Valencia Community College actively supports equality of opportunity and access to education and employment. Valencia will not deny employment or admission to any educational program or activity on the basis of any legally prohibited discrimination including but not limited to such factors as race, color, religion, national origin, sex, age, handicap and marital status. This college implements Title VI, Civil Rights Act of 1964; Executive Order 11246; Title IX, Educational Amendments of 1972; Section 504, Rehabilitation Act of 1973; Section 493A, Title IV of the Higher Education Act of 1965 as added by Section 131 of the Education Amendments of 1976, Dissemination of Financial Information; Title 38, United States Code, Veterans Benefits; The Family Education Rights and Privacy Act of 1974 as amended, also known as the Buckley Amendment; and the Immigration and Nationality Act, and all other state and federal laws, rules and regulations that apply to its activities. This school is authorized under federal law to enroll non-immigrant alien students.

Valencia Community College recognizes that discrimination against individuals diagnosed as having Acquired Immune Deficiency Syndrome (AIDS), persons diagnosed as having Acquired Immune Deficiency Syndrome Related Complex (ARC), or persons who have been determined to be positive for the Human Immunodeficiency Virus (HIV), but who have not developed the symptoms of AIDS or ARC, is expressly prohibited by Florida law under the provisions of the Human Rights Act of 1977, as amended by Section 760.50, FS 1988, which accords to such infected individuals every protection made available to handicapped persons under Section 504 of the Rehabilitation Act of 1973 (Pub. L. No. 93-112). See Valencia Community College Policy 615.4-39. The person designated to coordinate this implementation is the Assistant to the President for Equal Opportunity, Valencia Community College, Post Office Box 3028, Orlando, Florida, 32802, telephone number (407) 299-5000.

Valencia Community College reserves the right to make changes in the regulations and offerings announced in this catalog as circumstances require.

Valencia Community College
P. O. BOX 3028
ORLANDO, FLORIDA 32802-3028
TELEPHONE (407) 299-5000

DOWNTOWN CENTER
190 SOUTH ORANGE AVENUE
ORLANDO, FLORIDA 32801

WINTER PARK CENTER
1010 NORTH ORLANDO AVENUE
WINTER PARK, FLORIDA 32789
Telephone: 628-1976

EAST CAMPUS
701 NORTH ECONLOCKHATCHEE TRAIL
ORLANDO, FLORIDA 32825

WEST CAMPUS
1800 SOUTH KIRKMAN ROAD
ORLANDO, FLORIDA 32811

OSCEOLA CAMPUS
809 OSCEOLA BOULEVARD
KISSIMMEE, FLORIDA 34744
Telephone: (407) 847-9496
Valencia toll free number from Osceola County: 847-5011

MCcOY CENTER FOR BUSINESS AND INDUSTRY SERVICES
8503 DAETWYLER DRIVE
ORLANDO, FLORIDA 32812

TELECOMMUNICATION SYSTEM FOR THE DEAF: 298-7032

ACCREDITATION
Valencia Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award the Associate in Arts and the Associate in Science degrees.

Volume 23  Number 1  February, 1992

Published by Valencia Community College
TABLE OF CONTENTS

GENERAL INFORMATION
College Locations .................................................. 3
District Board of Trustees ....................................... 8
1992-94 College Calendar ....................................... 10
Valencia Community College .................................. 14
History, Values, Vision, Mission, Roles ................. 15
Foundation Board of Directors ............................... 16
Open Campus ....................................................... 19

ADMISSIONS .......................................................... 23
Admission Requirements ....................................... 23
The Admission Process ......................................... 25

ACADEMIC POLICIES ............................................... 32

FINANCIAL INFORMATION ........................................ 37

STUDENT SERVICES .................................................. 44

DEGREES AND PROGRAMS ........................................ 49
University Parallel Program - Associate in Arts Degree ... 53
Career Programs - Associate in Science Degree .......... 59

COURSE DESCRIPTIONS ......................................... 104

ADVISORY COMMITTEES ........................................... 169

COLLEGE ADMINISTRATION .................................... 181

FACULTY AND STAFF ............................................. 183

GLOSSARY .............................................................. 198

INDEX ................................................................. 201
West Campus
1800 South Kirkman Road
Orlando, Florida 32811
(407) 299-5000

East Campus
701 North Econlockhatchee Trail
Orlando, Florida 32825
(407) 299-5000

Osceola Campus
809 Osceola Boulevard
Kissimmee, Florida 34744
(407) 239-6995 - toll free from Orlando
(407) 847-9496 - from Kissimmee

Downtown Center
190 South Orange Avenue
Orlando, Florida 32801
(407) 299-5000

Winter Park Center
1010 North Orlando Avenue
Winter Park, Florida 32789
(407) 628-1976

McCoy Center for Business and Industry
8503 Daetwyler Drive
Orlando, Florida 32812
(407) 855-9989

1 WEST CAMPUS
2 EAST CAMPUS
3 OSCEOLA CENTER
4 DOWNTOWN CENTER
5 WINTER PARK CENTER
6 McCoy Center
DOWNTOWN CENTER

CHICONE BUILDING

College Administrative Offices
190 South Orange Avenue
Orlando, Florida 32801
Telephone: 299-5000
McCoy Center

8503 Daetwyler Drive
Orlando, Florida 32812
Telephone 855-9989

Osceola Campus

809 Osceola Boulevard
Kissimmee, Florida 34744
Telephone 847-9496
MAP of WEST CAMPUS

VALENCIA COMMUNITY COLLEGE

KEY:
- COMPLETED
- UNDER CONSTRUCTION
- FUTURE
1010 North Orlando Avenue
Winter Park, Florida 32789
Telephone: 628-1976
District Board of Trustees

Each of the 28 community colleges in Florida's statewide system is under the local control of a lay District Board of Trustees composed of citizens who serve without pay and are legally vested with decision-making power in all matters of College policy, programs, building, budget and personnel. Each trustee is appointed by the governor. Eight Orange County and Osceola County citizens form the Valencia Community College District Board of Trustees. Meeting in regular sessions once each month, these individuals contribute their time and talent to guiding the development of Valencia Community College so that it remains responsive to the educational needs of its local community.

Kenneth Smith is president of C.H. Lucas & Company, Inc., a real estate firm. Smith earned a bachelor's degree from Asbury College in Kentucky and a master's degree in education from UCF. He is a resident of Kissimmee.

Marcia K. Tompkins is a resident of Kissimmee, Marcia Tompkins is co-owner of a development company, Tompkins Investment Group, Inc., for which she serves as corporate attorney. She is a graduate of UCF and earned a law degree from the University of Florida.

John Lord is a senior vice president with NCNB National Bank of Florida. He is a resident of Winter Park and a graduate of Orlando Junior College and the University of Florida.

Ronald Rogers is an Orlando resident. He is vice president of operations for a local engineering firm, I.M.D.C., Inc. Rogers is a graduate of Florida A & M University.

Robert M. Vickery is a well-known philanthropist. Vickery has been active in the Valencia Foundation. He is chairman of the board of the Robert M. Vickery Company, a building contracting firm, and is a resident of Orlando.

Wayne C. Wolfson has been a practicing chiropractic physician in Winter Park for 15 years. Wolfson received his undergraduate degree from the University of Tennessee and his doctorate from the Palmer College of Chiropractic. He is a resident of Winter Park.

Jeanne Van Meter is an active citizen of Osceola County. She is a resident of Kissimmee where she owns Juliette's Gifts, a Hallmark card and gift shop. Van Meter attended the University of Kansas.

Edward J. Manning is a graduate of Auburn University. Manning has served as a member of the Economic Development Council of Central Florida and is a past president of the Valencia Community College Foundation Board of Directors. He is a resident of Orlando.
### Important College Calendar Dates 1992/93

<table>
<thead>
<tr>
<th>EVENT</th>
<th>SESSION 1</th>
<th>SESSION 2</th>
<th>SESSION 3</th>
<th>SESSION 4</th>
<th>SESSION 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Application Deadline</td>
<td>Aug 12</td>
<td>Dec 14</td>
<td>Apr 7</td>
<td>June 10</td>
<td>Apr 7</td>
</tr>
<tr>
<td>Registration Appointment Deadline</td>
<td>Aug 14</td>
<td>Dec 18</td>
<td>Apr 12</td>
<td>June 14</td>
<td>Apr 12</td>
</tr>
<tr>
<td>Returning Student Registration</td>
<td>July 27-31</td>
<td>Nov 30</td>
<td>Apr 12-16</td>
<td>Apr 12-16</td>
<td>Apr 12-16</td>
</tr>
<tr>
<td>(By Telephone Only)</td>
<td>Dec 1-4</td>
<td></td>
<td></td>
<td>June 14</td>
<td></td>
</tr>
<tr>
<td>New &amp; Returning Student Registration</td>
<td>Aug 3-7</td>
<td>Dec 7-11</td>
<td>Apr 19-23</td>
<td>Apr 19-23</td>
<td>Apr 19-23</td>
</tr>
<tr>
<td>(Appointment Only)</td>
<td>Aug 10-14</td>
<td>Dec 14-18</td>
<td>Apr 26-29</td>
<td>Apr 26-29</td>
<td>Apr 26-29</td>
</tr>
<tr>
<td></td>
<td>Aug 17-21</td>
<td>Jan 4-6</td>
<td>May 3-4</td>
<td>June 21</td>
<td>May 3-4</td>
</tr>
<tr>
<td></td>
<td>Aug 24-25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty Report</td>
<td>Aug 24</td>
<td>Jan 5</td>
<td>May 4</td>
<td>June 22</td>
<td>May 4</td>
</tr>
<tr>
<td>*Late Registration &amp; Drop/Add</td>
<td>Aug 26-27</td>
<td>Jan 7-8</td>
<td>May 5-6</td>
<td>June 22-23</td>
<td>May 5-6</td>
</tr>
<tr>
<td>Evening Classes Begin</td>
<td>Aug 26</td>
<td>Jan 7</td>
<td>May 5</td>
<td>June 21</td>
<td>May 5</td>
</tr>
<tr>
<td>Day Classes Begin</td>
<td>Aug 26</td>
<td>Jan 7</td>
<td>May 5</td>
<td>June 22</td>
<td>May 5</td>
</tr>
<tr>
<td>Audit Registration Deadline</td>
<td>Sept 1</td>
<td>Jan 13</td>
<td>May 6</td>
<td>June 23</td>
<td>May 11</td>
</tr>
<tr>
<td>Deadline for Refund Requests</td>
<td>Sept 1</td>
<td>Jan 13</td>
<td>May 6</td>
<td>June 23</td>
<td>May 11</td>
</tr>
<tr>
<td>Minimester Registration</td>
<td>Sept 22-23</td>
<td>Feb 1-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimester Late Registration and Drop/Add</td>
<td>Sept 24-25</td>
<td>Feb 3-4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimester Classes Begin</td>
<td>Sept 24</td>
<td>Feb 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimester Audit Registration Deadline</td>
<td>Sept 25</td>
<td>Feb 4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Late Registration for evening and Saturday classes through the first class meeting.*
# Important College Calendar Dates 1992/93

<table>
<thead>
<tr>
<th>EVENT</th>
<th>SESSION 1</th>
<th>SESSION 2</th>
<th>SESSION 3</th>
<th>SESSION 4</th>
<th>SESSION 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimester Deadline for Refund Requests</td>
<td>Sept 25</td>
<td>Feb 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Nights</td>
<td>Oct 13-West</td>
<td>Oct 15-East</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supper Hour &amp; Evening Classes Don't Meet</td>
<td>Oct 13-West</td>
<td>Oct 15-East</td>
<td>Nov 25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midterm</td>
<td>Oct 23</td>
<td>Feb 26</td>
<td>May 28</td>
<td>July 16</td>
<td>June 18</td>
</tr>
<tr>
<td>Matador Day</td>
<td></td>
<td>Mar 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimester Final Examination</td>
<td>Nov 23-24</td>
<td>Apr 8-9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>End of Minimester Classes</td>
<td>Nov 24</td>
<td>Apr 9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimester Grades Due</td>
<td>Dec 18</td>
<td>Apr 30</td>
<td>Noon</td>
<td>8:30 am</td>
<td></td>
</tr>
<tr>
<td>Final Examination Period for Evening/Weekend Classes</td>
<td>Dec 11-17</td>
<td>Apr 23-29</td>
<td>June 17-21</td>
<td>Aug 4-6</td>
<td>Aug 2-8</td>
</tr>
<tr>
<td>Final Examination Period (Day)</td>
<td>Dec 11</td>
<td>Apr 23</td>
<td>June 18-21</td>
<td>Aug 5-6</td>
<td>Aug 2-5</td>
</tr>
<tr>
<td>Dec 14-17</td>
<td>Apr 26-29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classes End</td>
<td>Dec 17</td>
<td>Apr 29</td>
<td>June 21</td>
<td>Aug 6</td>
<td>Aug 8</td>
</tr>
<tr>
<td>Grades Due</td>
<td>Dec 18</td>
<td>Apr 30</td>
<td>June 22</td>
<td>Aug 9</td>
<td>Aug 9</td>
</tr>
<tr>
<td>Noon</td>
<td>8:30 am</td>
<td>Noon</td>
<td>8:30 am</td>
<td>8:30 am</td>
<td></td>
</tr>
<tr>
<td>Commencement Ceremony</td>
<td></td>
<td>Apr 30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holidays</td>
<td>Sept 7</td>
<td>Jan 18</td>
<td>May 31</td>
<td>July 4</td>
<td>May 31</td>
</tr>
<tr>
<td>Nov 26-29</td>
<td>Mar 8-14</td>
<td></td>
<td></td>
<td>July 4</td>
<td></td>
</tr>
<tr>
<td>Dec 22-25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 28-31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduation/CLAST Application Deadline</td>
<td>Sept 16</td>
<td>See</td>
<td>See</td>
<td>See</td>
<td>See</td>
</tr>
<tr>
<td>Counsellor/Admissions</td>
<td>Counsellor/Admissions</td>
<td>Counsellor/Admissions</td>
<td>Counsellor/Admissions</td>
<td>Counsellor/Admissions</td>
<td>Counsellor/Admissions</td>
</tr>
<tr>
<td>College Level Academic Skills Test (CLAST)</td>
<td>Oct 17</td>
<td>See</td>
<td>See</td>
<td>See</td>
<td>See</td>
</tr>
<tr>
<td>Counsellor/Admissions</td>
<td>Counsellor/Admissions</td>
<td>Counsellor/Admissions</td>
<td>Counsellor/Admissions</td>
<td>Counsellor/Admissions</td>
<td>Counsellor/Admissions</td>
</tr>
<tr>
<td>EVENT</td>
<td>SESSION 1</td>
<td>SESSION 2</td>
<td>SESSION 3</td>
<td>SESSION 4</td>
<td>SESSION 5</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-----------</td>
<td>-----------</td>
<td>-----------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>Credit Application Deadline</td>
<td>Aug 11</td>
<td></td>
<td>Apr 6</td>
<td>June 9</td>
<td>April 6</td>
</tr>
<tr>
<td>Registration Appointment Deadline</td>
<td>Aug 13</td>
<td>Dec 17</td>
<td>Apr 11</td>
<td>June 13</td>
<td>April 11</td>
</tr>
<tr>
<td>Returning Student Registration (By Telephone Only)</td>
<td>July 26-30</td>
<td>Nov 29-30</td>
<td>Apr 11-15</td>
<td>Apr 11-15</td>
<td>Apr 11-15</td>
</tr>
<tr>
<td>New &amp; Returning Student Registration (Appointment Only)</td>
<td>Aug 2-6</td>
<td>Dec 6-10</td>
<td>Apr 18-22</td>
<td>June 14-17</td>
<td>Apr 18-22</td>
</tr>
<tr>
<td></td>
<td>Aug 9-13</td>
<td>Dec 13-17</td>
<td>Apr 25-28</td>
<td>June 20</td>
<td>Apr 25-28</td>
</tr>
<tr>
<td></td>
<td>Aug 16-20</td>
<td>Dec 20</td>
<td>May 2-3</td>
<td></td>
<td>May 2-3</td>
</tr>
<tr>
<td></td>
<td>Aug 23-24</td>
<td>Jan 4-5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty Report</td>
<td>Aug 23</td>
<td>Jan 4</td>
<td>May 3</td>
<td>June 21</td>
<td>May 3</td>
</tr>
<tr>
<td>*Late Registration &amp; Drop/Add</td>
<td>Aug 25-26</td>
<td>Jan 6-7</td>
<td>May 4-5</td>
<td>June 21-22</td>
<td>May 4-5</td>
</tr>
<tr>
<td>Evening Classes Begin</td>
<td>Aug 25</td>
<td>Jan 6</td>
<td>May 4</td>
<td>June 21</td>
<td>May 4</td>
</tr>
<tr>
<td>Day Classes Begin</td>
<td>Aug 25</td>
<td>Jan 6</td>
<td>May 4</td>
<td>June 21</td>
<td>May 4</td>
</tr>
<tr>
<td>Audit Registration Deadline</td>
<td>Aug 31</td>
<td>Jan 12</td>
<td>May 5</td>
<td>June 22</td>
<td>May 10</td>
</tr>
<tr>
<td>Deadline for Refund Requests</td>
<td>Aug 31</td>
<td>Jan 12</td>
<td>May 5</td>
<td>June 22</td>
<td>May 10</td>
</tr>
<tr>
<td>Minimester Registration</td>
<td>Sept 21-22</td>
<td>Feb 1-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimester Late Registration and Drop/Add</td>
<td>Sept 23-24</td>
<td>Feb 3-4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimester Classes Begin</td>
<td>Sept 23</td>
<td>Feb 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimester Audit Registration Deadline</td>
<td>Sept 24</td>
<td>Feb 4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Late Registration for evening and Saturday classes through the first class meeting.
<table>
<thead>
<tr>
<th>EVENT</th>
<th>SESSION 1</th>
<th>SESSION 2</th>
<th>SESSION 3</th>
<th>SESSION 4</th>
<th>SESSION 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimister Deadline for Refund Requests</td>
<td>Sept 24</td>
<td>Feb 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Nights</td>
<td>Oct 12-West</td>
<td>Oct 14-East</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supper Hour &amp; Evening Classes Don’t Meet</td>
<td>Oct 12-West</td>
<td>Oct 14-East</td>
<td>Nov 24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midterm</td>
<td>Oct 22</td>
<td>Feb 25</td>
<td>May 27</td>
<td>July 15</td>
<td>June 17</td>
</tr>
<tr>
<td>Matador Day</td>
<td></td>
<td></td>
<td>Mar 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimister Final Examination</td>
<td>Nov 22-23</td>
<td>Apr 7-8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>End of Minimister Classes</td>
<td>Nov 23</td>
<td>Apr 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimister Grades Due</td>
<td>Dec 17</td>
<td>Apr 29</td>
<td>Nov 29</td>
<td>Aug 3-5</td>
<td>Aug 1-7</td>
</tr>
<tr>
<td>Final Examination Period for Evening/Weekend Classes</td>
<td>Dec 10-16</td>
<td>Apr 22-28</td>
<td>June 16-20</td>
<td>Aug 4-5</td>
<td>Aug 1-4</td>
</tr>
<tr>
<td>Final Examination Period (Day)</td>
<td>Dec 10</td>
<td>Apr 22</td>
<td>June 17-20</td>
<td>Aug 4-5</td>
<td>Aug 1-4</td>
</tr>
<tr>
<td>Classes End</td>
<td>Dec 16</td>
<td>Apr 28</td>
<td>June 20</td>
<td>Aug 5</td>
<td>Aug 7</td>
</tr>
<tr>
<td>Grades Due</td>
<td>Dec 17</td>
<td>Apr 29</td>
<td>June 21</td>
<td>Aug 8</td>
<td>Aug 8</td>
</tr>
<tr>
<td>Commencement Ceremony</td>
<td></td>
<td></td>
<td>Noon</td>
<td>Noon</td>
<td>Noon</td>
</tr>
<tr>
<td>Holidays</td>
<td>Nov 25-28</td>
<td>Jan 17</td>
<td>May 30</td>
<td>July 4</td>
<td>May 30</td>
</tr>
<tr>
<td>Graduation/CLAST Application Deadline</td>
<td>See Counsel/Admissions</td>
<td>See Counsel/Admissions</td>
<td>See Counsel/Admissions</td>
<td>See Counsel/Admissions</td>
<td>See Counsel/Admissions</td>
</tr>
<tr>
<td>College Level Academic Skills Test (CLAST)</td>
<td>See Counsel/Admissions</td>
<td>See Counsel/Admissions</td>
<td>See Counsel/Admissions</td>
<td>See Counsel/Admissions</td>
<td>See Counsel/Admissions</td>
</tr>
</tbody>
</table>
Valencia's History

Valencia Junior College was founded in February 1967 by the Orange County Board of Public Instruction and the State Board of Education under authority granted by the 1961 session of the Florida Legislature.

In fall 1967, the Charter Class, limited to freshmen, began classes in temporary facilities on West Oak Ridge Road, Orlando.

On July 1, 1967, the College Advisory Committee became the Valencia Junior College Board of Trustees and replaced the Orange County Board of Public Instruction as the governing body of the College.

The following have been landmark events in the history of the College:

* Being granted full accreditation by the Southern Association of Colleges and Schools in 1969.
* Changing its name from Valencia Junior College to Valencia Community College in 1971.
* Moving to a first permanent campus in 1971.
* Adding Osceola County to the College district in 1974.
* Creating Open Campus in 1974.
* Opening East Campus in 1975.
* Opening a permanent campus in Osceola County in 1986.

Valencia's Multi-Campus Growth

Valencia is now a multi-campus institution. West Campus is situated on a 180-acre site at 1800 South Kirkman Road. East Campus is situated on an 80-acre site at 701 North Econlockhatchee Trail. The primary Open Campus administrative office is in the College's Downtown Center in the Chicoree Building at 190 South Orange Avenue.

