 1.5 quarter hour.
Disqualified: A student on academic probation is disqualified upon failure to achieve a 2.0 GPA during the subsequent semester.

Distance and Distributed Learning: Learning on-line through distributed courses allows students to participate virtually via a computer using e-mail, computer conferencing and the World Wide Web. Interactive television (ITV) courses are broadcasted in real-time using two-way audio between two or more sites. Fully on-line courses have minimal class meetings and involve additional media.

Drop: A student may drop a course during the official Add/Drop period and a dropped course will not appear on a permanent record. Students are not fee liable for dropped courses.

DTAC: UCF Downtown Academic Center, 36 West Pine Street, Orlando.

ED: Education. This abbreviation appears in the catalog listing of courses and refers to the College of Education.

Elective: Any course not required as part of the General Education Program or your major.

EN: Engineering. This abbreviation appears in the catalog listing of courses and refers to the College of Engineering.

Enrollment Certification: An official university document that provides a student's enrollment history including status, dates enrolled, and degrees awarded.

Excess Hours: When a student enrolls in semester hour credit beyond a maximum amount allowed for their particular degree program, additional fees are assessed for semester hours taken above this limit.

Excluded: A student readmitted following disqualification who fails to achieve a 2.0 GPA.

Fee Invoice: A printout of courses for which you have registered that lists each specific course, time and day(s). The amount of tuition and fees due for all courses registered and the payment deadline date is also indicated on printout.

Freshman and Sophomore Courses: Those courses with numbers ranging from 1000-2999. Example: ENC 1101, English Composition I. Generally, freshmen should enroll in 1000 and 2000 level courses.

FTIC: Abbreviation for "First Time in College" referring to those students who have completed fewer than 12 semester hours and are currently in their first term as a UCF college student.

Full-Time Course Load: A minimum of 12 credits in the fall, spring, and summer terms.

GEP: General Education Program: Specific courses required for all UCF degree programs providing skills and knowledge in general subject areas essential to continued learning and success, not only in college but throughout life.

Gordon 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.

GPA: Grade Point Average: The calculation of credit attempted and earned. UCF calculates 2 GPA's: (1) based on all college course work taken anywhere and (2) course work taken exclusively at UCF.

Grade Forgiveness: Refers to when a course taken at UCF is repeated and the grade earned in the first attempt is replaced by the grade earned in the second attempt (can only be done twice in your academic career).

Health Form: Documentation of immunity for measles and rubella, as well as consent for treatment at the University Health Center. (Must be completed and returned to Student Health Services prior to first registration.)

HPA: Health and Public Affairs. This abbreviation appears in the catalog listing of courses and refers to the College of Health and Public Affairs.

Incomplete: Assigned by the instructor when a student is unable to complete a course due to extenuating circumstances. Must be completed in 12 months or by graduation, whichever comes first.

Junior and Senior Courses: those courses with numbers ranging from 3000-4999. Example: ENG 3311, Advanced Expository Writing.

Lake Sumpter: Off campus classroom location.

Limited Access: Certain academic programs designated as "limited access" only guaranteed admission to a limited number of applicants.

Lower Level Courses: Courses with a number of 1000 or 2000 (not 0000).

Major: A group of related courses which constitute a focused program of study in a specific area of knowledge.

ME: Mechanical Engineering

Minor: A group of related courses which constitute limited study, usually 15 to 18 hours.

OASIS: Office of Academic Support and Information Services is the primary office for undergraduate academic assistance in the College of Arts and Sciences.

Pending Status: Category assigned to students who wish to enter limited access programs. Typically, students are required to complete the GEP and all major pre-requisites prior to admission into the desired limited access program. (Department will change student's status upon acceptance into the program.)

POLARIS: Personal On-Line Access to Restricted Information Systems is accessed at https://polaris.ucf.edu on the Internet. POLARIS allows students to view their degree audit and academic record, register for classes, access their financial aid data and change their PIN number.
PR: Prerequisite refers to a specific course that must be taken and passed prior to enrolling in the primary course you wish to take.

Probation: Action taken when a student’s UCF or overall GPA drops below 2.0.

Registration: The act of signing up for classes. This may be done through POLARIS, TouchTone telephone, walk-by or various colleges and departments.

Repeat Surcharge: Additional fee applied when a student enrolls in a class three or more times.

Restricted Access: A major has additional admission requirements, e.g. early application date, a separate application or specific GPA requirements. There is no “limit” to the number of students who can be enrolled. Students solving the specified requirement(s) will normally be admitted.

Restricted Electives: A specified group of courses within a major from which students must make selections.

Retention: A term used to describe students’ persistence at the university until successful completion of their educational goals.

SARC: Student Academic Resource Center provides academic support programs, including supplemental instruction, tutoring, academic advising, and various other programs and services to students.

SASS Audit: A Student Academic Support System is a computerized degree audit listing courses completed toward major and degree requirements.

SAT: Scholastic Assessment Test is an assessment used for admission purposes.

Satisfactory Academic Progress: A general eligibility requirement for financial assistance. (See Student Financial Assistance Office section.)

Second Degree: Awarded when student meets the requirements for both degrees and earns a minimum of 150 credit hours.

Section: Refers to one of several classes of the same course offered at several different hours of the day. For example: there may be 40 different sections of ENC 1101 in a single semester.

Sequence: A series of courses within the same subject area. Generally, you take these courses in numerical order: for instance PHY 2053, 2054, consult your advisor before registering out of sequence.

Semester: The academic year at UCF is divided into parts called semesters or terms. Each lasts approximately 16 weeks. Some universities break the year into fourths and call them quarters. UCF is on the semester system; however, we usually speak of “Fall Semester,” “Spring Semester, or “Summer Terms.”

SOC: South Orlando Center.

SUS: State University System. All ten Florida public universities are a part of the SUS.

THC: The Honors College

Third Attempt Charge: See Repeat Surcharge

TouchTone (telephone) Registration: Voice response registration system. Used for registration and add/drop.

TSR: Transfer Summary Report: Listing of all coursework transferring to the university for credit. A preliminary TSR is generated at the time of acceptance. A final TSR is processed after all final transcripts have been received by the Admissions Office.

Transient Student: A UCF student enrolled in courses at another regionally accredited institution.

UCF Area Campuses: Daytona Beach and Brevard area campuses, South Orlando Center, and Downtown Academic Center.

Universal PIN: Four digit code required to access POLARIS, TouchTone, the UCF Information Kiosks.

Upper Level Courses: Courses with a number of 3000 or 4000 (not 5000, 6000, or 7000).

Walk-by Registration: Registration site for students who have special situations which cannot be accommodated by web or telephone registration.

Withdrawal, Withdraw from a Course: To formally file an official withdrawal request, go to the Registrar’s Office. Limited to the first half of the semester and fees are not refunded. See withdrawal policy listed in catalog or schedule of classes for details. Fees are not refundable.
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High School __________________________ Graduation Date 19 ________

College(s) Attended __________________________ Graduation Date 19 ________

Category: Freshman  ______ Transfer  ______ Entrance Date: Summer  ______ Fall  ______ Spring  ______

(yr) (yr) (yr)

Social Security # (optional) __________________________ /

Ethnic Origin (optional) ______ American Indian or Alaska Native ______ African American ______ Other

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