Three permanent arms of Open Campus are Osceola Campus, a joint-use facility adjacent to Gateway High School at 908 Osceola Boulevard in Kissimmee; the Winter Park Center at 1010 North Orlando Avenue; and the McCoy Center for Business & Industry Services, near Orlando International Airport. These facilities provide a variety of educational opportunities — continuing education and credit courses, certificate programs, and associate in arts and associate in science degrees — to all citizens in the College district.
<table>
<thead>
<tr>
<th>EVENT</th>
<th>SESSION 1</th>
<th>SESSION 2</th>
<th>SESSION 3</th>
<th>SESSION 4</th>
<th>SESSION 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Application Deadline</td>
<td>Aug 10</td>
<td>Dec 12</td>
<td>Apr 5</td>
<td>June 8</td>
<td>Apr 5</td>
</tr>
<tr>
<td>Registration Appointment Deadline</td>
<td>Aug 12</td>
<td>Dec 16</td>
<td>Apr 7</td>
<td>June 9</td>
<td>Apr 7</td>
</tr>
<tr>
<td>Returning Student Registration (By Telephone Only)</td>
<td>July 25-29</td>
<td>Nov 28-30</td>
<td>Apr 10-14</td>
<td>Apr 10-14</td>
<td>Apr 10-14</td>
</tr>
<tr>
<td>New &amp; Returning Student Registration (Appointment Only)</td>
<td>Aug 1-5</td>
<td>Dec 5-9</td>
<td>Apr 17-21</td>
<td>Apr 17-21</td>
<td>Apr 17-21</td>
</tr>
<tr>
<td></td>
<td>Aug 15-19</td>
<td>Dec 12-16</td>
<td>Apr 24-27</td>
<td>Apr 24-27</td>
<td>Apr 24-27</td>
</tr>
<tr>
<td></td>
<td>Aug 22-23</td>
<td>Jan 3-4</td>
<td>May 1-2</td>
<td>May 1-2</td>
<td>May 1-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>June 13-16</td>
<td>June 16</td>
<td>June 19</td>
</tr>
<tr>
<td>Faculty Report</td>
<td>Aug 22</td>
<td>Jan 3</td>
<td>May 2</td>
<td>June 20</td>
<td>May 2</td>
</tr>
<tr>
<td>*Late Registration &amp; Drop/Add</td>
<td>Aug 24-25</td>
<td>Jan 5-6</td>
<td>May 3-4</td>
<td>June 20-21</td>
<td>May 3-4</td>
</tr>
<tr>
<td>Evening Classes Begin</td>
<td>Aug 24</td>
<td>Jan 5</td>
<td>May 3</td>
<td>June 20</td>
<td>May 3</td>
</tr>
<tr>
<td>Day Classes Begin</td>
<td>Aug 24</td>
<td>Jan 5</td>
<td>May 3</td>
<td>June 20</td>
<td>May 3</td>
</tr>
<tr>
<td>Audit Registration Deadline</td>
<td>Aug 30</td>
<td>Jan 11</td>
<td>May 4</td>
<td>June 21</td>
<td>May 9</td>
</tr>
<tr>
<td>Deadline for Refund Requests</td>
<td>Aug 30</td>
<td>Jan 11</td>
<td>May 4</td>
<td>June 21</td>
<td>May 9</td>
</tr>
</tbody>
</table>

*Late Registration for evening and Saturday classes continues through the first class meeting.
VALENCIA'S VALUES, VISION, AND MISSION

VALUES

At Valencia we value each student as a unique individual by supporting student success, high academic and personal standards, civic responsibility, and a lifelong quest for excellence.

We value the importance of critical thinking, reading, writing, and computational skills in all programs as a necessary component of lifelong learning.

We value a communicative and friendly collegiate environment, with faculty and staff who support a caring and professional relationship with our students and community.

We value the educational and interpersonal contributions to the College that people from all ethnic and cultural backgrounds bring us.

We value our ability to quickly and effectively respond to community needs through effective public/private partnerships.

VISION

Valencia Community College, an innovative institution of higher education, will continue to be recognized for teaching excellence, student success, and leadership in economic development and service to the community.

MISSION

Valencia Community College, a comprehensive multi-campus community College, is a creative leader and partner in the Central Florida community. The College is dedicated to the premise that quality educational opportunities are necessary to bring together the diverse social, ethnic, political, and economic forces in a democratic and open society. The College also recognizes that each student is different and, therefore, should have available a variety of services that support student academic and personal development.

As an educational leader in the community, Valencia commits its resources to providing an open-door, comprehensive postsecondary education, including opportunities for individual growth, professional development, and academic achievement. Valencia's dedicated faculty and staff offer courses, seminars, and workshops at multiple campuses and centers utilizing traditional class curricula, as well as emerging instructional technologies. Planning and evaluation are ongoing processes to ensure institutional effectiveness.

In an effort to be continually responsive to the changing needs of the community, as well as to mandated requirements, the College provides:

- A two-year parallel program that prepares students to transfer to an upper-division College or university
- College-preparatory courses that provide students with assistance in basic skills
- Technical programs and continuing education courses that prepare students to meet the needs of business and industry

As a partner, Valencia enters into and stimulates cooperative relationships with local businesses and industries, public agencies, civic groups, and educational institutions as it seeks to assist in the economic development of Central Florida. These relationships are maintained through professional advisory committees, a carefully articulated curriculum, and the expertise of faculty, staff, and students. These partnerships foster a cooperative community effort as Valencia and Central Florida prepare to meet the 21st century.

VALENCIA’S ROLES AND FUNCTIONS

1. The Transfer Function - A College-level program of general education and specialized courses designed to prepare students to transfer to baccalaureate degree granting colleges and universities.

2. The Technical Education Function - Technical College-level programs designed to prepare graduates to enter immediately into the work force.

3. The Economic Development and Service Function - Technical courses, workshops, conferences, seminars, and activities designed to meet the economic development needs of the community by providing participants with job-related skills.

4. The General Education Function - General education courses designed to prepare students for responsible citizenship, for wholesome and creative participation in life activities, and for intelligent decision-making.

5. The Student Services Function - Student services and activities designed to assist students in assessing and achieving their goals through academic, career, and personal decision-making.

6. The College-Preparatory Function - College preparatory courses designed to enable students to achieve College-level competency in reading, writing, mathematics, and elementary algebra.
The Valencia Community College Foundation, a nonprofit organization, was established in 1974 to give the community's private and corporate sectors an opportunity to play an active role in the College through leadership and financial support. The Foundation receives, manages, and disburses funds for the enhancement of college programs and services.

The management of the Foundation is vested in its board of directors, business and professional leaders from the community, and the College administration. Permanent board positions are filled by Valencia's president, a representative of the District Board of Trustees, and the president of the Alumni Association.

The Foundation is empowered to solicit and receive gifts, both monetary and tangible assets, from individuals, partnerships, or corporations. Gifts may be designated for specific purposes or given to be used as determined by the board of directors and the District Board of Trustees. For additional information, call 299-5000.

**VALENCIA COMMUNITY COLLEGE FOUNDATION, INC.**
**EXECUTIVE COMMITTEE 1991-92**

**PRESIDENT**
William Trickel, Jr.

**IMMEDIATE PAST PRESIDENT**
F.B. "Ted" Bywater

**REPRESENTATIVE FROM**
Valencia Community College
Paul C. Gianiini, Jr.

**SECRETARY**
Sue Foreman

**REPRESENTATIVE FROM**
Valencia Community College
ALUMNI ASSOCIATION
George O'Neill

**TREASURER**
Thomas E. Triplett

**REPRESENTATIVE FROM DISTRICT BOARD OF TRUSTEES**
Jeanne L. VanMeter

**PAST PRESIDENT AND PERMANENT MEMBER OF THE EXECUTIVE COMMITTEE**
Elizabeth A. Sterchi

**BOARD OF DIRECTORS OF THE VALENCIA COMMUNITY COLLEGE FOUNDATION, INC.**

A.N. Abramowitz
John K. Awsumb
Jerry Billings
Donald J. Bohannon
Donald Byrne
F.B. Bywater
Allen D. Carroll
Marie N. Caruso
Mary S. Collier
Edward B. Crowell
Robert J. Crowell
Julian K. Dominick
Richard P. Finnegan
Sue Foreman
A. George Fuller
Kathy A. Cardwell
Paul C. Gianiini, Jr.
Eleanor Hill
Russell Hughes
Thomas R. Hutton
Allan E. Keen
Richard Luzadder
Fred MacLeod
Raymer F. Maguire, III
Edward J. Manning
Rafael E. Martinez
Harvey L. Massey
Paul S. Mears, Jr.
George O'Neill
Norman R. Rice
Robert M. Rich, Jr.
James C. Robinson
Jerry L. Rogers
Ronald O. Rogers
Solomon F. Schick
Andrew N. Serros
Lawrence D. Slocum
James J. Smeenge, Jr.
Alan C. Starling
Elizabeth A. Sterchi
William Trickel, Jr.
Thomas E. Triplett
Jeanne L. VanMeter
Robert M. Vickery
Patricia H. Whalen
Joseph Wittenstein
Thomas H. Yochum
THE VALENCIA COMMUNITY COLLEGE ALUMNI ASSOCIATION

The Valencia Community College Alumni Association was established in 1979 to continue relationships between the College and its former students and to strengthen the bond between Valencia and the community. Throughout the year the Association sponsors events designed to promote social interaction among faculty, staff, and students; to support College programs; and to raise funds for scholarships and programs. Membership in the Alumni Association is available to any person who has attended classes at Valencia. For additional information call the Alumni Office.

INTERNATIONAL/INTERCULTURAL EDUCATION PROGRAM

Valencia Community College continues to respond to the demands placed on it by a shrinking world. Since the founding of the College in 1967, Central Florida has grown from a state and regional vacation spot to a hub for international business, industry, and entertainment. Indeed, Orlando has become an international city. To prepare students for effective citizenship and employment, Valencia continues to respond to the educational demands made by students seeking prosperity and security in what has become a world community.

To promote its students' open-mindedness in a world community, the College continues to develop and offer a curriculum and a social environment that promote mutually beneficial international/intercultural exchanges. Of particular importance are the mission statement and goals of the College's Long Range Plan for International/Intercultural Education.

Mission Statement: The purpose of international/intercultural education at Valencia is to promote knowledge, understanding, and appreciation of other peoples and cultures.

Goals

1. To increase interaction among individuals from various countries and cultures.
2. To add international dimensions to the College curriculum.
3. To encourage and increase faculty and student participation in international/intercultural experiences.
4. To enhance the international student program.
5. To expand opportunities for developing language competencies.
6. To develop educational programs of the College to foster international economic development.
7. To enhance the relationship between the College and the international dimensions of the community.

ENGLISH AS A SECOND LANGUAGE (ENS)

Valencia offers English as a Second Language (ENS) classes at the low-intermediate and high-intermediate levels in writing, reading, structure, and speaking/listening. Students who need basic ESOL are referred to the Orange County Adult Education ESOL program. The College offers a combined-skills ESL course as a "bridge" to low-intermediate ENS courses.

To be admitted, students on F-1 student visas must demonstrate proficiency at least at the high-intermediate level.

STUDY ABROAD

To enhance international/intercultural understanding, the College provides both short- and long-term academic study-abroad programs.

SHORT-TERM PROGRAMS

Valencia conducts several short-term overseas academic programs. The courses in these programs provide an excellent opportunity for students to combine foreign travel and on-campus academic instruction. These courses are fully accredited and may be applied toward a degree at Valencia. Approximately three short-term courses are offered each year, with study opportunities in Mexico and/or Europe.

LONG-TERM PROGRAMS

Valencia is a member of the College Consortium for International Studies, a national organization to provide high quality international/intercultural study abroad. As a member, the College offers semester or academic-year programs which provide students both instruction and immersion in the culture of another country. Programs are available in approximately 18 countries, including France, Germany, Ireland, Italy, Scotland, Spain, Sweden, England, and Switzerland.

In general, instruction overseas is in English. In most programs, students are required to study the language of the host country while overseas, but there is no requirement that a student study, or have studied, the language prior to departure. Students in these programs may earn 12-18 credits per semester toward a degree at Valencia.

Seminars for faculty and administrators are offered regularly in several overseas locations. These programs are designed to be appropriate for a diversity of disciplines, including arts, humanities, social sciences, and international education. Further information about these opportunities is available through the Office of International Education, West Campus.

Materials, resources, and literature on work, study, and travel abroad for faculty and students are available in the Career Center, East Campus, and the Office of International Education, West Campus.
OPEN CAMPUS - EDUCATIONAL & ECONOMIC DEVELOPMENT

VALENCIA’S ECONOMIC DEVELOPMENT CONNECTION

Open Campus offers educational and economic development opportunities to students at convenient sites in Orange and Osceola counties. Originally designed to offer continuing education and instructional telecommunications programs, Open Campus became an integral part of the College in July 1974. Since then, numerous Open Campus credit courses and nontraditional programs have expanded Valencia’s offerings to the community.

Although the primary campus administrative office is in the Downtown Center, Open Campus classes are offered in approximately 100 locations and three major outreach centers. The Winter Park Center, opened in 1986, offers credit as well as noncredit programs. Osceola County residents are served through a joint-use facility in Kissimmee, which opened in 1987 and offers selected noncredit courses and credit courses leading to an associate degree. The McCoy Center for Business & Industry Services, near Orlando International Airport, serves business and health professionals.

The Campus offers both traditional and nontraditional outreach functions. It provides all continuing education activities and many of the same College credit courses offered on East and West campuses.

Open Campus assists the community in providing a better quality of life—a stable economy, diversified employment sources, higher levels of income, and new job opportunities. Classes are held not only on East and West campuses but, also, in churches, hospitals, schools, libraries, businesses, dental offices, and police and fire stations. The Governmental Services program offers national public service employees training at a local hotel. Classes offered in such locations provide a comprehensive network of programs and services designed to enhance learning as well as community and economic development.

Open Campus provides unique learning opportunities for students who would otherwise be unable to continue their education. This “campus without walls” serves not only traditional students but also a variety of nontraditional students—senior citizens, housewives, displaced homemakers, ethnic minorities, persons needing job training to enter or re-enter the job market, persons needing retraining to improve their occupational skills, veterans, and even employers.

The guiding principles of Open Campus are to

- Make Valencia more open, accessible and responsive to individual, corporate, and community needs.
- Expand opportunities for higher education for a variety of constituencies with special training and educational needs.
- Integrate College and community by adjusting institutional offerings to lifestyles and life situations.
- Make more extensive use of community resources for teaching/learning experiences.

The success of Open Campus is a result, in part, of its organizational structure, which allows for flexibility, creativity, and accountability.

CENTER FOR PROFESSIONAL DEVELOPMENT

The Center for Professional Development is an approved provider of continuing education for health professionals and offers workshops, seminars, and conferences to meet a variety of professional development needs. Training is offered for nurses, dentists, emergency medical technicians, mental health professionals, social workers, marriage and family therapists, radiology technicians, psychologists, and addiction professionals. Courses are designed to expand technical skills using state-of-the-art equipment and techniques. Other services offered through this Center include the following:

HEALTH AND HUMAN SERVICES

Individualized programs are designed to meet the changing needs of health and human service professionals seeking to achieve educational goals or maintain certification or licensing. Classes are designed to enhance the competence of currently employed health professionals and to update the knowledge and skills of those seeking to re-enter the health field. A variety of times, locations, topics, and contact hours is offered. This program has been approved as a provider for addiction professionals and addiction prevention professionals.

CONFERENCE DEVELOPMENT SERVICES

Valencia offers a variety of services to help develop and implement plans for regional, state, national, and international conferences in the Orlando area. Services include site selection, facility negotiation, program development, conference coordination, on-site registration and management, and graphic assistance for publicity and marketing. Specialized services are available upon request.
TECHNICAL SERVICES

Working closely with the conference development area, the College offers modern conference production techniques, including satellite uplinks and downlinks for teleconferences. Valencia’s Center for Professional Development also can provide “high-tech” film and television studio facilities and a wide range of audiovisual services to business and industry to enhance corporate training.

FAMILY EDUCATION

Valencia’s Family Education program provides a wide range of educational opportunities to help parents enrich their children’s lives and build family strengths. Courses for parents of children of all ages are conducted at numerous sites. Topics include child development, communication, discipline techniques, and coping with stress.

GOVERNMENTAL SERVICES PROGRAM

The Governmental Services program is nationally known for providing state-of-the-art seminars and workshops for criminal justice employees, public safety officers, fire fighters and others involved in enhancing the technical skills of public service professionals. Creative and timely topics are explored by leading experts in their respective fields. Police and fire officials nationwide attend these specialized courses to continue their education and provide expertise to their departments.

This department also provides training and technical assistance to federal, state, and local governments through a variety of training classes, workshops, and seminars to meet the needs of government employees, elected officials, and citizen advisory board members.

WINTER PARK CENTER

Valencia’s District Board of Trustees established the Winter Park Center in September 1966 to serve residents of the northern district. This conveniently placed outreach center offers both day and evening credit and noncredit classes. Credit courses offered for employees at their business location are coordinated through this Center as are support services, including academic advisement, registration, and ASSET testing.

The unique teacher recertification program at the center allows staff members to work closely with area school teachers to update specific content areas while they pursue teaching certificate renewal. Teachers can extend their certificates by taking credit courses custom-tailored to meet individual needs. Courses are offered at the campuses, Sea World, the Orlando Science Center, and other sites in the district.

VALENCIA’S WOMEN’S CENTER IN WINTER PARK

In addition to Valencia’s efforts to meet the needs of business and education professionals, the Women’s Center serves students requiring special assistance to achieve academic excellence.

Valencia’s Women’s Center provides counseling and assessment for men and women making transitions in their lives. Programs are designed for persons who need assistance with career changes, goal setting, work values and job-seeking skills.

The Women’s Center offers special programs for groups such as displaced homemakers, single parents, and other nontraditional students needing specific career training. Programs are based at the Winter Park Center, but are held at several district sites. Displaced Homemaker programs are designed for those who want to clarify their career direction, identify personal strengths, discover educational and training opportunities, and learn strategies for conducting a successful job search.

Management training for local businesses is coordinated by the Women’s Center staff on such topics as communication skills, time management, career pathing, and team building. Professional network opportunities are available monthly through the Black Women in Management Network, the Women Business Owner’s Network, the Women in Management Network, and the Job Developer’s Network.

Academic advising is available at the center for persons entering or returning to College, with special emphasis on adult learners with special needs.

McCOY CENTER FOR BUSINESS AND INDUSTRY SERVICES

For more than 20 years, Valencia has served the training needs of business and industry in Central Florida. In the process, the College has earned a well-deserved reputation for faculty excellence and the practical, up-to-date content of its programs. Classes in the following five major program areas are offered on Valencia campuses and at a wide variety of business locations:

INSTITUTE FOR BUSINESS AND INDUSTRY (IBI)

The Institute for Business and Industry provides a variety of continuing education programs at business sites and Valencia campuses. Workshops, seminars, and classes are offered to meet the special needs of area businesses.

Institute services are designed to improve managerial skills, develop technical and professional competencies, and update workers on the latest advances in their fields. IBI’s staff is comprised of leading experts from business and industry who stress the importance of staying up-to-date on skills and information to enhance proficiency and increase profit.

Educational development programs are also provided to all management/professional skill levels in business and service agencies, with programs for small businesses, professional groups, partnerships, and large corporations.
COMPUTER TRAINING INSTITUTE (CTI)

The Computer Training Institute programs are designed to meet the needs of students wishing to develop computer skills. Serving everyone from business executives to homemakers, short-term courses offer students software applications of word processing, financial spreadsheets, electronic filing systems, and the basics of using personal computers.

Faculty are experienced professionals who know the software and, more importantly, know how to teach adults needing special assistance. Students receive a hands-on learning experience in intensive workshops. Designed for people with busy schedules, the workshops are offered during the day, in the evenings, and on weekends—always at sites convenient to students.

OFFICE SYSTEMS TECHNOLOGY INSTITUTE (OSTI)

To contribute to the economic development of Central Florida, OSTI operates tailor-made office skills centers at Sun Bank, Walt Disney World, Orlando Central Park Center, Harcourt Brace Jovanovich, the Winter Park Center, the McCoy Center for Business & Industry Services, and at the Osceola Campus. These unique public/private partnership programs have received national acclaim for their foresightedness in meeting the needs of business and industry.

The centers offer individualized multimedia courses in clerical and administrative skills, accounting, word processing, data processing, basic skills, and other business matters. The open-entry/open-exit courses are designed to train entry-level employees in basic office skills, enhance the skills of current employees, and prepare experienced employees for advancement. All courses are individualized and self-paced so employees can master the skills at their own pace. Although most of the courses are noncredit, students who wish can earn College credit for courses in typing, business math, shorthand, keyboarding, word processing, and computer applications.

Special home study courses are available through OSTI on audiotape, videotape, and written form to be checked out and completed by students at their own pace.

INTERNATIONAL BUSINESS DEVELOPMENT

International Business Development conducts seminars and classes to assist interested students in developing the knowledge and skills necessary to enter the international business arena. The program targets international trade and assists businesses with specific training needs. Courses are taught by experienced consultants in a variety of fields, including banking, international law, import/export policies, and worldwide marketing.

OSCEOLA CAMPUS

Valencia's Osceola Campus, opened in January 1987, provides degree and non-degree courses in a wide variety of topics. A full-service facility, the campus provides admission, counseling, placement testing, bookstore facilities, and library services. The instructional staff includes full- and part-time faculty selected from a wide range of highly qualified professionals.

All courses for an Associate in Arts degree for university transfer and core courses toward an Associate in Science degree are offered. Continuing education courses are offered in several areas, including real estate and computer training.

The Osceola Campus is a joint-use facility with the School Board of Osceola County. Faculty and students benefit from sharing library facilities and science laboratories with Gateway High School. Valencia's dual enrollment program is an exemplary cooperative project between Valencia and the high schools in Osceola County. In this program, a high school senior with a GPA of 3.0 is allowed to take College courses during the day and earn College and high school credit simultaneously.

The Osceola Campus allows citizens of Osceola County to take advantage of university transfer programs, selected technical courses, and continuing education classes in a location accessible to their homes.

VALENCIA TELEVISION (VTV)

Many students find telecourses an exciting, convenient, and economical way to earn College credit. Courses in such areas as biology, business, psychology, and humanities are televised weekly on local television and cable outlets scheduled at various times during the week. To obtain credit, the student must apply, register for the class, pay course tuition, watch the telecasts, complete the textbook and workbook assignments and visit a Valencia campus five to seven times during the semester for orientation, reviews, mid-term examination, and final examination. If a telecast is missed, make-up viewing is available at the student's convenience in the audiovisual section of the Learning Resources Center on East, West, and Osceola campuses.

CONTINUING EDUCATION

The Open Campus continuing education program consists of a comprehensive offering of courses with occupational, personal and avocational emphases. For more information about course content and length, class schedules, etc. consult the continuing education schedule or contact Open Campus. Continuing education courses are designed to meet the needs of individual students or groups of students who are not interested in enrolling for College credit, but are interested in upgrading occupational or personal skills or learning to make better use of leisure and recreational time. They are offered throughout Orange and Osceola counties.

Students satisfactorily completing courses designated CEU can earn one continuing education unit for every 10 contact hours of participation. While CEUs are neither College credit nor their equivalent, these nationally approved units are being used by business and industry to validate adult education experiences.

Open Campus continuing education courses and services are available to businesses, industries, clubs and organizations that have particular training needs.
ADMISSION
REQUIREMENTS

You may be admitted to Valencia Community College as a student upon the
College's receiving your high school or
General Equivalency Development (GED)
transcript and, when appropriate, a
college transcript—if you satisfy any of
the following criteria:

1. You have a diploma from a high school
   accredited by the Florida State
   Department of Education or a diploma
   from a regionally accredited high school.
   Additionally, for admission to the
   Associate in Arts (AA) degree program,
   if you were graduated from high school
   after August 1, 1987, you will be
   required to have successfully completed
   a minimum of four years of English and
   three years each of mathematics, social
   studies, and science in grades nine
   through 12. If you earned a high school
diploma after August 1, 1987, and lack
   the minimum number of credits in
   English, mathematics, social studies, and
   science, you may enroll in courses
   leading only toward an Associate in
   Science (AS) degree unless you receive a
   state-approved GED.

2. If you have a Certificate of Completion
   from a Florida high school, you will be
   admitted as a Certificate of Completion
   Provisional Student, and your
   enrollment will be limited to courses
   required for an AS degree. You will
   remain so classified until you provide a
   high school equivalency diploma after
   completing the GED test through a state
   department of education.

3. You are at least 18 years of age and, after
   completing the GED test through a state
   department of education, have been
   issued a high school equivalency diploma.

4. You are under 18 years of age and, after
   completing the GED test through a state
   department of education, have been
   issued a high school equivalency diploma.

5. You are at least 18 years of age, legally
   out of school, and without a high school
   diploma. You will be admitted as a
   provisional student and may enroll for
   up to 12 credit hours of course work
   with the understanding that you
   complete the GED test through a state
   department of education before
   registering for your 13th College credit.
   If you have not been issued a high school
   equivalency diploma prior to registering
   for your 13th college credit, your
   enrollment will be limited to courses
   leading to an AS degree. To change your
   status from provisional to regular, you
   must provide a high school equivalency
   diploma after completing the GED test
   through a state department of education.

6. You registered previously at another
   college or university, regardless of the
   length of attendance or credit earned.
   You must be eligible to return to the last
   college attended. You must request that
   each college or university you attended
   previously send a transcript of your
   record directly to Valencia's Admissions
   Office prior to your registration. You
   must answer all items on the appropriate
   application form completely and
   accurately regarding all former
   enrollments if you expect to receive
   credit and/or graduate from Valencia.

   FAILURE TO FURNISH COMPLETE
   AND ACCURATE INFORMATION
   MAY RESULT IN CANCELLATION OF
   REGISTRATION AND LOSS OF ALL
   CREDITS EARNED AT THIS COLLEGE.

a. Your credits will be accepted if earned at
   colleges or universities fully accredited
   by regional accrediting agencies
   (Southern Association of Colleges and
   Schools, for example), provided the work
   at the other institutions was on a level
   normally included within the first two
   years of college and a grade of D or
   higher was earned. (*Grades of D or
   lower will not be accepted to satisfy
   requirements for ENC 0012 College-Prep
   English II or any Gordon-Rule courses.)

b. If you are on academic suspension from
   another college or a university, you are
   eligible for enrollment only upon written
   recommendation from your transfer
   institution.

c. If you are on disciplinary suspension
   from another institution, you must
   secure approval of the Committee of
   Student Appeals to be eligible for
   admission.

d. If you have transfer quality-point
   deficiencies, they will be included in the
   computation of GPA requirements for
   graduation.

e. To validate transfer credits earned more
   than 10 years before enrolling at
   Valencia, you must earn a C average or
   higher in the first 12 semester-hours
   credit you earn at Valencia.

7. You are a transient student seeking a
   degree from another institution and
   desire to take a course at Valencia for
   transfer or credit. You are not required
   to submit a transcript of your other
   college records, but you must have
   written permission (Transient Student
   Form) from your "home" college or
   university and complete the Valencia
   Community College Application for
   Admission form. You must also submit
   a Transient Student Form for each term
   you enroll as a transient student at
   Valencia.

8. You desire to enroll at Valencia for
   personal enrichment, job improvement,
   or teacher recertification. You would
   register as a part-time student for at least
   one credit course and be classified as
   neither freshman nor sophomore.
   Valencia transcripts will indicate your
   special status.

a. You cannot be admitted prior to your
   18th birthday if you are not a high school
   graduate, unless you have (1) completed
   an Early Admission/Dual Enrollment
   form, (2) taken the GED test through a
   state department of education and have
   been issued a high school equivalency
   diploma, or (3) received a certification of
   completion.

b. If you attend another college or
   university, you must sign a statement
   certifying that you are eligible to return
   to the last institution attended and that
   you are not now under any suspension.

c. You may change your status to regular
   student upon written request in the
   Admissions Office when all admission
   requirements for regular students have
   been met.
9. If you are an academically outstanding student, you may enroll as an early admissions student at Valencia during your senior year of high school. Students interested in the early admissions program must meet the requirements established by their county board of public instruction and Valencia Community College.

10. While a high school senior, you may dual-enroll in Valencia classes taught on your high school campus during school hours. You must be qualified and have the approval of your parents and guidance counselor.

Eligibility for early admission or dual enrollment is determined by requirements of the Orange or Osceola County Board of Public Instruction and Valencia Community College based upon test scores and an average of B in all courses taken in grades 10 and 11. College credit earned during early admission or dual enrollment is held in escrow and granted after you are graduated from high school.

To apply the college credit you earn through the early admission or dual-enrollment program towards a degree at Valencia, you must provide a high school transcript showing your graduation date. No high school credit is granted by the College. Further information may be obtained from the guidance counselor at your high school.

11. You meet international student requirements. This College is authorized under federal law to enroll nonimmigrant alien students. If you wish to enroll at Valencia on a nonimmigrant visa (F-1 or J-1), you must meet all the admission requirements outlined below. Your application materials should be submitted to the Admissions Office at least two months prior to the start of the session in which you wish to enroll.

a. You must satisfy the admission requirements as a regular student.

b. You must submit an International Student Application.

c. You must submit a regular Application for Admission form.

d. You must pay a non-refundable application fee.

e. You must have the equivalent of a high school education in the United States, and you must submit a complete record of all subjects you have taken and examinations you have passed. These records must carry the official seal of the educational institution.

f. Since instruction is in the English language, you must have adequate knowledge of the English language to pursue a full course of study for credit. If English is not your native language, you must demonstrate competency on a placement test. You may demonstrate proficiency by a score of 450 on the TOEFL, successful completion of the ELPA at Valencia or college level performance on the ASSET test. Students whose scores fall below a designated level on the ASSET test will be required to take the ELPA. Non-native speakers are encouraged to begin the assessment process by registering for the ELPA in the counseling department.

Your level of English language proficiency at the time of admission will determine if you must take ENS/ESL classes at Valencia.

You will not be required to demonstrate English proficiency if you have completed 30 or more semester credits in a U.S. College or university with at least a 2.5 GPA or if you have earned an AA degree for which English was the language of instruction.

g. If your English proficiency is such that you are not required to take ENS/ESL classes, you will be required to take assessments in reading and writing the English language and in mathematics for placement in appropriate courses.

h. You must submit a declaration of finances certifying that you have the financial resources to attend Valencia.

i. You must submit a signed International Student Agreement form.

j. The College has no dormitories or living facilities; thus, you are responsible for providing your own housing and transportation.

k. You must be covered by health insurance that is active in the United States during your entire period of study at Valencia.

Because Valencia is committed to broaden the education of its American students by acquainting them with persons from a variety of countries and cultures and to acculturate international students in American ways and language, no more than 20 percent of the total international student enrollment shall be from a single country.

12. Immigrants, refugees and U.S. citizens who do not speak English as a native language will be required to demonstrate their English language proficiency. Since instruction at Valencia is in the English language, you must have adequate knowledge of the language to enroll. To demonstrate this competency, you will be required to take and pass the ELPA at Valencia.

Your level of English language proficiency at the time of admission will determine if you must take ENS/ESL courses at Valencia.

Students who need basic English are referred to the Orange and Osceola County Adult Education ESL program.

You may not be required to demonstrate English proficiency if you have completed, with at least a 2.5 cumulative GPA, 30 or more semester credits in a U.S. college or university or if you have earned an AA degree for which English was the language of instruction.

1. Before your first registration, you must submit in person or by mail to the Admissions Office a completed Application for Admission form, the nonrefundable application fee, transcripts, and any other records for admissions consideration. The information should be in the Admissions Office before the admission deadline listed in the calendar of the College catalog.

2. You must ask your high school or previously attended College(s) to forward a transcript of your records directly to Valencia Community College Admissions Office. Your entrance status is based upon this evidence. You are urged to do this as early as possible to assure complete records. This information MUST be received by the Admissions Office before you can be admitted to the College as a regular status student.
THE ADMISSION PROCESS

1. Before your first registration, you must submit in person or by mail to the Admissions Office a completed Application for Admission form, the nonrefundable application fee, transcripts, and any other records for admissions consideration. The information should be in the Admissions Office before the admission deadline listed in the calendar of the College catalog.

2. You must ask your high school or the previously attended college(s) to forward a transcript of your records directly to the Valencia Community College Admissions Office.

Your entrance status is based upon this evidence. You are urged to do this as early as possible to assure complete records. This information MUST be received by the Admissions Office before you can be admitted to the College as a regular status student.

ADMISSION REQUIREMENTS SUMMARY

Valencia Community College requires the documentation marked with an “X” in the following chart from those students applying under the categories listed. The application fee is payable ONE TIME ONLY.

| Degree Seeking Students | Special Students | Teacher Recertification | Transient Students | Dual Enrollment | Early Admission Students | / | International Students | Students Whose Native Language is Not English | Audit |
|-------------------------|------------------|-------------------------|-------------------|----------------|-------------------------| / |------------------------|---------------------------------------------|-------|
| Credit Application Form | x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |
| Application Fee         | x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |
| Affidavit of Residence  | x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |
| (on application)        | x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |
| Privacy Act Statement | x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |
| Signature              | x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |
| High School Transcript  | x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |
| or Certificate of       | x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |
| Completion of GED       | x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |
| College Transcript(s)   | x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |
| ASSET, SAT, ACT, or     | x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |
| MAPS Test Scores        | x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |
| TOEFL or ELPA Scores    | x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |
| Dual Enrollment or      | x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |
| Early Admission Form    | x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |
| Transient Student Form  | x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |
| International Student   | x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |
| Application, Financial  | x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |
| Statement, International| x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |
| Student Agreement Form  | x                 | x                       | x                  | x              | x                       | x | x                       | x                                           | x     |

Footnotes:
1. Must be furnished after the student has completed high school or GED requirements.
2. An official transcript is required from each institution previously attended.
3. Transcripts are required prior to taking English or math courses.
4. Not required for students who speak English as their native language.
INFORMATION NEEDED TO COMPLETE THE APPLICATION

1. Residency Information

a. Florida Resident. You are classified as a bona fide resident of Florida and are not required to pay out-of-state tuition when you have completed the Valencia Community College Application for Admission form with the residency affidavit properly notarized. You are classified as a bona fide Florida resident, for purposes of admission and finance at Valencia, if you are a citizen of the United States of America, a resident alien, or a legal alien granted indefinite stay, and have resided and have had habitation, domicile, home and permanent abode in the state of Florida for at least 12 months immediately prior to the start of classes for the session in which you plan to enroll. You also may be considered a Florida resident for tuition purposes if you are:

(1) A person married to a legal Florida resident who intends to make Florida a permanent home.

(2) An active duty member of the armed services stationed in Florida (and a spouse/dependent child) or military personnel not stationed in Florida whose home of record or state of legal residence certificate DD form 2058 is Florida.

(3) Full-time instructional and administrative personnel (and spouse/dependent child of same) employed by the state public school system, community colleges, or other institutions of higher education.

(4) A dependent child residing for at least five years with a legal resident adult relative other than the parent.

(5) A person who was enrolled as a Florida resident for tuition purposes at a Florida institution of higher education, but who abandoned Florida residency and then re-enrolled in Florida within 12 months of abandonment.

(6) A Latin American/Caribbean scholar sponsored by your government.

(7) According to the United States Immigration and Naturalization Service, you are a permanent resident alien or other legal alien granted indefinite stay. You have maintained domicile in Florida for at least 12 months. (INS documentation required.)

b. Non-Florida Resident. If you do not qualify as a Florida resident, you do not complete a residency affidavit on your Application for Admission form and must pay the tuition and charges required of non-Florida residents. College fees and tuition assessments are based on your legal residence or that of your parents or legal guardian if you are under 18 years of age.

c. Change of Residence. The burden of proof rests with you, the student, to establish Florida residence. The law provides that you can change your place of residence from another state to Florida only by physically coming into the state and establishing residence with the intention of becoming a permanent resident. Furthermore, any period of time in which a student resides in the state primarily for education purposes shall not be counted toward residency status.

Ownership of real property without actual residence is not enough. The domicile or legal residence of a wife is that of the husband or the domicile or legal residence of the husband is that of the wife as determined by the couple and duly expressed in writing. The legal residence of a minor is that of the parent or legal guardian. As a non-Florida resident, you may apply in writing for reclassification prior to any subsequent registration.

You are required to provide two types of verification showing you have resided in Florida for the previous 12 consecutive months for the purpose of publicizing this state your place of permanent residence. Residence in Florida must be for the purpose of establishing a permanent home and not merely incident to enrollment at an institution of higher education. Documents that may be used to verify a person’s residence may include a valid Florida driver’s license, a current voter’s registration card, a Declaration of Domicile, and a valid Florida vehicle registration. All of the documents must have been issued at least 12 months prior to the beginning of the term for which the student wants to be reclassified.

If you are an alien, you must present United States Immigration and naturalization certification that you are a resident alien. Classification as a Florida resident will then be recorded if your application is supported by satisfactory evidence. You are encouraged to complete the above process well in advance of registration. If the request for reclassification and the necessary documentation is not received by the registrar prior to the last day of registration for the term in which you intend to be reclassified for that term, you will not be reclassified for that term.

d. Fraud. You may be denied College credits for work done at Valencia if it is determined you have made false or fraudulent statements concerning your legal residence or your intentions as to legal residence in connection with, or supplemental to, your application for admission.

2. Campus of Record

You may attend classes at the East Campus (Econolockhee Trail), West Campus (Kirkman Road), or through Open Campus, or at all of these locations, but should declare your “home” campus by stating on your Application for Admission form where you plan to take most of your classes. Your records will be kept at the campus (East or West) which you designate. You can receive counseling, utilize student services and transact your business there. If you wish your records transferred to a different campus, you must complete a Change of Campus form in the Records Office of your “home” campus. It is your responsibility to notify the Records Office of any change in your status, address, etc. You have a right to view your records.

STEPS FOR NEW STUDENTS IN THE REGISTRATION PROCESS

ENTRY ASSESSMENT AND PLACEMENT

1. After you are admitted to Valencia, the first step is to provide placement assessment scores. ACT, SAT, MAPS, or ASSET scores are all acceptable, providing they are less than three years old. Scores may be submitted on an official transcript or score report. If you
have not taken any of the assessments identified or if scores are not available, it will be necessary for you to sign up for the ASSET entry assessment offered at Valencia. The assessment takes approximately three hours. There is no charge for this service.

The purpose of the assessment is to help you evaluate your achievement in mathematics, English and reading and assure that you are correctly placed in classes. Before taking any English or mathematics courses (except at the fundamental level) at Valencia, you must participate in assessment and advisement.

You may register for only one term at Valencia without the assessment (excluding English and mathematics courses) if (1) you have a two- or four-year College degree; (2) you plan to enroll in only one class (excluding English and mathematics courses) your first semester and have not graduated from high school during the previous academic year; (3) you are currently pursuing a degree at another College and plan to return to that institution without earning a degree from Valencia Community College (transient student status). If you are in one of these categories and do not choose to participate in the assessment and academic advising sessions, we encourage you to contact the Counseling Office on the campus where you plan to enroll.

Advising is available Monday through Friday on a walk-in basis during the day and by appointment Monday through Thursday in the evening.

Advising is available on Osceola Campus by appointment only.

If you do not provide appropriate assessment scores and choose initially not to attend a Valencia assessment session, you will be required to attend an assessment session after you complete one term (maximum 12 credit hours within that term) at Valencia before being allowed to register for additional credit courses. If you indicate on your application that you are a nondegree-seeking student, the initial assessment session may be optional; however, if you continue as nondegree-seeking and do not attend an assessment session, any hours you take after the first session may not apply toward a degree.

2. The second step for new students at Valencia is to schedule an advising session with a counselor or academic advisor. In this session you will receive help choosing your courses before enrolling for your first semester. At the end of the advising session you will be given an appointment card designating the day and time you are to register for your classes. You are required to pay your tuition fees according to the College’s fee-payment schedule. The assessment and advising sessions are conducted both during the day and in the evening.

NOTE: The College may limit students whose level of achievement of communication and computation skills is below that defined by the College as required for successful performance in a College-credit program to compensatory courses and any other instruction for which they are adequately prepared.

Restrictions on Enrollment

When limited facilities or programs restrict the size of enrollment, admission to the College will be granted in the order in which applications are received by the Admissions Office. The Admissions Committee reserves the right to deny you admission if your secondary school record provides evidence that you would be unlikely to make satisfactory progress in the educational programs provided by the College. The committee may further determine that you be admitted on provisional or probationary status. In such cases, you would be informed by letter of the conditions of your admission and the means by which the restricted status may be removed.

Advanced Placement

It is possible for you to earn College credits prior to enrollment at Valencia under a Florida statewide Advanced Placement Program agreement. To be eligible, you must present a valid score of 5, 4, or 3 on the examination administered by the College Entrance Examination Board. Credit thus granted by the College is transferable among Florida institutions of higher education participating in the statewide advanced placement agreement. The University of Florida does not accept a score of 3.

Admission to the Health Related Programs

Students interested in a health related career are encouraged to explore the many challenging and rewarding opportunities available in health related professions. Valencia Community College offers 11 health programs which lead to an A.S. degree. They are cardiovascular technology, dental hygiene, diagnostic medical sonography, dietetic technology, emergency medical services, medical laboratory technology, nuclear medicine technology, nursing, R.N., radiation therapy technology, radiography and respiratory care. Admission to these programs is limited because of clinical facilities and staff. Therefore, students who wish to pursue one of the 11 programs must meet requirements of that program.

Students seeking admission to any of the health related programs must complete two applications: (1) the Valencia Application for Admission form and (2) a specific application to the health related program in which they are interested. Admission to the College does not imply acceptance to the health related program. Applicants should contact the health related education advisor for admission requirements and procedures.

Primary consideration will be given to applicants who have completed all admission requirements and submitted an application by deadline dates. Completed applications received after this date will be considered on a space-available basis.

Before being accepted into a health related program, a student must have completed coursework and have earned the minimum GPA established for the program.

An applicant is required to complete Valencia’s assessment packet prior to application to a health program. Applicants must schedule an appointment with a College counselor to review test results. If deficiencies are indicated by test scores, the student will be required to complete mandated course work.

The Department of Health and Public Service provides academic and career counseling and information about specific admissions criteria.
CONDITIONS THAT APPLY TO ALL STUDENTS

1. You may be allowed up to 45 semester hours credit without overlap through general and subject examinations in the College Level Examination Program (CLEP).

2. College departmental examinations are available to you in certain subjects. (See appropriate department head.)

3. You may transfer credit earned at other regionally accredited institutions. (See catalog section on admission requirements.)

4. You or your dependent(s) may satisfy the tuition residency requirements. (See catalog section on residency.)

5. You may obtain professional counseling and advisement by contacting the Counseling Office.

6. You are protected from release of student information under the Family Educational Rights and Privacy Act, whereby only the following information may be released by the College: student name, address, telephone listing, race, sex, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of athletic team members, dates of attendance, degrees and awards received and the most recent previous educational agency or institution attended. Student directories, which are accessible to the public, may list student name, social security number, local and permanent address, telephone number, classification, and major field of study. If you refuse to permit the College to release "directory information," you must so inform the Admissions Office in writing within the first five days after the first class day of each session. The request must be made for each session. Your decision to refuse release of information means also that your name would not appear on lists of programs, news releases, etc. You must give written consent for release of information to second parties.

CLASSIFICATION OF STUDENTS

REGULAR STUDENT

You are classified as a regular student when you have provided the Admissions Office with all the required admission credentials and are officially working toward a degree. You are eligible to register as a full-time day or evening student in any session.

1. Full-time. You are a full-time student if enrolled for 12 or more semester hours credit in Session 1, 2 or 5, and six or more semester hours credit in Session 3, 4 or any of the College's minimesters.

2. Part-time. You are a part-time student if enrolled for fewer than 12 semester hours credit in Session 1, 2 or 5, and fewer than six semester hours credit in Session 3, 4 or any of the College's minimesters.

3. Freshman. You are classified as a freshman if you have completed fewer than 24 semester hours credit of College work.

4. Sophomore. If you are regularly enrolled in College credit courses and have completed 24 semester hours credit and are still taking courses toward your initial degree, you are classified as a sophomore.

AUDIT STUDENT

When you register for a College credit course for which you do not want credit, you are an audit student. To register as an audit student, you need not have special permission, but you must register during the regularly scheduled registration period and indicate on the registration form that you plan to audit the class for no credit.

1. As an audit student you must meet the admission requirements of the College.

2. Your fees and tuition are the same as for credit.

3. You must regularly attend your class and make regular class preparation. You may participate in all class activities, but you will not be required to take examinations and will be given neither grades nor credit.

4. Once the late registration period has ended, you may not change from audit status to credit status or from credit status to audit status without approval of the campus provost.

ROTC AND CROSS ENROLLMENT

Students, male and female, at Valencia are eligible through cross-enrollment agreements to apply for the United States Air Force ROTC program at the University of Central Florida or the U.S. Army ROTC program at Stetson University with Army Military Science classes conducted at the University of Central Florida and Valencia campuses. A maximum of eight semester hours of ROTC credit may apply as elective credit toward a degree at Valencia. Further information is available at the ROTC office at the appropriate university and Valencia.

SPECIAL SCHEDULING OPPORTUNITIES

MINISTER

The minimester is designed to allow students already registered for classes to supplement their current course schedule and new students who missed the regular session to enroll on a limited basis.

WEEKEND COLLEGE

The Weekend College provides a program of Friday evening, Saturday and/or Sunday classes for individuals interested in obtaining a college education by attending on weekends.

Weekend classes are scheduled to allow students to receive a maximum of 12 hours of credit during Sessions 1 and 2. Students choosing to attend weekends may be able to complete an associate degree program in five years by completing six hours of credit every session.

Students are encouraged to supplement weekend classes with either TV courses or courses by mail.
INDIPENDENT STUDY

Valencia offers Independent Study (IS) in various courses to allow you to progress at your own rate. Independent Study helps you meet course requirements through individual student/faculty interaction in a non-classroom situation. Independent Study arrangements are dependent on the availability of a professor. Regardless of the date of enrollment in an IS course, you must complete the class prior to the end of the session in which you sign up for it or receive a grade of W.

You may not re-take a course in which you have already received credit under independent study.

If you wish to take an IS course, you will have to make arrangements with a professor and the appropriate department chair. Application forms are available in the departmental office responsible for the course. A non-refundable fee of $10.00 per student semester hour is charged in addition to regular tuition for each IS course in which you enroll. Independent study is not covered by government grant programs, but you may be eligible for coverage by special permission under veterans programs.

MILITARY TRANSITION PROGRAM

A state grant has funded this program to assist service members and their families to re-enter the civilian workforce through postsecondary education. Emphasis is placed on providing adequate information on the College to potential students to facilitate their decision-making process. Additional information on the Orlando area and community support organizations will be provided upon request. An informal network of interested employers is being developed for referral of successful graduates. For additional information, contact the Office of Military Transition.

CLEP CREDIT AWARDED AT VALENCIA

<table>
<thead>
<tr>
<th>Examination</th>
<th>Course</th>
<th>Equivalent</th>
<th>Credits Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Science</td>
<td>POS 101</td>
<td>POS 1002</td>
<td>6 Hrs.</td>
</tr>
<tr>
<td>Natural Science</td>
<td>FSC 1515</td>
<td>APS 1120</td>
<td>6 Hrs.</td>
</tr>
<tr>
<td>Subject Examinations</td>
<td>AMH 2010</td>
<td>AMH 2020</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>American History</td>
<td>AMH 101</td>
<td>AMH 102</td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>American Literature</td>
<td>AML 2010</td>
<td>AML 2022</td>
<td>6 Hrs.</td>
</tr>
<tr>
<td>Biology</td>
<td>BSC 1010</td>
<td></td>
<td>4 Hrs.</td>
</tr>
<tr>
<td>Calculus/Analytic</td>
<td>MAC 2311</td>
<td></td>
<td>5 Hrs.</td>
</tr>
<tr>
<td>College Algebra</td>
<td>MAC 1104</td>
<td></td>
<td>3 Hrs.</td>
</tr>
<tr>
<td>College French - Level 1 &amp; 2</td>
<td>FRE 1100, 1101</td>
<td>FRE 1100, 1101, 2200</td>
<td>6 Hrs.</td>
</tr>
<tr>
<td></td>
<td>FRE 1100, 1101, 2200</td>
<td>FRE 1100, 1101, 2200, 2201</td>
<td>9 Hrs.</td>
</tr>
<tr>
<td>College German - Level 1 &amp; 2</td>
<td>GER 1100, 1101</td>
<td>GER 1100, 1101, 2200</td>
<td>6 Hrs.</td>
</tr>
<tr>
<td></td>
<td>GER 1100, 1101, 2200</td>
<td>GER 1100, 1101, 2200, 2201</td>
<td>12 Hrs.</td>
</tr>
</tbody>
</table>

3. Credit can be awarded to you through relevant validated military service training including military service schools, United States Armed Forces Institute (USAFI) courses and acceptable college-level GED test scores.

In recognition of the advanced academic and technical content of many military education experiences, Valencia will grant credit for military education that has been evaluated and recommended as suitable for postsecondary credit by the American Council on Education's Guide to the Evaluation of Educational Experiences in the Armed Services. After enrollment in the College, you may initiate the request for such credit by providing appropriate documentation as determined by the College. Recommendations in the ACE Guide are advisory and are not binding upon the College.

Students having CLEP scores sent to other institutions must accept the responsibility for securing the CLEP policies of those institutions.

If you earn acceptable CLEP scores and request that these scores be sent to Valencia, the credits will be recorded as a part of your official Valencia transcript. No letter grades or quality points will be assigned.

You may use CLEP credit under the repeat course policy for D or F grades only. Credit will not be awarded for courses in which you have earned a C or better.

Under the repeat policy, only the last attempt at a course is counted in your GPA. If you earn an acceptable CLEP score in a course where a D or F has been earned, the CLEP credit will be recorded and the D or F will no longer be computed in your GPA. No letter grade or quality points will be assigned.

You may obtain information concerning test dates and application procedures from the East Campus, Osceola Campus, West Campus or Winter Park Center counseling departments.

Valencia will accept a maximum of 45 semester hours of credit through CLEP general and subject examinations combined.

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

As a Valencia student, you may gain credit in certain specified courses through CLEP examinations administered by the Educational Testing Service (ETS) for the College Entrance Examination Board (CEEB). CLEP General Examinations and CLEP Subject Examination(s) are administered periodically at Valencia.

You may register for either CLEP general exam(s) or CLEP subject exam(s). You may take only three exams at Valencia on any test date.

SERVICEMEN'S OPPORTUNITY COLLEGE

You may benefit from the College's special efforts to aid servicemen in securing a postsecondary education. The American Association of Community and Junior Colleges has designated Valencia as a Servicemen's Opportunity College (SOC). Aside from stated and traditional means of obtaining credit toward most associate degrees, the following special policies, procedures and services are available to you as active-duty military personnel:

1. You may earn certain credits by satisfactory completion of Advanced Placement examinations. (See catalog section on Advanced Placement.)

2. You may earn a maximum of 15 semester hours credit through examination and/or correspondence courses. (See catalog section on Correspondence and Extension Credit.)
**College Spanish - Levels 1 & 2**
- SPN 1100, 1101: 6 Hrs.
- SPN 1100, 1101, 2200: 9 Hrs.
- SPN 1100, 1101, 2200, 2201: 12 Hrs.

**Educational**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Course</th>
<th>Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychology</td>
<td>EDP 2002</td>
<td>3</td>
</tr>
<tr>
<td><em>English Literature</em></td>
<td>ENL 2023</td>
<td>6</td>
</tr>
<tr>
<td>General Chemistry</td>
<td>CHM 1040C</td>
<td>4</td>
</tr>
<tr>
<td>General Psychology</td>
<td>PSY 1012</td>
<td>3</td>
</tr>
<tr>
<td>Human Growth and Development</td>
<td>DEP 2003</td>
<td>3</td>
</tr>
<tr>
<td>Introductory Accounting</td>
<td>ACG 2001</td>
<td>6</td>
</tr>
<tr>
<td>Introductory Micro-Economics</td>
<td>ECO 2013</td>
<td>3</td>
</tr>
<tr>
<td>Introductory Sociology</td>
<td>SYG 2000</td>
<td>3</td>
</tr>
<tr>
<td>Trigonometry</td>
<td>MAC 1114</td>
<td>3</td>
</tr>
<tr>
<td>Western Civilization I</td>
<td>EUH 1000</td>
<td>3</td>
</tr>
<tr>
<td>Western Civilization II</td>
<td>EUH 1001</td>
<td>3</td>
</tr>
</tbody>
</table>

**NOTE:** Credit awarded is subject to change according to current Valencia policies.

Refer to CLEP Registration Guide for current test fees.

*The following CLEP examinations do not include the Gordon Rule 6000-word writing requirement and therefore do not meet the Area 2 general education requirements for an AA degree:

- General Examination in Humanities
  - HUM 2213 - HUM 2230

- General Examination in English Composition
  - ENC 1101 - ENC 1102

- American Literature - Subject Examination
  - AML 2010 - AML 2222

- English Literature - Subject Examination
  - ENL 2013 - ENL 2023

**CREDIT BY EXAMINATION**

You may receive credit by examination in courses designed as career courses if you have a substantial background, including experience and training in a specified field. This type of credit might not be acceptable for transfer to other institutions.

Applications and information regarding the specific career courses available through the local credit-by-examination program should be obtained from the department offering the course. The fee for a local credit-by-exam is $15.00.

The fee for clinical testing required by some health programs is $25.00.

It also is possible to take credit by examination in other subject areas. You should contact the department concerned and explore other test possibilities.

**TRANSFER CREDIT**

If you attend another institution as a Valencia transient student, you must have an overall C (2.0) academic average or higher and have written approval from the Admissions/Records Office on a Transient Student Form. Forms for this purpose are available in the Registrar's Office. To receive credit as a transient student, you must have a transcript of any courses taken at another institution sent to the Valencia Registrar's Office.

If you desire to have transcripts sent from Valencia to another institution, you must complete a Transcript Request form. These forms are available in the Admissions/Records Office. There is no charge.

**CREDITS FROM MID-FLORIDA TECHNICAL INSTITUTE**

To promote career education programs, Valencia accepts transfer credits from Mid-Florida Technical Institute in electronics/drafting and design technology, construction technology, graphic arts technology, hospitality management and data processing. Further information can be obtained from the West Campus Department of Technical and Engineering Related Programs, East Campus Department of Technical Programs and West Campus Department of Business.

**CREDIT FOR CERTIFIED PROFESSIONAL SECRETARY (CPS) AND PROFESSIONAL LEGAL SECRETARY (PLS)**

Valencia recognizes the professional achievement of the secretary who has earned and been awarded the CPS or PLS designation. Certain College credits may be allowed the applicant who enrolls and elects to pursue an AS or AA degree.

For further details contact the chairman of the Business and Public Service Departments on East Campus or the chairman of the Department of Business on West Campus.

**TRANSFER OF CORRESPONDENCE AND EXTENSION COURSE CREDITS**

Under certain conditions, you can earn up to but not exceed 15 semester hours credit through correspondence and/or extension courses and apply these toward a degree at Valencia.

1. You must have permission of the director of admissions to register for correspondence or extension courses.

2. The course or courses must be offered by a regionally accredited institution.

3. The minimum grade acceptable must be at least the equivalent of a D at Valencia.

4. The credit must be acceptable toward one of its own degrees by the institution conducting the correspondence and/or extension course.

5. None of the final 15 semester hours credit before your graduation may be earned through correspondence and/or extension courses.

If you plan to transfer from Valencia to another institution, you should learn its acceptance policy regarding correspondence and extension courses. Correspondence and extension (television and newspaper) courses are not eligible for government grant programs but are eligible for veterans' programs under special conditions.
ACADEMIC POLICIES

ACADEMIC STANDARDS, PROBATION, SUSPENSION, DISMISSAL

ACADEMIC STANDARDS
To maintain satisfactory academic progress at Valencia, you must complete each course with a grade of A, B, C, or D and achieve a minimum grade-point average (GPA) of 2.0 each session. In certain communications, computations, and Area 2(1) general education (Gordon-Rule) writing-reinforcement courses, grades of C or better are required.

MID-TERM WARNING
If you are making a grade lower than C at or about midterm of a session, you will be notified by your professor in writing. If you receive such a notice, you should meet without delay with the professor and with a counselor prior to registering for the next session.

ACADEMIC WARNING
If your term GPA falls below 2.0 and/or you do not complete 50% of your coursework each session, you will be put on academic warning. Sometime during the ensuing session, you should talk with a counselor to discuss your proposed coursework before your next registration. To be removed from academic warning, you must complete 50% of your coursework and achieve a term GPA of 2.0 or higher.

ACADEMIC PROBATION
If your cumulative GPA falls below 2.0 and/or you have not completed 50% of your coursework for two successive sessions, you will be placed on academic probation. Under this status you must obtain a counselor's approval of your proposed schedule.

If you registered for the upcoming session prior to receiving notification of probationary status, you must obtain a counselor's approval of your proposed schedule before the end of the late registration/drop-add period of the upcoming session. To be removed from probation, you must achieve a cumulative GPA of 2.0 or higher and complete 50% of your term coursework.

ACADEMIC SUSPENSION
If you do not remove yourself from probation after attempting 24 semester hours, you will be placed on academic suspension for the following session (1, 2, 5 or combined 3 and 4).

Under Academic Suspension you:
1. Are officially suspended from enrolling for credit courses at Valencia for one session (1, 2, 5 or combined 3 and 4).
2. Must apply to the provost of the appropriate campus for reen trance to the College after the suspension period ends.
3. When readmitted, will be placed on academic probation and before registration will have to have your schedule approved by a counselor.
4. Must achieve a 2.0 GPA for the session and successfully complete 50% of your courses or you will be academically dismissed.

ACADEMIC DISMISSAL
If while on a second probation you do not meet the College's academic standards, you will be dismissed from the College for two sessions (1, 2, 5 or combined 3 and 4).

Under academic dismissal you:
1. May register only for noncredit work at Valencia.
2. May petition, after two sessions from the date of dismissal, the provost at the appropriate campus for permission to reenter the College. The provost will convene a panel of three members - counselor, student and provost - to consider your request. If the request is granted, you may then reenter in an unrestricted registration category.

APPEAL OF ACADEMIC SUSPENSION OR DISMISSAL
You have the right to appeal the academic suspension or dismissal decision.

To appeal suspension, you must first discuss your concerns with the provost of the appropriate campus, who may reverse a suspension decision. If dissatisfied with the decision of the provost, you may appeal to the Committee on Student Appeals on or before the fifth day of class of the following session.

To appeal dismissal, you must bring your concerns directly to the Committee on Student Appeals on or before the fifth day of class of the following session.

DISCIPLINE POLICY
In any case, the president of the College has discretionary power to summarily suspend a student pending a hearing. Hearings shall be scheduled as promptly as possible without prejudicing the rights of the accused. All College-administered financial support of a student suspended or expelled shall be terminated as of the date of the suspension or expulsion.

Violations of College regulations or other forms of student misconduct will be investigated by the appropriate provost. The provost shall have original jurisdiction in such matters and may take the following degrees of disciplinary action: warning, censure, disciplinary probation, or restitution.

Nothing in Valencia’s discipline policy shall be construed as preventing the president or an authorized representative from taking any immediate action which may be deemed necessary.
APPEAL OF ADMINISTRATIVE DECISIONS

You have the right, individually, to appeal any administrative decision under existing policies which adversely affects you. Such appeals should be directed to the Committee on Student Appeals, which may consider appeals for many types of administrative actions including:

1. Reinstatement from academic suspension
2. Waiver of certain admission requirements
3. Reinstatement of credit status

EXPECTED STUDENT CONDUCT

You attend Valencia as a privilege and are expected to conduct yourself honorably and with dignity at all times. As a registered student you assume the responsibility for learning and abiding by the general rules of good conduct listed in the current Valencia student handbook.

DISCIPLINARY ACTION

If you have received notice and have had a hearing on charges of misconduct and are subject to disciplinary action, the president of Valencia or an authorized representative shall have the authority to suspend or expel you if it is found that you have violated any of the rules of conduct as stated in the Valencia student handbook.

MISCONDUCT HEARINGS

Hearings shall be conducted by the president or an officer or committee appointed as a designate. At such hearings, you shall have the right to counsel or a representative of your choice. Determination of your guilt or innocence in the commission of the act of misconduct may be made by the president after the hearing. If you are convicted of a criminal offense involving personal misconduct of a kind which, if condoned by the College, would reflect dishonor or discredit on the College, there shall be sufficient grounds for suspension or expulsion.

DISCIPLINARY APPEAL

You may, within 10 working days, appeal to the Student Appeals Committee any administrative discipline action taken against you. Following a hearing, the committee shall by majority vote recommend on a case to the president of the College on any of the following: warning, censure, disciplinary probation, restitution, suspension, expulsion, or removal of charges.

The recommendation of the Student Appeals Committee shall be carefully evaluated by the president or an authorized representative, with whom rests the final decision. The decision must be made in writing within 10 working days of the recommendation, and copies shall be sent to the president, the campus provost and the student requesting the committee hearing. Any appeal of the decision of the president shall be formally lodged with the Board of Trustees of the College.

WITHDRAWAL FROM COLLEGE

If you withdraw from all of your courses, you must abide by the procedure stated above and do the following:

1. Obtain from the Admissions Office a Withdrawal from College form and secure clearance signatures from counseling, financial aid, finance, and the library.
2. Submit your withdrawal form and College I.D. (registration receipt) to the Admissions Office.

ACADEMIC HONORS

Academic honors lists are published each session in recognition of high scholastic achievement at Valencia. You are eligible for honors recognition after you complete a minimum of 12 semester hours of College-level coursework during a session. Part-time students are eligible for honors recognition after they complete increments of 12 semester hours of College-level coursework over several sessions. Once a part-time student has completed 12 hours of College-level coursework, a new increment for honors recognition is begun.

At the end of each session, the College prepares two lists of academic honors:

1. President’s Honor List — 3.75-4.0 (A-) GPA
2. Dean’s Honor List — 3.25-3.74 (B+) GPA

Questions pertaining to inclusion of names on the President’s or Dean’s Honor List should be directed to the director of admissions.
ACADEMIC AVERAGES

Your grade point average (GPA) is determined by dividing total quality points earned by total academic credit hours completed. Academic honors for graduation are determined by computing grades in courses you have taken at all institutions (all-College GPA) you have attended. Only the last attempt of a repeated course counts toward your overall GPA. A minimum of 2.0 (C) GPA is required for graduation. Quality points are calculated as follows:

<table>
<thead>
<tr>
<th>Grade Rating (per credit hour)</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B Good</td>
<td>3</td>
</tr>
<tr>
<td>C Average</td>
<td>2</td>
</tr>
<tr>
<td>D Passing Below Average</td>
<td>1</td>
</tr>
<tr>
<td>F Failure</td>
<td>0</td>
</tr>
<tr>
<td>I Incomplete</td>
<td>0</td>
</tr>
<tr>
<td>W Withdrawn or Dropped</td>
<td>0</td>
</tr>
<tr>
<td>X Audit</td>
<td>0</td>
</tr>
<tr>
<td>N No Grade or Noncredit</td>
<td>0</td>
</tr>
<tr>
<td>No Grade Submitted</td>
<td>0</td>
</tr>
</tbody>
</table>

For example, assume that you have taken the schedule below, made the grades recorded and want to know your GPA. Although you signed up for five courses (16 semester hours), you withdrew from HUM 2220, so you don’t count that course at all. You completed 13 semester hours, even though you passed only 10. You do have to count the course you completed but failed. Now look at the quality-point list above and multiply the number of hours you completed in each course by the number of quality points you get for each grade. You have earned a total of 29 quality points by completing 13 semester hours. Divide your 29 quality points by the 13 hours you completed and get your GPA: 2.23

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Hours Attempted</th>
<th>Hours Earned</th>
<th>Hours Completed</th>
<th>Hours Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1011</td>
<td>3</td>
<td>A</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>POS 1041</td>
<td>3</td>
<td>B</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>CHM 1025C</td>
<td>4</td>
<td>C</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>MAC 1104</td>
<td>3</td>
<td>F</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>HUM 2220</td>
<td>3</td>
<td>W</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>13</td>
<td>10</td>
<td>29</td>
</tr>
</tbody>
</table>

An Incomplete may be assigned if you are progressing satisfactorily and, for valid reasons (emergencies such as serious illness or death of a family member), cannot complete the work of a course within the semester. The I becomes a W unless the grade is changed by the professor to a letter grade (A-F) within the agreed time period for completion in the ensuing session.

REPEATED COURSES

If you repeat a course or take two courses, only one of which you can receive credit for, you can be allowed credit only in the course you take most recently even if the grade is lower. You cannot be given multiple credit for the same course unless the catalog says you can. You may not repeat a course for credit for which you have previously earned a grade of A or B (including teacher recertification). You may not use CLEP or independent study credit to raise the grade in a course in which you have earned a C or higher.

You will not receive credit for a course repeated after you have been awarded a degree or certificate from Valencia.

GRIEVANCE PROCESS

FINAL GRADES

If you feel that your final course grade is not representative of your performance according to the evaluation system defined and used by your professor, you have recourse through the student academic grievance process to seek a change of grade. Here are the steps you must take in the grievance process:

1. Meet with the professor to learn how the grade was determined and to examine the evidence.

2. If the matter is not resolved, you should meet with the professor’s department chair on East or West Campus or equivalent at other sites, depending upon where you took the course.

3. If the matter is still not resolved, you should meet with the provost of the appropriate campus.

4. If the matter is still not resolved, you may take your case to the Student Academic Grievance Committee, composed of faculty and students. These guidelines must be followed:
   a. W and I grades are not grievable.
   b. Only final course grades may be grieved.
   c. You must fill out an official form requesting that the Grievance Committee review your case. The form is available in the provost’s office on each campus.
   d. You must apply to the Grievance Committee for a hearing within 30 days after receiving the final grade in the course.

GRIEVANCE HEARING

An informal hearing will be conducted by the Student Academic Grievance Committee within 30 days after receipt of your grievance form. The hearing will provide you an opportunity to present your position and supporting facts. You will be required to provide the committee an advance copy of the major issues, documents to be included, and names of persons you expect to attend the hearing. The committee is the final judge of what and who are to be included and excluded in the hearing and has the right to adjourn and reconvene at a later time if this is necessary to complete the hearing. After the hearing, the committee will make a recommendation to the president of the College, who will notify you in writing as to the resolution of the grievance.

GRADE EVALUATION

You should learn and understand the evaluation system used in each of your classes and meet with your professor often enough during the session to know what grade you are making in the course.

ACADEMIC COURSE LOAD

Your normal full-time academic course load during Session 1, 2, or 5 is 15 or 16 semester hours, with a maximum of 19 or a minimum of 12 semester hours. During Sessions 3 or 4 or any of the College’s mini-terms, seven semester hours are considered the maximum full-time course load, since these sessions are half as long as regular semesters but equally full in class hours per course. In unusual cases, the appropriate provost or a counselor may grant you special permission to deviate from these maximums.
The College reserves the right to limit the number of semester hours you carry if your academic record indicates need for further preparation for College-level work. A counselor can assist you in determining your academic course load.

**FINAL EXAMINATIONS**

To receive credit for a course for which you are registered, you must take the final examination. It is your responsibility to know when and where the final examination is scheduled and to be present on time. Final examination schedules are published each session in the class schedule for that semester and in campus student newsletters. They also are available in the Admissions Office. You may be absent from a final examination or deviate from the examination schedule only upon approval by the professor and the appropriate provost.

**CLASS ATTENDANCE**

You are expected to attend all sessions of all classes for which you are duly registered. Regular attendance and regular class participation are significant factors which promote success in College. In the event of absence, you should contact your professor as soon as possible to indicate the reason and to obtain necessary information to make up the loss.

If your absences in a class become excessive, your professor will contact you in writing requesting a conference with you by a stated date and indicating that further absence may result in withdrawal from the course. If you fail to respond by that stated date, your withdrawal from the class will be processed and a grade of W assigned.

**SCHEDULE FOR COMPLETING MANDATED COURSES**

**SEQUENCE OF COURSES**

In all cases—whether you are full-time or part-time—if you are mandated into a College-prep reading course, you must take that reading course as the first course in your College-prep sequence.

**FULL-TIME STUDENTS**

If you are mandated into one or more College-prep courses and you wish to register for at least 12 credit hours, you must begin taking College-prep work in your first term of enrollment.

**MANDATES IN THREE AREAS**

If you are mandated into College-prep courses in three areas (reading, English, math), you must enroll in at least two of the three areas during your first full-time term of enrollment.

**MANDATES IN TWO AREAS**

If you are mandated into College-prep courses in two of the three areas, you must enroll in at least one College-prep course in your first full-time term of enrollment.

**PART-TIME STUDENTS**

If you are a part-time student, you must enroll according to the following schedule:

**MATHEMATICS**

Register for mandated College-prep mathematics course before enrolling in or concurrent with the tenth credit hour.

**ENGLISH**

Register for mandated College-prep English course before enrolling in or concurrent with the tenth credit hour.

**READING**

Register for mandated College-prep reading course before enrolling in or concurrent with the seventh credit hour.

**CONTINUATION OF ENROLLMENT IN COLLEGE-PREPATORY COURSES**

Once you have begun taking College-prep courses, you must continue to register for at least one of your mandated courses each registration until you complete your mandated College-prep courses.

**IMPLEMENTING THE THIRD ATTEMPT RULE**

If you fail in three attempts to complete successfully your College-prep requirements in any single skill area (English, mathematics, reading), you will be barred from taking at Valencia further courses in that skill area until you (1) present evidence that you have received remedial instruction from another institution or agency and (2) demonstrate on a placement test given at Valencia that you are prepared for College-level work in that skill area. Upon your failing in the third attempt, the College will recommend where you might immediately seek remediation elsewhere.

Even if you are barred from taking courses in a College-prep skill area, you will still be eligible to continue taking courses in other disciplines for which you are qualified.

**THE GORDON RULE**

State Board of Education Rule (6A-10.30), the Gordon Rule, requires that any new student enrolling in a public postsecondary institution after October 15, 1982, must complete successfully 12 credit hours of course work in which the student is required to demonstrate written skills and six credit hours of mathematics coursework at the level of College algebra or higher. These courses must be completed successfully prior to the receipt of an AA degree from a public community College or university and prior to entry into the upper division of a public university as provided in the rule.

Students entering Valencia after October 15, 1982, as first-time College students will meet the writing and mathematics requirements specified in Rule 6A-10.30 (the Gordon Rule) by completing the general education requirements in Areas 1, 2 and 3 or by completing the Area 3 mathematics requirements and the interdisciplinary studies program.
APPLICATION FEE

When you first apply for admission to Valencia you are required to pay a $15.00 application fee. This fee is non-refundable and non-transferable. It is payable only once and covers all subsequent enrollments even though they may be interrupted. This applies whether you are a credit, audit, full-time, part-time, day, or evening student.

FEE AND TUITION SCHEDULE

Required fees and tuition are established by the Valencia Community College Board of Trustees and the Florida State Legislature. Fees are subject to change without notice. MasterCard and Visa are accepted.

Residency Status

1. Florida Residents $30.25/Credit Hour
2. Out of State $108.75/Credit Hour

* Includes:
  - Scholarship Fee - $1.25/Credit Hour
  - Student Services Fee - $2.50/Credit Hour for Florida residents;
    $3.00/Credit Hour for out-of-state residents.
  - Capital Improvement Fee - $1.00/Credit Hour

LABORATORY FEES

A special fee of $10.00 is assessed for certain credit courses and is included in the course descriptions in this catalog. Any exception to the $10.00 special fee is included with the course description.

MUSIC FEES

The following special fees are assessed at the time of registration for these music courses:

Preparatory Freshman
Applied Music $80.00
Performance I, II, III and IV $80.00
Secondary Applied Music $40.00

DENTAL HYGIENE EXPENSES

Dental hygiene students will incur the following costs in addition to tuition, fees, books, meals, and transportation to the campus. These expenses are subject to change without notice:

1. Dental hygiene instrument kit $1400.00
2. Uniforms, laboratory costs, caps, white hose and safety glasses $180.00
3. Graduate pins (est.)* $95.00
4. Liability insurance $33.00
5. Miscellaneous supplies and materials $100.00

Approximate total for two years $1808.00

NOTE: To be licensed, the graduate must sit for:

1. National Dental Hygiene Examination $70.00
2. Florida State Dental Hygiene Examination $350.00

TOTAL: $420.00

*NOTE: All fees subject to change

MEDICAL LABORATORY TECHNOLOGY EXPENSES

Medical laboratory students may incur the following costs in addition to tuition, fees, books, meals, transportation to the campus. These expenses are subject to change without notice:

1. Uniforms, lab coat and shoes $180.00
2. Liability insurance $33.00

Approximate total for two years $213.00

NOTE: Subsequent to successful completion of the program, the graduate must sit for:

1. EMT State Certification Exam $55.00
2. Paramedic State Certification Examination $65.00

$120.00

*NOTE: Prices subject to change.

EMERGENCY MEDICAL SERVICES

EMS students will incur the following costs in addition to tuition, fees, books, meals, and transportation to the campus and clinical facilities. These expenses are subject to change without notice:

1. Uniforms, lab coat and shoes $80.00
2. Name pins and patches for lab coat $5.00
3. Liability insurance $33.00
4. Miscellaneous supplies and materials $50.00

Approximate total for two years $168.00

NOTE: Subsequent to successful completion of the program, the graduate must sit for:

1. EMT State Certification Exam $55.00
2. Paramedic State Certification Examination $65.00

$120.00

*NOTE: Prices subject to change.

RESPIRATORY CARE EXPENSES

Respiratory care students will incur the following costs in addition to tuition, fees, books, meals, and transportation to the campus. These expenses are subject to change without notice:

1. Uniforms, lab coats $125.00
2. Name pins and uniform patches $10.00
3. Liability insurance $33.00
4. Graduate pins (estimated) $50.00

Approximate total for two years $218.00

*NOTE: Prices subject to change.
NURSING EXPENSES

Nursing students will incur the following costs in addition to tuition, fees, and books. These expenses are subject to change without notice.

1. Uniforms, caps, shoes, lab coats and accessories $200.00
2. Nursing Arts Lab Kit $80.00
3. Achievement tests (two-year period) $30.00
4. Name pins and uniform patches $10.00
5. Liability insurance* $33.00
6. Graduate pins (estimated) $70.00

Approximate total for two years $423.00

*NOTE: Prices subject to change.

Nursing students will be responsible for furnishing transportation to the community and/or hospital facilities used by the College for clinical practice.

NOTE: Subsequent to successful completion of the program, the graduate must sit for:

American Registry of Radiologic Technologists Examination $35.00
State of Florida Certification Examination $50.00

Approximate total $85.00

NOTE: In order to be licensed:

State of Florida License Application $50.00
NMTCB (Nuclear Medicine Technology Certification Board) $80.00
ARRT (American Registry of Radiologic Technologists) $35.00

Approximate total $165.00

CARDIOVASCULAR TECHNOLOGY - INVASIVE

Nuclear medicine technology students will incur the following costs in addition to tuition, fees, books, meals, and transportation to the campus and clinical facilities. These expenses are subject to change without notice.

1. Uniforms, lab coat, shoes $200.00
2. Liability insurance $33.00
3. Graduate pin (estimate) $40.00

Approximate total for two years $273.00

NOTE: Upon graduation, students are eligible to sit for the CCI Registry (Cardiovascular Credentialing)

Basic Science Exam $110.00
Invasive CVT Exam $110.00

$220.00

NOTE: In order to be certified, graduate must sit for the:

American Registry of Diagnostic Medical Sonography $250.00

DIAGNOSTIC MEDICAL SONOGRAPHY

Diagnostic medical sonography students will incur the following costs in addition to tuition, fees, books, meals, and transportation to the campus and clinical facilities. These expenses are subject to change without notice.

1. Uniforms, lab coat, shoes $200.00
2. Liability insurance $33.00
3. Graduate pin (estimate) $40.00

Approximate total for two years $273.00

NOTE: In order to be licensed:

RADIATION THERAPY TECHNOLOGY

Radiation therapy technology students will incur the following costs in addition to tuition, fees, books, meals, and transportation to the campus and clinical facilities. These expenses are subject to change without notice.

1. Uniforms, shoes, lab coats, and accessories $200.00
2. Liability insurance $33.00
3. Graduate pin (estimate) $40.00

Approximate total for two years $273.00

NOTE: Subsequent to successful completion of the program, the graduate must sit for:

National Council Licensure Examination (NCLEX) $165.00

NUCLEAR MEDICINE TECHNOLOGY

Nuclear medicine technology students will incur the following costs in addition to tuition, fees, books, meals, and transportation to the campus and clinical facilities. These expenses are subject to change without notice.

1. Uniforms, lab coats, shoes $200.00
2. Liability insurance $33.00
3. Graduate pin $40.00
4. HRS lab training license $5.00

Approximate total for two years $278.00

RADIOGRAPHY PROGRAM

Radiography students will incur the following costs in addition to tuition, fees, books, meals, and transportation to the campus and clinical facilities. These expenses are subject to change without notice.

1. Uniforms, lab coat, shoes $200.00
2. Liability insurance $33.00
3. Graduate pin (estimate) $40.00

Approximate total for two years $273.00

38
NOTE: To be licensed:

1. Graduate must sit for American Registry of Radiologic Technologists examination $35.00

2. Graduate must apply to HRS for Florida state license $50.00

\[ \text{Total: } \$85.00 \]

CAREER ASSESSMENT COSTS

Valencia students (anyone who has ever registered at VCC) — $5.00 for up to four instruments plus interpretation within a three-month period.

Non-Valencia students — $25.00 for up to two instruments plus interpretation within a three-month period.

CONTINUING EDUCATION COURSE FEES

Noncredit continuing education courses vary in length, nature and amount of fees. Special fees may be charged for high-cost courses. Fees for these courses are not refundable after the starting date of the course. In the event of class cancellation or written request for student withdrawal prior to the starting of the class, full refund will be made. Students may enroll in Valencia continuing education (noncredit) courses if they are at least 16 years of age and provide a social security number. (See the catalog section on Continuing Education.)

SPECIAL FEE

Special services offered by the College carry special fees as follows:

1. Credit by Examination:
   - CLEP General and Subject Examination (each) $38.00
   - CLEP Service Fee $7.00
   - Local Credit by Examination (per exam) $15.00
   - Local Credit by Examination (with lab exam) $25.00

2. Other tests approved by the Board of Trustees to be announced

3. Independent study fee (nonrefundable and payable in addition to regular course tuition)
   - per student semester hour $10.00

4. Late Registration: Late fee $15.00

Fees are subject to change without notice.

REFUNDS

If you MUST withdraw from the College, you must notify the Admissions Office at once and complete the necessary form. If you withdraw within the drop/add refund period, all tuition and appropriate fees will be refunded. Refunds are processed through the Finance Office and must be mailed to you. You will receive no refunds after the drop/add refund period expires. Application fees and certain other fees are not refundable. You will be responsible for knowing the dates of drop/add.

COLLECTION OF RETURNED CHECKS AND/OR LOANS

If you are currently enrolled and have an overdue loan or returned check, you will be notified. If you do not respond within seven days, you will be withdrawn from classes and not eligible for reinstatement in the current session. Until your indebtedness is paid, you will not be allowed to enroll or receive transcripts. Every effort will be made by the College to collect overdue loans and returned checks, including submission to a collection agency. A fee of $10.00 will be assessed for each returned check or overdue loan.

GENERAL ELIGIBILITY REQUIREMENTS

All financial aid is dependent upon the availability of federal, state and institutional resources. To be eligible for financial aid you must:

1. Be degree seeking
2. Be accepted for admission to the College
3. Be making satisfactory academic progress
4. Be enrolled at least half-time, six semester hours
5. Be a U.S. citizen or live in the U.S. for other than a temporary purpose and intend to become a permanent resident
6. Not be in default of a Guaranteed Student Loan or National Direct Student Loan/Perkins Loan
7. Not owe a refund to Pell or SEOG
8. Not have existing financial obligations to the College
9. Be registered with Selective Service (if applicable)

SATISFACTORY PROGRESS

1. All students receiving federal, state and institutional assistance must comply with the standards of progress at VCC. The requirements are set by Federal Regulations (34 CFR Section 668.19) pertaining to all Title IV Assistance.

2. Students who have previously been enrolled and have attempted 120 hours at Valencia and have not received their AA or AS degrees are considered to be no longer making satisfactory academic progress for aid purposes unless they appeal and the appeals are approved. Students seeking both AA and AS degrees or two AS degrees may attempt
no more than 130 credit hours. Students attempting an AA degree after an AS, or an AS after an AA, or a certificate program after another course of study may receive aid if otherwise qualified, provided they do not exceed 130 semester hours. Students who have attempted 100 hours must request a graduation check from the Registrar’s Office on the campus they are attending.

3. A successful completion rate of at least 50% of the courses attempted and a 2.0 GPA will denote satisfactory progress. The success rate will be calculated at the end of the first summer term in June. (GSL and SEOG recipients are monitored for satisfactory progress each term.) The credit hours of successfully completed work required will be expressed as a whole number which includes any fraction developed in the calculation. The formula for the calculation is: Hours attempted (to nearest 100th) x .50 = required number of hours successfully completed. For instance - 96 hours x 50% = 48 hours completed.

Successful completion of a course is defined as an earned grade of A, B, C or D. Unsatisfactory grades are F, W and I. All courses for which a student is registered after the drop/add period has expired are counted in the determinations.

Students will be allowed to attempt a maximum of 120 semester hours including preparatory courses. Any student who has attempted 120 semester hours by June of each year will be ineligible to receive assistance unless there are mitigating circumstances which shall be defined as:

1. Death of a close relative affecting the student’s academic performance
2. Illness of the student or close family member having direct effect upon the academic record
3. Special mitigating circumstances of a specific and substantial nature of a unique kind as determined by the director of financial aid or a designee. If mitigating circumstances are found to exist, the student may be restored to satisfactory academic standing for one semester after which the general standards shall apply; further restrictions to satisfactory standing may occur only if progress during the intervening semester(s) clearly does not meet all of the listed progress standards.

REINSTATEMENT AND APPEALS

Students suspended from aid due to failure to maintain the standards may be reinstated after they have attended one semester and completed at least 12 credits and attained the minimum standards. It shall be the student’s responsibility to request reinstatement. Appeals must be typed. The appellant shall also provide such documentation as necessary for a determination and dismissal of the case by the director and shall fulfill all reasonable requests with reference to time, personal appearance and supporting evidence.

FINANCIAL AID PROGRAMS AVAILABLE

Grants:
Gift aid that does not require repayment.

Pell Grant:
Pell Grant is a federally funded program designed to assist financially needy students. Eligibility is determined by a needs analysis. Applications are available in the Financial Aid Office. Processing requires six to eight weeks. The amounts of the grant are relative to the student’s eligibility index number and the number of hours the student is enrolled. Students must be registered for at least six credit hours to receive a Pell Grant. Cost of tuition and books is usually covered under the grant, and any remaining amount will be awarded in the form of a check. Students can receive a Pell Grant for a maximum of two sessions per year at full-time status. Maximum eligibility is five years; students must re-apply each year.

Supplemental Educational Opportunity Grant (SEOG):
A federally funded program designed to assist qualified students who show exceptional financial need as demonstrated by the Need Analysis Report processed by the College Scholarship Service. The grant is based upon the individual student’s financial need, family contribution as determined by federal regulations and the availability of funds.

Florida Student Assistance Grant (FSAG):
The program is sponsored by the State of Florida, Florida Department of Education. It is designed to provide assistance for qualified students who show exceptional financial need as demonstrated by the Need Analysis Report processed by the College Scholarship Service. To apply, students must file a Financial Aid Form (FAF) by April 15th (date subject to change) for the coming academic year. Eligibility requirements, in addition to those previously stated, that are particular to this grant are:

1. Must maintain residency for a minimum of 12 months preceding the first day of classes for the academic year for which state aid is awarded. Residency must be established for other than educational purposes.
   a. Dependent students whose parents live in another state are considered (for financial aid purposes only) a resident of that state.

2. Must be a full-time student (12 semester hours or more).

3. CLAST must be taken prior to the term or in the term a student has completed 60 credits toward an AA degree.
   a. Students who have taken CLAST but did not pass all components must take remedial or preparatory courses particular to the component not passed to be eligible for this grant.

4. Students who are renewal recipients of this grant must have completed 12 credit hours for each semester FSAG was awarded the prior academic year.

Scholarships:
Gift aids that do not require repayment.

College Scholarships:
The District Board of Trustees of Valencia has approved several types of scholarships. These scholarships are awarded only during Sessions 1 and 2 of each academic year.

Local Scholarships:
Many area organizations, firms and individuals offer scholarships to students. The majority of the recipients are selected by the organizations, and the funds are administered by the Financial Aid Office. Interested students should contact the Financial Aid Office or the donor agency.
Loans:
Borrowed monies which must be repaid in accordance with the promissory note.

Robert T. Stafford Loan:
The Robert T. Stafford Loan (formerly the Guaranteed Student Loan) is a need-based, government-subsidized loan program which enables eligible students to borrow money for educational expenses and pay it back after leaving school or attending less than half-time. Interested students must first complete the Financial Aid Form through the College Scholarship Service. Determined eligibility for the PELL Grant is mandatory, and applicants must have a demonstrated need. All students applying for these loans will be required to have an overall GPA of 2.0 or above, including all transfer work, and have maintained satisfactory academic progress. Loan applications and more information are available in the Financial Aid Office.

Auxiliary Loan Program (SLS or PLUS): PLUS loans are available to parents of dependent undergraduate students, and the SLS loans are available to independent undergraduate students or graduate students. SLS loan applicants must first apply for the Robert T. Stafford loan prior to application for an SLS. Applications and more information on these programs are available in the Financial Aid Office.

Short-Term Loans:
Short-term loans are administered by Valencia’s Financial Aid Office and are available up to a maximum of half the amount of tuition and fees not to exceed $300. These loans are not for cash. Loans for tuition and fees are issued during registration. Each student may receive only one loan per session. No loan will be issued to a student who has an outstanding or current financial obligation, such as VA deferment, at Valencia.

All loans must be repaid no later than the due date indicated on the promissory note. Failure to repay by the due date will result in a collection fee and refusal of future loans. An overdue loan will result in a hold being placed on the student’s records. Short-term loans are available only for students taking six or more credit hours.

A student who has an outstanding bad check is not eligible to receive a short-term loan. Any exceptions to these short-term loan procedures will be at the discretion of the director of financial aid.

Emergency Loans:
Loans may be issued in extreme cases of emergencies by the director of financial aid. Only one loan per student per semester will be issued. Loans will not be issued for automobile expenses. Maximum amount is $50.00.

PART-TIME EMPLOYMENT

College Work-Study Program (CWSP):
A federally funded program providing on-campus part-time jobs to students who have financial need.

To apply for College Work-Study, students must complete a Financial Aid Form and a Valencia Community College Financial Aid Application. Students awarded College Work-Study must come to the Financial Aid Office for a job placement interview.

Institutional Work-Study:
Each year a number of students are employed on campus in administrative and department offices, libraries and laboratories. Applicants may qualify on the basis of satisfactory standing or the possession of a particular skill needed for the job assignment. Institutional Work-Study is administered by each department. It is not a financial-need-based program.

APPLYING FOR FINANCIAL AID

Applications for financial aid at Valencia should be filed as early as possible for the following academic year. Applications are usually available by the second week of January. Students do not need to be accepted for admission to the College to apply for financial aid; however, an award will not be offered until the student is admitted.

These applications are not difficult to fill out; however, it is most important that the student provide complete and accurate information on all applications. Information should be provided from the student’s and/or parent’s previous year’s 1040/1040A. Failure to do so will cause unnecessary delays in evaluation of the student’s need. Counselors are available to answer questions.

General Application Procedures

1. Valencia Community College Financial Aid Application:
Students applying for any type of financial aid must complete this form. All blanks must be completed before the application will be processed, and the Affidavit of Educational Purpose must be signed. This form should be submitted along with a copy of appropriate tax returns, student and/or parent.

2. Financial Aid Form:
Students must complete the Financial Aid Form (FAF) to be considered for the following financial aid programs based on need:

- Florida Student Assistance Grant (FSAG)
- Supplemental Educational Opportunity Grant (SEOG)
- College Work-Study (CWS)
- Nursing Scholarship (NS)
- Need Scholarship
- Robert T. Stafford Loan (formerly GSL)
- SLS Loan Program - non-need-based loan

This form calculates eligibility to receive funds from federal, state, institutional and other programs. The FAF also is used to apply for a Pell Grant.

3. Financial Aid Transcript:
A financial aid transcript must be on file from every post-secondary institution previously attended, even if financial aid was not received.

Application for Federal Student Aid:
This separate application should be used only in the following two cases:

A. The student is applying only for Pell and is not applying for other types of financial assistance.

B. Due to drastic changes in the student’s or his/her family’s financial situation, it is necessary for the student to file a Pell Special Conditions form.

Students should be sure to check with the program administrator as the application procedures vary somewhat with each type of aid.
VETERANS

APPROVAL INFORMATION

Valencia is approved for educational benefits of veterans and other eligible persons. Continuing education programs are not approved for veterans benefits. Other restrictions may apply depending on dates of active duty. See the Office of Veteran Affairs for specific details.

APPLICATION PROCEDURES

Students planning to receive veterans benefits should contact the Office of Veterans Affairs on either East or West Campus for assistance in applying for VA educational benefits. These offices will process all Veterans Administration educational benefits for the veteran.

OTHER FINANCIAL AID

Check with the Financial Aid Office for eligibility requirements.

ACADEMIC STANDARDS

Standards of progress for persons in receipt of veterans benefits are the same as those for all other Valencia students. See page 41 for these requirements.

Veterans and other persons eligible for veterans educational benefits MUST receive academic counseling prior to registration and are required to follow the specific degree program they choose.

BENEFIT CHECKS

Benefit payments will vary depending on the individual's type of G.I. Bill. You can expect to receive your first check approximately eight weeks after the beginning of the term. It will be mailed to the address indicated on your application.

PAYMENT OF TUITION

The Office of Veteran Affairs may issue a deferment for your initial enrollment at the time of registration, providing you are eligible and all necessary documents are on file. This deferment is for tuition only and must be paid on or before its due date. Tuition deferments are not granted to individuals who are in debt to the College or the Department of Veteran Affairs.
COUNSELING AND ADVISING SERVICES

You may want to see a member of the counseling staff for a variety of reasons. They are available to discuss such things as career decisions, academic difficulties, personal problems, degree requirements, university transfer information, and test results. The counseling staff is here to help you achieve a productive and rewarding college experience.

If you plan to obtain an AA degree and transfer, you should check with the institution you plan to attend to determine specific courses you need to prepare for your major. Additionally, the counseling staff prepares some program planning sheets that list the general requirements for the AA degree as well as some specific background courses necessary to prepare for various majors at Florida's universities.

If you are pursuing an AS degree, check in this catalog for the course requirements of your program. The counseling staff also has program planning sheets listing the requirements of each AS degree.

COUNSELING OR ADVISING APPOINTMENTS

You are encouraged to have an appointment with a member of the counseling staff to review your previous educational background, interests and appropriate program of study at Valencia. Since it is important for you to feel comfortable, you will not be assigned to a counselor but may select your own.

You can see a counselor or educational advisor during the day on a walk-in basis by going to the Counseling Office. If you desire to see a counselor in the evening, please call ahead of time to make an appointment.

EVENING SERVICES

Services of the admissions, registration, and finance areas are provided on East and West Campus Monday through Thursday from 5:00 until 10:00 p.m. Counseling offices are open Monday through Thursday until 7:00 p.m. Counselors and educational advisors make appointments to see students in the evenings during the semester except during published registration dates.

CAREER DEVELOPMENT CENTERS

If you are undecided about your career or educational goals, visit the Career Center on East or West Campus. There you can take career assessments, receive career counseling, research occupations and colleges, and write resumes and cover letters.

EXPERIENTIAL LEARNING

A growing number of colleges and universities are implementing programs designed to award College credits for experiential learning: that is, learning acquired outside the College classroom. This learning may result from such activities as work experience, volunteer activities, community service, travel, military experience, work-related inservice training, homemaking, or self-directed independent study.

Valencia is willing to recognize and award appropriate credit for a person’s knowledge resulting from non-College experience. Credits will not be awarded simply for your years of experience. Rather, you will be requested to demonstrate the important knowledge, skills or competencies you have attained as a result of the experiences you have had.

The Office of Cooperative and Experiential Education can provide information regarding the type of evaluation appropriate for your credit request.

COOPERATIVE EDUCATION

Cooperative education is a planned educational program designed to integrate classroom study with practical experience directly related to a college major.

Two, three or four credits, based on the number of hours worked each week and the employment responsibilities involved, are granted for the satisfactory completion of each cooperative training assignment. The Cooperative Education Office grades each assignment using reports submitted by the student, evaluations from the employer, and conferences with the student and the employer.

Students who have completed one semester (12 credit hours) and are in good academic standing are eligible for the program. Co-op: You earn a future when you earn a degree.

For further information, write or call the Cooperative Education Office.

LEARNING RESOURCES CENTER

The Learning Resources Center (LRC) includes the library and audio-visual services available to students, faculty and staff. The LRC’s resources and individualized services are provided to support the research and informational needs of students. The combination of library and audio-visual materials in one area makes the LRC a one-stop multi-use service with an integrated approach to learning materials. Valencia has LRCs at East, West and Osceola Campus. Students at other sites have access to these facilities.

A variety of LRC resources are available at Valencia. Combined holdings of campuses include—books (97,000 vols.), periodicals (903 current subscriptions), microform (76,326 units), and audio-visual material (6,070 titles of films, videotapes, audiotapes, etc.) equipment, and informational data bases. In addition to College-owned resources, LRC staff can
help obtain materials from other libraries. Patrons are charged for overdue or lost material.

Check campus Learning Resources Centers for hours of operation.

Qualified staff are available to provide reference services and help patrons identify, find and use all LRC materials and equipment. They also will help with individual research; provide instruction-in-use, tours and orientation; and assist in inter-library loan arrangements.

In the event materials are held overdue, the following fines are charged:

**Books**  
$0.25 per day (5-day grace period)

**Reserve Materials**  
$0.50 per day (no grace period)

---

**STUDENT-CENTERED LEARNING LABORATORIES**

The College provides student-centered learning laboratories on East and West Campus and an Academic Skills Center at Osceola Campus. The laboratories are designed to provide (1) alternative modes of instruction which are parallel in content to the standard method of instruction and (2) assistance for students who need help in reading skills, writing skills and mathematics skills. For more information, please contact the Counseling Office on any campus.

---

**TUTORIAL SERVICES**

The College offers tutorial assistance to students in academic courses for which they are currently enrolled. The tutoring centers, located on East and West Campus, match students having academic difficulty with tutors who are familiar with the course curriculum. Students can secure tutoring services by picking up a referral form in the East or West Campus tutoring centers or counseling offices. The referral form must be signed by a faculty member or a counselor and presented by the student at the campus tutoring center.

The tutoring centers also offer opportunities for students who would like to be tutors. Criteria and necessary forms are available in the tutoring centers.

Tutorial assistance also is available in other designated labs on the campuses.

---

**HANDICAPPED STUDENT SERVICES**

It is the philosophy of Valencia Community College that disabled students should be integrated as fully as possible into all aspects of College life in order to obtain maximum benefit from their educational experience. Please contact the Handicapped Student Services Office on either East or West Campus, if you have a disability, apparent or not, and feel that you can benefit from any of the services of the program.

Handicapped Student Services provides and coordinates support services in the following areas for disabled students attending Valencia:

- mobility impaired
- speech and language impaired
- visually impaired
- hearing impaired
- health impaired
- heart, epileptic, emotional and others
- learning disabled

A lengthy involvement in providing services to handicapped students has resulted in highly positive attitudes on behalf of instructional, administrative and support personnel. The facilities are essentially barrier-free, resulting from the College’s long commitment to remove such barriers. The services offered include:

- counseling (career, academic, personal)
- early registration
- special orientation
- liaison assistance with agencies and other College personnel
- tutoring, readers, scribes, notetakers and special testing
- interpreters for the deaf
- technical assistance with program and instructional modification
- adaptive equipment
- sensitizing and awareness seminars and workshops

NOTE: The College does not provide personal attendant care.

---

**OFF CAMPUS EMPLOYMENT**

The Valencia Placement Office offers placement services to currently enrolled students, graduates, and interested persons in the community.

Information for off-campus part-time or full-time employment and specific information on job requirements and opportunities is available in the Placement Office.

Current part-time and full-time job opportunities are posted on the placement bulletin boards on the East and West Campus.

---

**BOOKSTORE OWNERSHIP**

Owned and operated by the College, the bookstore is a facility to provide services to students, faculty, and staff.

**SERVICES AND MERCHANDISE**

The main job of the bookstore is to sell textbooks for all classes offered at Valencia. Department chairs submit the titles of required textbooks to bookstore staff, including specific information regarding estimated enrollments. Bookstore personnel order and sell the correct books.

Prices: Selling prices of textbooks are set by publishers, not the bookstore. When publishers find it necessary to increase prices, the bookstore must increase prices accordingly.
In addition to textbooks, you will find in the bookstore ample supplies, imprinted soft goods, school supplies, engineering and drafting supplies, and paperback books.

The bookstore staff will assist you in ordering class rings and in special-ordering books—all special orders requiring a 50% deposit. If you need assistance in the bookstore, please feel free to call on any of the staff or check with the office if you have any questions. The bookstore staff will be pleased to assist you in any way possible, for the purpose of the store is to serve its customers.

**HOURS**

Regular daily bookstore hours are Monday through Thursday from 7:00 a.m. until 7:00 p.m. and Friday from 7:00 a.m. until 4:30 p.m. When necessary, the bookstore observes special hours during the first two weeks of Sessions 1 and 2.

**PERSONAL CHECK PURCHASING**

You may pay for what you buy in the bookstore by cash, personal check, MasterCard, or Visa. Your or your parent's personal check will be accepted provided it is properly completed for the exact amount of the purchase and includes your social security and telephone numbers.

**BOOK RETURNS**

If you drop or change a course or buy the wrong book(s), you may return the textbook(s) for a full refund under the following conditions:

1. You have not written in the book(s).
2. You return the book(s) during the first two weeks the class meets.
3. You have a drop notice, if applicable.
4. You accompany the return with the register receipt.
5. The books are in the same condition you bought them with no marks in new books.
6. Your check has cleared the bank if you paid for the books by personal check.

**USED BOOKS—BUY-BACK SERVICE**

At the end of each term, a wholesale book buyer provides the bookstore and Valencia students a buy-back service for used texts. Books are bought back from students at a percentage of the original price, if they will be used again at the College and if they are in resalable condition. If a book has been discontinued at Valencia but is still current, you may choose to sell it to the wholesaler at the catalog price.

**FOOD SERVICE**

A food service facility is operated by an outside vendor.

**HEALTH SERVICE**

Health service is not available to you while you are a student at Valencia. In case of a serious emergency, your local guardian will be contacted. If your guardian is not available, you will be taken to a local emergency room at your own expense. The College is not responsible or legally obligated for your medical expenses.

**DENTAL CARE**

The Dental Hygiene Clinic is available to students, staff, alumni and the general public for cleaning and polishing teeth on an appointment basis by telephoning the College. Charges are:

- Cleaning (students, employees, and alumni) $8.00
- Cleaning (general public) $8.00
- Cleaning (child under 12) $8.00
- Bite-Wing X-ray $8.00
- Full mouth and Panorex X-ray $8.00

*Subject to change

**STUDENT ACTIVITIES**

Involvement in out-of-classroom activities is an important component of a well-rounded College experience. At Valencia participation in student organizations is encouraged as is participation in intercollegiate athletics, intramurals, campus events, and special programs. Students not only have fun through involvement in these student activities but also gain valuable experiences. In many cases, these out-of-classroom opportunities serve as practical application of classroom learning.

Contact your campus Student Development Office for information on student organizations and activity groups available at the College.

**ATHLETICS**

The Athletic Department is in the Physical Education Center on West Campus. The department sponsors four teams: for women the teams are basketball and softball; for men the teams are baseball and basketball. Scholarships are available in all sports. Information on tryouts for the various teams can be obtained by coming to or calling the Athletic Department.

**PUBLIC TRANSPORTATION**

Tri-County Transit provides bus service several times each day to the Downtown Center, the East Campus and the West Campus.

**EMERGENCIES**

Campus security personnel are on duty day and night to control traffic and parking and provide for the safety and welfare of students, faculty and staff.

**HOUSING**

Valencia is a commuter institution and has no dormitory facilities. The College assumes no responsibility for the acquisition or supervision of housing for students.
LOST AND FOUND

A lost and found depository is maintained in the security offices on East and West Campus. All found articles should be turned in to those offices. You should check with those offices when seeking a lost article.

MAIL

You should provide correspondents with your correct mailing address. Mail addressed to you at the College will be returned to the sender. You should use your residence for delivery of all correspondence.

PARKING

Registration of Vehicles; Parking Permits and Decals:

All motor vehicles operated by students and employees in connection with attendance or employment at Valencia must display a current parking decal.

Parking decals are valid from August 1 to July 31 the following year.

Parking decals must be obtained at the time of registration for classes. Lost, stolen or damaged decals must be replaced. Decals are issued at no cost to students and employees.

Emergency or temporary permits for short-term periods may be obtained at the campus Security Office.

Handicapped Parking Permits:

Persons with either a permanent or temporary physical disability who have a vehicle properly registered with the College, may park in designated parking spaces for the handicapped. Persons with temporary physical disabilities must secure a temporary permit from the Handicapped Student Services Office. Persons with permanent disabilities must have a State of Florida handicapped sticker.

Parking Regulations:

Student holders of parking decals may park only in spaces designated with white stripes.

Handicapped students may park in the white (General Parking) spaces or in the Handicapped Parking Only spaces if the vehicle bears a valid handicapped parking permit.

Parking is prohibited on sidewalks, grass area and lawns, wheelchair ramps, along parking lot curbs and in areas temporarily restricted.

In the event a vehicle must be parked illegally to await repairs or fuel, campus security must be notified immediately.

Motorcycles and motor scooters (including MOPEDS) may be parked only in spaces provided for such vehicles.

Trailers, motorhomes and similar recreational vehicles will not be parked anywhere on campus without approval of the Security Office.

Vehicles parked in such manner as to obstruct another vehicle or the flow of vehicular traffic may be moved or impounded at the owner’s expense.

Permission to leave a vehicle on campus overnight must be obtained from the Security Office. Vehicles left parked on campus in excess of 72 hours will be towed as abandoned at the owner’s or operator’s expense.

Moving Traffic Regulations:

Speed Limits:

Perimeter Roads - 25 MPH
Parking Lots - 10 MPH

Observance of entrance and exit lanes will be strictly enforced.

Driving and Parking Offenses:

Parking in RESERVED, LOADING or other unauthorized areas; blocking or obstructing traffic, street, sidewalk, handicapped ramp, building entrance or exit, or another vehicle; parking on grass area, athletic fields and/or along parking lot curbs is prohibited. Student parking in faculty/staff areas (designated with yellow stripes) is prohibited. Parking in handicapped-only zones or blocking wheelchair ramps can subject the vehicle to impoundment at the owner’s or operator’s expense as will repeated violations of other parking regulations.

Bicycles shall not be ridden on the sidewalks between or around the buildings. All bicycles shall be walked from the parking lot areas to the approved parking areas.

No skateboards, roller skates or other roller-equipped means of transportation will be allowed on the sidewalks between or around the buildings, or inside the building, except when hand carried.

Visitor Parking:

Parking for visitors is provided in designated lots. Vehicles operated by Valencia students or employees are prohibited from visitor parking lots at all times.

Fines:

Fines imposed for violations must be paid within 15 school days from date of issue of citation. Amounts due after the delinquent date are double the original amount of fine. Fines for parking violations are payable at the finance offices on East and West Campus.

PARKING VIOLATIONS:

<table>
<thead>
<tr>
<th>Violation</th>
<th>Fine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handicapped Spaces, Ramps</td>
<td>$10.00</td>
</tr>
<tr>
<td>Roadways, Curb Areas</td>
<td>$ 5.00</td>
</tr>
<tr>
<td>Visitors, Special (Faculty/Staff)</td>
<td>$ 5.00</td>
</tr>
<tr>
<td>Grass Areas</td>
<td>$ 5.00</td>
</tr>
<tr>
<td>Motorcycle Areas</td>
<td>$ 5.00</td>
</tr>
<tr>
<td>No Current Decal Display</td>
<td>$ 5.00</td>
</tr>
<tr>
<td>Other Violations as listed in these regulations</td>
<td>$ 5.00</td>
</tr>
</tbody>
</table>
Valencia Community College offers you the choice of two degrees:

The Associate in Arts degree (AA)
The Associate in Science degree (AS)

Briefly, the degrees can be distinguished as follows:

1. The AA degree is designed for transfer to an upper-division College or university.

2. The AS degree is designed to prepare students to enter a career upon completing the degree, with no further study required.

Both degrees are described in detail in this catalog. If you are interested in either degree, you should read the catalog carefully to learn the requirements and characteristics of each.

Special Note: For a five-year period from the date you begin taking courses at Valencia in a degree program, you have the right to follow the catalog course requirements under which you entered and meet the graduation requirements of that catalog even if the course requirements are changed while you are a student, except as may be otherwise provided by law or policies of the District Board of Trustees.

Effective August 1, 1989, students planning to transfer to one of Florida's state universities must have earned two years of sequential foreign language at the high school level or equivalency at the community college. Contact the university where you are applying for specific foreign language requirements.

COMMUNITY COLLEGE ASSOCIATE IN ARTS TRANSFER GUARANTEES

Community College Associate In Arts graduates are guaranteed certain rights under statewide Articulation Agreement 6A-10.024. This Articulation Agreement governs the transfer of students from Florida public community colleges into the state university system. The agreement addresses GENERAL ADMISSION to the university and PROGRAM ADMISSION.

GENERAL ADMISSION TO STATE UNIVERSITIES GUARANTEES

The Articulation Agreement designates the Associate in Arts degree as the transfer degree. In doing so, the Agreement guarantees that:

1. Community college AA degree holders will be granted admission to one of nine (9) universities, but not necessarily to limited access programs.

2. Upon transferring to a state university, AA degree graduates will be awarded at least 60 credit hours towards the baccalaureate degree.

3. The university catalog in effect the year the AA degree student first enrolled at the community college will remain in effect for the student's program, provided the student maintains continuous enrollment as defined in that catalog.

4. Once a student has completed the general education core and this is so noted on the transcript, regardless of whether or not an AA degree is awarded, no other state university or community college to which the student may transfer can require additional courses to the general education core.

5. When a student transfers to an institution participating in the statewide course numbering system, the receiving institution must accept all courses taken at the transfer institution, if the same course with the same course number is offered at the receiving institution.

6. Credits earned through acceleration mechanisms (CLEP, AP, PEP, early admission, International Baccalaureate, and dual enrollment courses) within the AA degree at the community college will be transferable to the state university.

Students without an AA degree who are seeking admission to a state university do not have all the protection provided by the Articulation Agreement and may be denied admission or lose credit when transferring. In most cases students without an AA degree will have to meet freshman admissions standards.

ADMISSION TO SPECIFIC PROGRAMS AT STATE UNIVERSITIES

The universities determine the courses and prerequisites that must be taken in order to receive a baccalaureate degree for a chosen program. Although all credit earned towards an AA degree will transfer to a university, not all credit may satisfy the program prerequisites or the course requirements for a baccalaureate degree. Therefore, it is important to know the program requirements and to take as many courses as possible at the community college while completing the AA degree.

LIMITED ACCESS

Due to limited resources, some programs have additional admission requirements which are more restrictive than the university's general admission requirements. These requirements include one or more of the following: grade point average, test scores, prerequisite courses, auditions, portfolios.
GUARANTEES

AA graduates are not guaranteed admission into limited access programs but are guaranteed that:

1. The community College student will have the same opportunity to enroll in a university limited access program as the native university student.

2. Selection and enrollment criteria for a university limited access program will be established and published in catalogs, counseling manuals and appropriate publications. Notification of any changes in a program will include sufficient time for prospective students to adjust to meet program criteria.

Resources available for planning your transfer to a bachelor’s degree program: Counselors and advisors are available through the Student Services departments on each campus at Valencia to help you plan your individual transfer program.

Counseling manuals are composed by the Community College Relations Office of each Florida State University. The manual contains all the information you need to plan your transfer effectively. It includes admission information, financial aid and scholarship information, as well as academic planning and general information regarding transfer. These manuals are available for your viewing:

a. In counseling and student services offices.

b. In the Career Centers on East and West Campus.

c. At the reserve desk in the libraries of West, East and Osceola campuses.

APPEALS

Should any of these guarantees be denied, you have the right to file an appeal. Each state university and community college has established appeal procedures. You may contact the state university or community college articulation officer for a copy of these procedures.

You may enroll in both credit and noncredit courses without planning to work toward a degree from the College.

Or, you might be interested in another type of recognition which Valencia offers students who complete courses in particular areas. That recognition is called a certificate. Certificates are available for students who complete a certain number of courses in office systems, EMT and paramedic technology. If you are interested in learning more about the certificates that are available, you are encouraged to talk to one of the counselors.

VALENCIA OUTCOMES ASSESSMENT

Competencies of a Valencia Community College Graduate

Realizing the importance of educating individuals who can function effectively both inside and outside a College classroom, the Valencia faculty has defined seven global competencies and numerous sub-competencies that help prepare Valencia graduates to succeed in the world community. Thus, when you are graduated from Valencia Community College, you should be able to do the following:

Competency I — Think critically and make reasoned choices by acquiring, analyzing, synthesizing, and evaluating knowledge.

1. Know what to observe and systematically make accurate observations.
2. Represent observations in an appropriate pattern to show relationships.
3. Recognize problems that need to be and can be solved.
4. Use sequential and holistic approaches to problem solving.
5. Analyze information and ideas to make decisions.
6. Synthesize information and ideas to progress to a higher level of understanding.
7. Evaluate evidence and generalizations against appropriate criteria.
8. Recognize and use induction, deduction, analogy, and intuition.
9. Understand the fundamental concepts of a discipline.

Competency II — Read, listen, write, and speak effectively.

1. Organize personal, primary, and secondary sources into coherent units.

2. Locate key ideas, thesis statements, and topic sentences.
3. Paraphrase key ideas, taking into account the context of the ideas, without distorting them.
4. Comprehend literal meaning, then symbolic or implied meaning.
5. View an idea and its exposition as a whole.
6. Recognize the symbolic nature of language.
7. Recognize and understand nonverbal communication.
8. Express ideas through appropriate forms of written and spoken language.

Competency III — Understand and use quantitative information.

1. Perform basic arithmetic operations.
2. Interpret, apply, and solve relationships within a mathematical framework.
3. Interpret and construct graphic information.
4. Analyze problems and formulate solutions using appropriate quantitative information.
5. Interpret and use descriptive and inferential statistics.
6. Use logical reasoning processes in quantitative problem solving.

Competency IV — Clarify personal strengths, values, and goals in relation to cultural values.

1. Recognize and use strengths to develop a personally satisfying existence.
2. Establish and work toward personal goals while acknowledging the realities of self and society.
3. Identify personal reactions to ideas from diverse cultures and deal with them constructively.
4. Recognize and articulate values at personal, familial, and societal levels.

Competency V — Have the knowledge and skills necessary for effective citizenship.

1. Understand the effects that participation by groups and individuals have on social, cultural, political, and economic processes.
2. Understand and interpret global influences on our social and cultural institutions.
3. Understand the structural and functional relationships of major social institutions as they apply to contemporary problems.
4. Understand the dynamic relationship between individual rights and social responsibilities.
5. Understand the human past through the analysis of social, economic, and political events to function effectively in the contemporary world.
6. Understand the basic tenets upon which a democratic society is based.
7. Understand how the principles of compromise and consensus are used to make laws and allocate resources for social maintenance and change.

Competency VI — Recognize the value of aesthetics
1. Perceive historical and conceptual continuity and diversity in art forms.
2. Develop the ability to evaluate art forms on the basis of identified criteria.
3. Value artistic endeavors as meaningful activities.
4. Appreciate art forms through personal experiences of viewing, listening, and participating.

Competency VII — Recognize the value of physical and mental health.
1. Identify traits associated with desirable physical and mental health.
2. Demonstrate an understanding of the relationship between physical and mental health.
3. Demonstrate an understanding of the relationship among exercise, nutrition, and health.
4. Demonstrate an understanding of environmental and societal problems which affect health.

COLLEGE-LEVEL ACADEMIC SKILLS PROGRAM (CLASP) AND TEST (CLAST)

CLAST is an achievement test that measures proficiency in communication and computation skills. Florida statutes and rules of the State Board of Education require passing scores on all four sections of CLAST before the awarding of an Associate in Arts degree. Students in the following categories are required to take CLAST:
1. Those seeking the Associate in Arts degree.
2. Those seeking the Associate in Science degree and transferring to a state university.
3. Those completing 60 semester hours credit and transferring to a state university.
4. Students receiving State of Florida financial aid awards who will complete 60 or more credits.

To be eligible for CLAST, students must have successfully completed a minimum of 18 hours of college-level work including Freshman Composition I and a math course at Intermediate Algebra level or higher.

To assist students in preparing for CLAST, Valencia teaches skills in computation, English language, essay, and reading in courses in those academic disciplines. These skills are reinforced in virtually all appropriate courses offered at the College and immediately before each CLAST sitting through CLAST review sessions in all four areas. Students can get additional support to strengthen CLASP skills through the English, mathematics, and reading labs. Special help is provided through the West Campus Writing Center.

CLAST measures the following communication and computation skills:

READING SKILLS

Literal Comprehension
* Recognize main ideas
* Identify supporting details
* Determine meaning of words

Critical Comprehension
* Recognize author’s purpose
* Identify author’s overall organizational pattern
* Distinguish between fact and opinion
* Detect bias
* Recognize author’s tone
* Recognize relationships within sentences
* Recognize relationships between sentences
* Recognize valid arguments
* Draw inferences and conclusions

ESSAY SKILLS
* Select a subject which lends itself to development
* Determine the purpose and audience for writing
* Limit a subject to requirements of time, purpose, and audience
* Formulate a thesis or main idea statement
* Provide adequate supporting details
* Arrange ideas and details in an organizational pattern appropriate to the purpose and focus
* Provide relevant supporting material
* Write coherent prose with effective transition between parts

ENGLISH LANGUAGE SKILLS

Demonstrate Effective Word Choice
* Use words which convey the meaning required by context
* Avoid inappropriate slang, jargon, clichés, and pretentious expressions
* Avoid wordiness

Employ Conventional Sentence Structure
* Place modifiers correctly
* Coordinate and subordinate sentence elements
* Use parallel expressions for parallel ideas
* Avoid fragments, comma splices, and fused sentences

Employ Effective Sentence Structure
* Use a variety of sentence patterns
* Avoid overuse of passive constructions

Use Conventions of Standard American English
* Use standard verb forms
* Maintain agreement between subject and verb, pronoun and antecedent
* Use proper case forms
* Maintain a consistent point of view
* Use adjectives and adverbs correctly
* Avoid inappropriate shifts in verb tenses
* Make logical comparisons

Use Standard Practices for Spelling, Punctuation, and Capitalization

Revise, edit and proofread units of written discourse to assure clarity, consistency, and conformity to the conventions of Standard American English

1 All of the skills on the English Language Skills subtest are also tested on the essay subtest.
MATHEMATICS SKILLS

Arithmetic Skills
* Add, subtract, multiply and divide rational numbers in fractional form
* Add, subtract, multiply and divide rational numbers in decimal form
* Calculate percent increase and percent decrease
* Recognize the meaning of exponents
* Recognize the role of the base number in numeration systems
* Identify equivalent forms of decimals, percents, and fractions
* Determine the order relation between magnitudes
* Identify a reasonable estimate of a sum, average, or product
* Infer relations between numbers in general by examining number pairs
* Select applicable properties for performing arithmetic calculations
* Solve real-world problems which do not involve the use of percent
* Solve real-world problems which involve the use of percent
* Solve problems that involve the structure and logic of arithmetic

Statistics Skills, Including Probability
* Identify information contained in graphs
* Determine the mean, median and mode
* Count subsets of a given set
* Recognize properties and interrelationships among the mean, median and mode
* Choose the most appropriate procedures for selecting an unbiased sample
* Identify the probability of a specified outcome
* Infer relations and make accurate predictions from studying particular cases
* Solve real-world problems involving the normal curve
* Solve real-world problems involving probabilities

Geometry and Measurement Skills
* Round measurements
* Calculate distance, area and volume
* Identify relationships between angle measures
* Classify simple plane figures by recognizing their properties
* Recognize similar triangles and their properties
* Identify types of measurement (linear, square, cubic) for geometric objects
* Infer formulas for measuring geometric figures
* Select applicable formulas for computing measures of geometric figures
* Solve real-world problems involving perimeters, areas, and volumes of geometric figures
* Solve real-world problems involving the Pythagorean property

Logical Reasoning Skills
* Deduce facts of set inclusion or set non-inclusion from a diagram
* Identify the negations of simple and compound statements
* Draw logical conclusions from data
* Recognize valid arguments with true conclusions
* Infer valid reasoning patterns and express them with variables
* Determine equivalence and nonequivalence of statements
* Select applicable rules for transforming statements without affecting their meaning
* Draw logical conclusions when facts warrant them

Algebra Skills
* Add, subtract, multiply and divide real numbers
* Apply the order of operations agreement
* Use scientific notation
* Solve linear equations and inequalities
* Use formulas to compute results
* Find particular values of a function
* Factor a quadratic expression
If you choose to work toward an AA degree, you should talk with a member of the counseling staff about a suggested program leading to a bachelor's degree. You should choose electives to prepare you for transfer in a particular major field at a specific college or university. The AA degree provides the courses of study equivalent to those offered to the freshman and sophomore in the lower division of Florida’s state universities. If you receive the AA degree from Valencia, your degree will meet the lower-division requirements of a Florida state university and will admit you to junior status. The degree requirements consist of the general education requirements which parallel the universities’ requirements and electives in preparation for a specific bachelor's degree.

The Associate in Arts degree requires a minimum of 60 college-level credit hours in general education and 24 college-level credit hours of electives. Electives should be selected in consultation with your counselor based upon the bachelor's degree you are planning to pursue after earning the Associate in Arts degree.

The counseling staff has prepared a program sheet for many of the following popular bachelor's degrees. If your interest is not on the list, a counselor can help you develop a program.

Accounting
Agriculture
Allied Legal Services
Architecture
Art Education
Astronomy
Biology (Botany, Zoology, Microbiology)
Biology Education
Building Construction
Business Administration
Business Education
Chemistry
Chemistry Education
Communications
Computer Science (Business)
Computer Science (Scientific)
Criminal Justice
Dentistry
Dietetics and Nutrition
Drama
Ecology and Environment
Economics
Education
Engineering
Engineering Technology
English and English Education
Fashion Design and Merchandising
Fire Science
Forestry and Wildlife Ecology
French
Geology
German
History
Home Economics
Humanities
International Business
Interior Design
Journalism
Law
Library Science
Marketing
Mathematics
Mathematics Education
Medical Technology
Medicine
Meteorology
Music
Music Education
Nursing
Occupational Therapy
Oceanography and Marine Biology
Optometry
Pharmacy
Physical Education
Physical Therapy
Physics
Physics Education
Political Science
Psychology
Public Administration
Public Relations
Real Estate
Respiratory Therapy
Sociology/Social Work
Spanish
Speech
Statistics
Veterinary Medicine

GRADUATION REQUIREMENTS FOR THE ASSOCIATE IN ARTS DEGREE

To be awarded an AA degree from Valencia Community College, you must do the following:

1. Complete a minimum of 60 hours of acceptable college-level credits, of which six elective credit hours may be in music ensemble courses and/or up to six elective credit hours may be in physical education activity courses.

The minimum 60 credit hours must include 36-45 credit hours as shown in the general education requirements section. The remaining 24 elective credit hours may be selected from other college-level courses, excluding courses in the health related programs.

NOTE: For a 5-year period from the date you begin taking courses in a degree program at Valencia, you have the right to follow the catalog course requirements under which you entered and meet the graduation requirements of that catalog even if the course requirements are changed while you are a student except as may be otherwise provided by law or policies of the District Board of Trustees.

2. Complete the general education requirements.

3. Earn a cumulative grade-point average (GPA) of at least 2.0 in all courses attempted which apply toward the AA degree, in all courses attempted at Valencia, and in all courses attempted in all colleges attended.

4. Complete the last 25% of the college-level credit hours in residence at Valencia.

5. Complete with a grade of C or better ENC 1101 or ENC 1101H; ENC 1102 or ENC 1102H or CRW 2000; two three-hour Area 2 (1) humanities courses, each of which requires 6,000 words of writing; and the required six hours of Area 3 mathematics courses. (Gordon Rule requirements)
6. Request a graduation check in the Admissions & Records Office upon completion of 40 semester hours.

7. File an application for graduation and sign up for CLAST (after completing 18 credit hours including ENC 1101 and MAT 1033 or their equivalents as part of the 18 hours) in the Admissions & Records Office by the deadline date as listed in the College calendar and catalog.

8. Fulfill all financial obligations to the College.

9. Take and pass the four components of the College-Level Academic Skills Test.

Students Required to Take Assessments

Degree-Seeking Students

Whether you are a full-time or part-time student, if you are in college for the first time and seeking a degree, you must take a state-approved entry assessment prior to being academically advised and registered. If you are transferring to Valencia from another college or university, to satisfy Valencia prerequisites you may have to take appropriate state-approved assessment tests to register for certain courses.

Non-Degree-Seeking Students Who Must Take Entry Assessments

If you are not exempt from taking entry assessments and declare that you are not seeking a degree, you must take the assessment upon completing your 12th credit hour before you may register for further course work.

If you give “personal enrichment or job improvement” as a reason for entering Valencia, you may take up to 12 credit hours in courses for which you are qualified, except for English and mathematics. You may not register for English or mathematics courses under any circumstances without taking the appropriate entry assessment.

Non-Degree-Seeking Students Exempt from Entry Assessments

1. If you hold a college degree, you are exempt from taking entry assessments for registration in courses for which you are qualified. However, even if you hold a degree, you are subject to all course prerequisites, some of which require appropriate entry-assessment scores.

2. If you are enrolled in another college or university and have applied for transient status, you are exempt from taking entry assessments for registration in courses for which you are qualified. You will, however, be subject to all course prerequisites, some of which require appropriate entry-assessment scores.

3. If you are enrolled for teacher recertification, you are exempt from taking entry assessments for registration in courses for which you are qualified. However, you are subject to all course prerequisites, some of which require appropriate entry-assessment scores.

4. If you are enrolling in only one course (excluding English or mathematics) in your first session of enrollment and you have not graduated from high school within the previous academic year, you are exempt from taking entry assessments for registration in courses for which you are qualified. If you are a personal-interest student, you must take an entry assessment after completing your 12th semester hour credit before you will be permitted to continue registering for courses.
GENERAL EDUCATION REQUIREMENTS AT VALENCIA COMMUNITY COLLEGE

The general education program at Valencia is designed to contribute to your educational growth by providing a basic liberal education and is an integral part of the AA degree program. There are two approaches to general education at Valencia. The first is 36-45 semester hours of academic credit which serves as the core of the curriculum. The 36 hours are selected from six core areas of academic courses offered at the College. The second is the 24-semester-hour interdisciplinary studies program and the completion of SPC 1600, POS 1041, and the six-semester-hour mathematics requirement outlined in Area 3.

The two programs are described on the pages that follow. You must request that completion of the general education requirements be indicated on your student record.

GENERAL EDUCATION, THE REQUIREMENTS FOR ALL ASSOCIATE IN ARTS DEGREE

AREA 1. COMMUNICATIONS

Required Courses - A minimum of nine semester hours credit. (Each composition course contains a minimum of 6,000 words of writing and requires a minimum grade of C.)

- ENC 1101 or ENC 1101H: Freshman Composition I - 3 credits
- ENC 1102 or ENC 1102H or CRW 2000: Freshman Composition II - 3 credits
- SPC 1600 or SPC 1600H: Fundamentals of Speech - 3 credits

AREA 2. HUMANITIES

Required Courses - A minimum of nine semester-hours credit. (Courses requiring 6,000 words of writing require a minimum grade of C.)

In meeting this requirement, the student must: (1) Complete two of the following courses, one of which must have an HUM prefix and all of which will require at least 6,000 words of writing:

**Humanities**

- HUM 2220: Humanities, Greek and Roman - 3 credits
- HUM 2223: Humanities, Late Roman and Medieval - 3 credits
- HUM 2232: Humanities, Renaissance and Baroque - 3 credits
- HUM 2234: Humanities - Enlightenment and Romanticism - 3 credits
- HUM 2250: Humanities in the Twentieth Century - 3 credits
- HUM 2310: Mythology in Art and Literature - 3 credits
- HUM 2740: Humanities in the British Isles - 3-6 credits
- HUM 2742: Humanities in Italy - 3-6 credits

**Fine Arts**

- ARH 2051: Introduction to Art History II - 3 credits
- MUL 1110: Music Literature - 3 credits

**Literature**

- AML 2010: Survey in American Literature: Colonial Period to Civil War - 3 credits
- AML 2022: Survey in American Literature: Civil War to Present - 3 credits
- ENL 2013: Survey in English Literature 1300 to 1800 - 3 credits
- ENL 2023: Survey in English Literature 1800 to Present - 3 credits
- LIT 2090: Contemporary Literature - 3 credits
- LIT 2110: Survey in World Literature: Beginnings through Renaissance - 3 credits
- LIT 2220: Survey in World Literature: Enlightenment to Present - 3 credits

**Political Science**

- INR 2002: International Politics
- INR 2002H: International Politics-honors

(2) Complete a third course from the list above or one of the courses below (these courses do not meet the 6,000 word requirement):

**Art**

- ARH 1000: The Visual Arts Today - 3 credits
- ARH 2050: Introduction to Art History I - 3 credits

**Film**

- ENG 2100: Introduction to Film - 3 credits

**Foreign Language**

- FREN 2200-2201: Intermediate French - 3 credits each
- GER 2200-2201: Intermediate German - 3 credits each
- SPAN 2200-2201: Intermediate Spanish - 3 credits each
- SPAN 2510: Introduction to Spanish Civilization - 3 credits
- SPAN 2100-2101: Introduction to Spanish Literature - 3 credits each
- SPAN 1170-2220: Overseas Study in Spanish Language and Culture I and II - 6 credits each

**Humanities**

- HUM 1020: Introduction to Humanities - 3 credits
- HUM 2930: Selected Topics in Humanities - 1-3 credits

**Music**

- MUL 1010: Music Appreciation - 3 credits
- MUL 1121: Musicianship I - 4 credits

**Philosophy**

- PHI 2010: Philosophy - 3 credits

**Religion**

- REL 2020: Understanding Religious Man - 3 credits
Theater
THE 1020 Introduction to Theater - 3 credits
THE 1301 Development of Theater and Drama: Beginnings to Ibsen - 3 credits
THE 1302 Development of Theater and Drama: Ibsen to Present - 3 credits

**Area 3. Mathematics**

Required Courses - A minimum of six semester hours of credit from the following (A minimum grade of C is required):

- MGF 2202 College Mathematics - 3 credits
- MAC 1104 College Algebra - 3 credits
- MAC 1114 College Trigonometry - 3 credits
- MAC 1122 College Algebra and Trigonometry - 4 credits
- MAC 2233 Calculus for Business and Social Science - 3 credits
- MAC 2311 Calculus with Analytic Geometry I - 5 credits
- MAC 2312 Calculus with Analytic Geometry II - 5 credits
- MAC 2313 Calculus with Analytic Geometry III - 4 credits
- MAP 2302 Differential Equations - 3 credits
- MAS 2103 Introduction to Matrices - 3 credits
- MTH 2300 Logic and Proof in Mathematics - 3 credits
- Either, but not both of
- STA 2014 or
- PHI 2101
- Elementary Statistics - 3 credits
- Formal Logic - 3 credits

**Area 4. Natural and Physical Sciences**

Required Courses - A minimum of six semester hours of credit:

- APB 1120 Man and Environment I - 3 credits
- APB 1150 Biological Sciences - 3 credits
- APB 1253 Biology of Human Sexuality - 3 credits
- APB 2203C-2204C Human Anatomy and Physiology - 4 credits each
- AST 1002 Astronomy - 3 credits
- AST 1002H Astronomy-honors - 3 credits
- BOT 2101C Botany - 4 credits
- BSC 1010C Fundamentals of Biology - 4 credits
- BSC 1010CH Fundamentals of Biology-honors - 4 credits
- BSC 2933 Selected Topics in Biology 1-3 credits each
- CHM 1020 Chemistry in Everyday Life - 3 credits
- CHM 1025C Introduction to Chemistry - 4 credits
- CHM 1045C General Chemistry and Qualitative Analysis - 4 credits each
- CHM 1205C Introductory Organic and Biochemistry - 4 credits
- CHM 2120C Quantitative Analysis - 4 credits each
- CHM 2933 Special Topics in Chemistry - 1-3 credits each
- CHM 2210-2211C Organic Chemistry - 4 credits each
- GLY 1001 Earth Sciences - 3 credits
- GLY 2010C Physical Geology - 4 credits
- GLY 2100 Historical Geology - 3 credits
- MCB 2010C Microbiology - 4 credits
- MET 1010 Introduction to Meteorology - 3 credits
- OCB 2003 Marine Biology - 4 credits
- OCB 2003 Introduction to Oceanography - 3 credits
- PCB 1440 Florida Environmental Systems - 3 credits
- PCB 1440H Florida Environmental Systems-honors - 3 credits
- PCB 2303 Aquatic Biology - 3 credits
- PCB 2342 Natural History of Coastal Sea Grass Communities - 1 credit
- PCB 2333 Natural History of Florida Manatees - 1 credit
- PCB 2304 Natural History of Florida Rivers - 1 credit
- PHY 1001C Physics - 4 credits
- PHY 1053-1054C Introductory Physics - 4 credits each
- PHY 2048-2049C General Physics with Calculus - 4 credits each
- PHY 2036 Special Topics in Physics - 1-3 credits each
- PSC 1515 Energy: Past, Present and Future - 3 credits
- PSC 2121 Selected Topics in Physical Science - 1-3 credits each
- ZOO 2013C General Zoology - 4 credits
- ZOO 2013C General Zoology-honors - 4 credits
- ZOO 2303C Vertebrate Zoology - 4 credits

**Area 5. Social Sciences**

Required Courses - A minimum of six semester hours of credit:

- POL 1041 or
- POL 1041H
- U.S. Government I - 3 credits
- U.S. Government I - honors - 3 credits
- Plus one of the following courses:
- AFA 2150 Afro-American History and Culture - 3 credits
- AMH 2010 United States History - 3 credits each
- AMH 2020
- ANT 2010H United States History-honors - 3 credits each
- ANT 2000 Introduction to Anthropology - 3 credits
- ANT 2000H Introduction to Anthropology-honors - 3 credits
- ECO 1000 Basic Economics - 3 credits (or both ECO 1023 and ECO 2013)
- EUH 1000-1001 Western Civilization - 3 credits each
- HIS 2206 Recent and Contemporary History - 3 credits
- INR 2002 International Politics - 3 credits
- INR 2022H International Politics-honors - 3 credits
- POS 2112 State and Local Government - 3 credits
- PSY 1012 General Psychology - 3 credits
- POS 1002 U.S. Government II - 3 credits
- SYG 2000 Introductory Sociology - 3 credits

**Area 6. Foreign Languages**

Required Courses - A minimum of nine semester hours of credit in one foreign language.

**French**
- FRE 1000 Basic French - 3 credits
- FRE 1100 Elementary French I - 3 credits
- FRE 1101 Elementary French II - 3 credits

**German**
- GER 1000 Basic German - 3 credits
- GER 1100 Elementary German I - 3 credits
- GER 1101 Elementary German II - 3 credits

**Spanish**
- SPA 1000 Basic Spanish - 3 credits
- SPA 1100 Elementary Spanish I - 3 credits
- SPA 1101 Elementary Spanish II - 3 credits

*Applicable if student has no foreign language proficiency. To be exempted from Area 6 requirements, you must (1) be able to demonstrate proficiency by passing the CLEP Foreign Language Test or (2) have completed two credits (two years) of high school instruction in one foreign language with a grade of D or higher.
## Associate in Arts Degree Course Sequence

(See general education listing for specific courses.)

### Foundation Courses

<table>
<thead>
<tr>
<th>Area</th>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area 1.</td>
<td>ENC 1101 Freshman Composition I or ENC 1101H Honors Freshman Composition I (If mandated, ENC 0010 and ENC 0012 must be completed before taking ENC 1101 or 1101H.)</td>
<td>3</td>
</tr>
<tr>
<td>Area 2.</td>
<td>Humanities, fine arts, or literature course</td>
<td>3</td>
</tr>
<tr>
<td>Area 3*</td>
<td>College-level mathematics course (If mandated, MAT 003, MAT 0024 and/or MAT 103 must be completed before taking college-level mathematics.)</td>
<td>3</td>
</tr>
<tr>
<td>Area 4*</td>
<td>Natural and physical science course</td>
<td>3</td>
</tr>
<tr>
<td>Area 5.</td>
<td>Social science course (POS 1041 or POS 1041H required) Elective course</td>
<td>3</td>
</tr>
<tr>
<td>Area 6.</td>
<td>Foreign language course(s)**</td>
<td>0-9</td>
</tr>
</tbody>
</table>

**Total**

**21-30**

### Intermediate Courses

| Area 1. | ENC 1102 Freshman Composition II or ENC 1102H Freshman Composition II-honors or CRW 2000 Creative Writing and Advanced Composition | 3           |
| Area 2. | Humanities, fine arts, or literature course                           | 3           |
| Area 3*| College-level mathematics course                                      | 3           |
| Area 4*| Natural and physical science course                                   | 3           |
| Area 5.| Social science course Major and/or elective course                    | 3           |
|        | Major and/or elective course                                         | 3           |

**Total**

**21**

### Advanced Courses

| Area 1. | SPC 1600 Fundamentals of Speech or SPC 1600H Fundamentals of Speech-honors | 3           |
| Area 2. | Humanities, fine arts, or literature course Elective course              | 3           |
|        | Elective course                                                          | 3           |
|        | Elective course                                                          | 3           |
|        | Elective course                                                          | 3           |
|        | Elective course                                                          | 3           |

**Total**

**18**

* Students who plan to transfer to a bachelor's degree program at a university should seek advice from a counselor before selecting math and science courses.

**Depending upon foreign language proficiency.

### Honors Program

A major emphasis of Valencia Community College's honors program is to teach students to think critically and in so doing awaken them to opportunities for personal and intellectual growth.

Honors classes are not merely regular classes with additional work. They are a unique intellectual journey. Emphasis on individuality, originality and participative learning is key. In addition, classes are kept small (average 15 students). Students in honors classes study and evaluate primary source materials rather than relying solely on textbooks. The classes help students develop and sharpen their research skills. Originality and individuality are valued, and students learn to fashion original interpretations and analyses of course materials.

While students have some flexibility in designing their honors program to meet individual needs, two basic routes lead to an honors degree. The first option is the course-based honors program, and the second is the interdisciplinary studies program.

The course-based honors program offers a total of 25 courses ranging from Mythology to U.S. Government. Each course is three or four credit hours.

The interdisciplinary studies honors program gives students a strong liberal arts and science background. IDS classes encourage the full expression of ideas. Instead of studying one topic such as philosophy during the entire class period, students explore a range of topics related to a particular subject. To earn an honors degree through the IDS program or the course-based honors program, students take 24 credit hours of their 60-hour degree requirement in IDS courses or course-based honors classes and maintain an overall GPA of 3.0 or better. Honors certificates are given to students who complete 12 credit hours of their 60-hour degree requirement in honors classes and maintain a minimum overall GPA of at least 3.0.

In addition to a challenging classroom environment, the honors program offers a wide variety of opportunities for experiential learning. Taking instruction beyond the classroom helps students better understand the world they are studying. Taking field trips, seeing plays, attending concerts, meeting famous authors and participating in leadership retreats are all part of the honors
experience. Several times each year the honors program also brings in nationally and internationally acclaimed speakers to discuss politics, science and the arts.

To qualify for Valencia's honors program, you must meet one of the following entrance requirements.

- Be in the top ten percent of your high school graduating class.
- Have a cumulative high school GPA of 3.5 or higher on a four-point scale or 4.3 or higher on a five-point scale.
- Have an ASSET test score of 46 or above on writing, 47 or above on reading, 47 or above on math, and 50 or above on algebra.
- Have an ACT composite score of 26 or higher or an SAT combined score of 1100 or higher.
- Have a cumulative Valencia GPA of 3.25 or higher with a minimum of 12 credit hours excluding college-preparatory classes.
- Have a written recommendation from two Valencia instructors.
- Be nominated by an instructional department chairman or recommended by a faculty member and/or a Valencia counselor with approval by the campus provost.

Honors program scholarships are available based on academic ability. Sadler scholarships are available through the honors program for students who show financial need.

**INTERDISCIPLINARY STUDIES PROGRAM**

**An Alternative Approach to General Education**

As an alternative approach to general education, you may enter the Interdisciplinary Studies in General Education Program (West Campus only). Through this program you can complete 24 of the 36 hours required in general education. The additional 12 hours of general education requirements are POS 1041 U.S. Government I, six hours of mathematics (see requirements for Area 3') and SPC 1600 Fundamentals of Speech.

Through the program students learn about the intellectual progress mankind has made from ancient times to the present, as well as learning about and formulating projections for the future. Content in the program ranges from Plato to Einstein, from Shakespeare to Sarte and has been carefully selected so that students receive a wide range of information and yet study a number of topics in depth.

Valencia's interdisciplinary studies program has been recognized by the National Endowment for the Humanities as an excellent general education program.

The IDS program is a four-semester sequence which consists of four six-hour courses taught during Sessions 1 and 2 of each academic year. These courses are:

- **IDS 1101** Interdisciplinary Studies in General Education I - 6 credit hrs.
- **IDS 1102** Interdisciplinary Studies in General Education II - 6 credit hrs.
- **IDS 2103** Interdisciplinary Studies in General Education III - 6 credit hrs.
- **IDS 2104** Interdisciplinary Studies in General Education IV - 6 credit hrs.

Each of the courses above requires 6,000 words of writing.

Enrollment in the program is open to students who qualify for admission into Valencia's honors program. Students can withdraw from the program without loss of credit, and new students who qualify may enter the program at the beginning of any semester. The following table of equivalency indicates how credit is distributed within the IDS program:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDS 1101</td>
<td>English Composition I</td>
<td>3</td>
<td>6,000</td>
</tr>
<tr>
<td></td>
<td>Humanities</td>
<td></td>
<td>(3 credits)</td>
</tr>
<tr>
<td>IDS 1102</td>
<td>Humanities</td>
<td>3</td>
<td>6,000</td>
</tr>
<tr>
<td></td>
<td>Natural Science</td>
<td></td>
<td>(3 credits)</td>
</tr>
<tr>
<td>IDS 2103</td>
<td>Humanities</td>
<td>3</td>
<td>6,000</td>
</tr>
<tr>
<td></td>
<td>Social Science</td>
<td></td>
<td>(3 credits)</td>
</tr>
<tr>
<td>IDS 2104</td>
<td>English Composition II</td>
<td>3</td>
<td>6,000</td>
</tr>
<tr>
<td></td>
<td>Natural Science</td>
<td></td>
<td>(3 credits)</td>
</tr>
</tbody>
</table>
You may be interested in earning an Associate in Science degree at Valencia Community College. The College offers numerous programs for students who are interested in preparing for a career that requires study beyond the high school level, but does not require a four-year degree. They range from secretarial science programs to health-related programs such as dental hygiene and registered nursing.

When you decide to follow an AS degree program, you are not necessarily preparing yourself for transfer to a state university. You should understand that your decision will result in your earning an associate degree which should lead to a productive career. If later you decide to attend a university, you may be required to do additional work at the freshman or sophomore level to meet the general education requirements.

In the Associate in Science degree program, you will take courses in two basic areas. One area will be a specialized course. For instance, if you are going to study construction technology, you will be taking specialized courses in architecture and construction.

The second major area of courses you will take will be general education. General education courses are designed to help you develop as a well-rounded individual capable of thinking and acting as a mature, educated and enlightened citizen. It is the College’s belief that courses in general education, such as English composition and humanities, will enhance your overall employment potential since they will broaden your knowledge.

The AS degree programs are described on the following pages. You can obtain additional information about the courses by visiting with counselors in the counseling offices or by contacting the program directors and department heads who work with the program.

Some of the AS degree programs are restricted to one campus. When this is the case, a note is made at the bottom of the program description. However, the general education courses in each of the programs may be taken at any campus of the College.

The Associate in Science degree requires a minimum of 60 college credit hours.

Each Associate in Science degree program consists of a major which includes a core group of courses known as the area of specialization. To earn an Associate in Science degree you must complete a minimum of 30 college-level credit hours in your major, at least 15 college-level credit hours in general education, and one or more college-level credit hours in elective courses outside the area of specialization. Detailed information regarding each Associate in Science degree program is provided on program information sheets available in counseling and department offices.

ASSOCIATE IN SCIENCE DEGREE PROGRAMS

Accounting Technology
Business Administration and Management
Building Construction Technology - Architectural and Building Construction
Building Construction Technology - Civil
Cardiovascular Technology - Invasive
Computer Integrated Manufacturing Technology
Computer Programming and Analysis
Criminal Justice Technology
Diagnostic Medical Sonography
Dietetic Technician
Dental Hygiene
Drafting and Design Technology
Electronics Engineering Technology
Emergency Medical Technology - EMT (Certificate)
Emergency Medical Services Technology
Environmental Science Technology
Film Production Technology
Financial Services
Financial Services - Banking
Financial Services - Savings & Loan
Fire Science Technology
Graphics Arts Technology - Management
Graphics Design Technology
Hospitality Management
Land Surveying Technology
Laser Electro-Optic Engineering Technology
Legal Assisting
Medical Laboratory Technology
Nuclear Medicine Technology
Nursing, R.N.
Office Systems Technology
Office Systems Technology - Legal Secretarial Technology
Office Systems Technology - Medical Secretarial Technology
Office Systems Technology - Word/Information Processing Technology
Office Systems Technology - Office Systems Specialist (Certificate)
Ornamental Horticulture - International Horticulture Business Specialization
Ornamental Horticulture - Maintenance and Construction Specialization
Ornamental Horticulture - Production Specialization
Paramedic Technology Certificate
Postal Service Management
Radiation Therapy Technology
Radiography
Real Estate Management
Respiratory Care
Theater and Entertainment Technology

Revised program sheets are available in the Counseling Department Office for any program in which changes may be made after the date of catalog printing.

Each program will include reading, writing, oral communication and fundamental mathematical skills within specific courses of the program. Students will be required to meet a specified level of competence in reading and writing prior to enrolling in Freshman Composition I. A number of courses within programs provide opportunities for students to acquire basic competencies in the use of computers. Computer courses and computer laboratories are available to all students to acquire basic computer competencies.

GRADUATION REQUIREMENTS FOR THE ASSOCIATE IN SCIENCE DEGREE

To earn an AS degree from Valencia Community College you must do the following:

1. Complete a prescribed course of study in one of the career programs described in the following pages.

Note: For a five-year period from the date you begin taking courses in a degree program at Valencia, you have the right to follow the catalog course requirements under which you entered and meet the
graduation requirements of that catalog even if the course requirements are changed while you are a student except as may be otherwise provided by law or policies of the District Board of Trustees.

2. Complete the general education requirements.

3. Earn a cumulative GPA of at least 2.0 on all courses attempted which apply toward the AS degree. (A nursing student who has not succeeded—fails or withdraws—in a nursing course after two attempts will be withdrawn from the nursing program and must petition the Admission Committee of the College to request reinstatement.)

4. Complete the last 25% of college-level credit hours in residence at Valencia.

5. Request a graduation check in the Registrar’s Office and file an application for graduation by the deadline date listed in the College calendar and catalog.

6. Fulfill all financial obligations to the College.

FINAL RESPONSIBILITY FOR MEETING THE REQUIREMENTS FOR GRADUATION FOR AN ASSOCIATE IN SCIENCE DEGREE RESTS WITH YOU, THE STUDENT.

The General Education Core and other program requirements for the Associate in Science degree include:

**III. Natural Science or Mathematics**

Any course designated as a natural science or a course in mathematics that is Intermediate Algebra or higher. Examples include courses in: biology, anatomy and physiology, chemistry, geology, physical and earth sciences, physics, formal logic, statistics, (Business Mathematics and Mathematics for Electronics will not satisfy the mathematics requirement)

**IV. Social or Behavioral Science**

Any course designated as a social science or behavioral science. Examples include courses in economics, history, political science, psychology, social science, sociology, geography, anthropology

**V. General Education Elective**

Any course identified in the areas listed above and other English and speech courses may be taken to satisfy this general education elective. This course may be designated within the degree program or may be offered as a general education elective within the program.

**Total AS Degree General Education Core**

15

**ASSOCIATE IN SCIENCE DEGREE ELECTIVES OUTSIDE SPECIALIZATION**

**Credit Hours**

3

A minimum of one course totaling one to three college credit hours must be selected as an elective outside the major area of specialization.

As an example, in the office systems technology program, students may select one course with any prefix other than OST.
## Accounting Technology

### Associate in Science

This program is designed for students who seek immediate employment in the field of accounting and for those presently employed in accounting careers and desiring advancement but not a transfer degree. Students wishing to transfer any credits from this option to another institution must accept responsibility for securing approval in advance from the transfer institution.

### Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2021</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2071</td>
<td>Principles of Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>GEB 1011</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1103</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>OST 1141</td>
<td>Keyboarding Skills</td>
<td>3</td>
</tr>
<tr>
<td>POS 1041</td>
<td>U.S. Government I</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1600</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total: 24 Credit Hours**

### Intermediate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2100</td>
<td>Intermediate Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2450</td>
<td>Computer Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>BUL 2111</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>ECO 1023</td>
<td>Principles of Economics - Micro</td>
<td>3</td>
</tr>
<tr>
<td>INP 1301</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>OST 1335</td>
<td>Business Communications</td>
<td>3</td>
</tr>
</tbody>
</table>

*1 Humanities or Fine Arts
*2 Natural Science or Mathematics

**Total: 24 Credit Hours**

### Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2110</td>
<td>Intermediate Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>TAX 2000</td>
<td>Federal Income Tax</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2360</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2451</td>
<td>Computer Accounting II - Lotus</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Business Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

*3 Electives (outside of specialization)

**Total: 18 Credit Hours**

**Total Hours Required: 66 Credit Hours**

---

**Business Electives (Recommended)**

- ACG 2934: Selected Topics in Accounting 3
- BRC 2001: Principles of Finance 3
- BUL 2112: Business Law II 3
- ECO 2013: Principles of Economics - Macro 3
- FIN 2100: Personal Finance 3
- GEB 1014: Introduction to International Business 3
- MAN 2021: Principles of Management 3
- MAR 2011: Principles of Marketing 3

*1 Students must select course in areas of art, foreign language, literature, music, humanities, philosophy, religion, theater or English Composition II.

*2 Students must select courses designated as natural science (such as biology, anatomy and physiology, chemistry, geology, logic, physical and earth science and physics) or a course in mathematics that is Intermediate Algebra or higher.

*3 Students must select at least one course outside the area of specialization (not ACG and tax prefix courses).

**NOTE:** Students may take credit by exam for keyboarding skills.
BUSINESS ADMINISTRATION AND MANAGEMENT
Associate in Science

This program is designed for students who seek immediate employment in the field of business administration and management by providing training for both first-time job seekers and experienced employees who wish to advance in their careers. The courses provide proficiency and will help students develop managerial know-how and become valuable assets to any company. Instruction in this program provides a balanced curriculum of general education and business-related subjects. Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ECO 1000</td>
<td>Basic Economics</td>
<td>3</td>
</tr>
<tr>
<td>BUL 2111</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1600</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
<tr>
<td>GEB 1011</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1103</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>OST 1141</td>
<td>Keyboarding Skills</td>
<td>3</td>
</tr>
</tbody>
</table>

21

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUL 2112</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2021</td>
<td>Principles of Financial</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Accounting</td>
<td></td>
</tr>
<tr>
<td>MAN 2021</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MAR 2011</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>OST 1335</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>INP 1301</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>MKA 2021</td>
<td>Principles of Salesmanship</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL HOURS 21

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2071</td>
<td>Principles of Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*1 Humanities/Fine Art</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*2 Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*3 Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*4 Math/Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>*5 Introduction to Data Processing</td>
<td>3</td>
</tr>
</tbody>
</table>

18

TOTAL HOURS REQUIRED 60

*1 Students may select a course from Area 2 of the general education requirements for an AS degree.

*2 Students will select elective hours from any business, office systems technology or hospitality management courses.

*3 Students will select at least one course outside the business administration and management specialization. Suggestions: any 1, 2 or 3 credit hour courses from the office systems technology, Electronic Writing I, II, or III, hospitality management programs or U.S. Government I (not MAN, MAR< MKA prefix courses).

*4 If a student selects natural science, the course may be in biology, anatomy and physiology, chemistry, geology, formal Logic, physical and earth science, or physics. If the student selects mathematics, the course must be Intermediate Algebra or higher.

*5 Students may substitute CGS 1570, CGS 1061, any program language or software package. See department chairman for substitutions.

RECOMMENDED ELECTIVES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAX 2000</td>
<td>Federal Income Tax</td>
</tr>
<tr>
<td>RRE 1000</td>
<td>Real Estate, I &amp; II</td>
</tr>
<tr>
<td>BRC 2001</td>
<td>Principles of Finance</td>
</tr>
<tr>
<td>MKA 2041</td>
<td>Retailing</td>
</tr>
<tr>
<td>MKA 2511</td>
<td>Advertising</td>
</tr>
<tr>
<td>ECO 1040</td>
<td>Consumer Economics</td>
</tr>
<tr>
<td>STA 2014</td>
<td>Statistics</td>
</tr>
<tr>
<td>SPN 1000</td>
<td>Basic Spanish</td>
</tr>
<tr>
<td>MAN 2100</td>
<td>Supervision of Personnel</td>
</tr>
<tr>
<td>MAN 1800</td>
<td>Small Business Management</td>
</tr>
<tr>
<td>MKA 1402</td>
<td>Fashion Merchandising</td>
</tr>
</tbody>
</table>

NOTE: Do not confuse this program with the business administration program for the AA degree or marketing program for which program sheets are available in the counseling office.
BUILDING CONSTRUCTION TECHNOLOGY
With Options in
Architectural and Building Construction Technology or Civil Technology
Associate in Science

Each program has been planned to provide theoretical and classroom experience which closely parallels on-the-job activities. The architectural and building construction option is designed to train competent technicians capable of working with architects, engineers, contractors, building officials and others. The program will accommodate construction estimators, schedulers, and supervisors, as well as persons just entering the field of construction.

The civil technology option simulates job situations found in a civil engineer's office. This program applies to the design of bridges, causeways, highways, airports, water control systems, large structures, environmental considerations, and various other related areas within the total occupational cluster.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAR 120C</td>
<td>Architectural Drawing I (Wood Frame Structures)</td>
<td>4</td>
</tr>
<tr>
<td>BCN 120C</td>
<td>Building Materials and Construction Methods</td>
<td>4</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 1033</td>
<td>Intermediate Algebra or College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1104</td>
<td>Introductory Physics I</td>
<td>4</td>
</tr>
<tr>
<td>ECO 1000</td>
<td>Basic Economics</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED 21

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAR 2122C</td>
<td>Architectural Drawing II (Steel Structures)</td>
<td>4</td>
</tr>
<tr>
<td>TAR 2154C</td>
<td>Architectural Drawing III (Concrete Structures)</td>
<td>4</td>
</tr>
<tr>
<td>BCN 2405C</td>
<td>Statics and Strength of Materials</td>
<td>4</td>
</tr>
<tr>
<td>BCN 2616</td>
<td>Building Construction Estimating</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>Freshman Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1114</td>
<td>College Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>SUR 1100</td>
<td>Basic Surveying and Measurements (Surveying I)</td>
<td>4</td>
</tr>
<tr>
<td>*Electives</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED 31

ADVANCED SPECIALIZED COURSES

ARCHITECTURE AND BUILDING CONSTRUCTION TECHNOLOGY OPTION

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAR 2033C</td>
<td>Architectural Design</td>
<td>4</td>
</tr>
<tr>
<td>BCN 1705</td>
<td>Contracts, Codes, Specifications and Office Practice</td>
<td>3</td>
</tr>
<tr>
<td>BCN 1721</td>
<td>Construction Planning and Control</td>
<td>3</td>
</tr>
<tr>
<td>BCN 2563</td>
<td>Building Service Systems</td>
<td>4</td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED 14

CIVIL TECHNOLOGY OPTION

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETC 2220C</td>
<td>Soils and Foundations</td>
<td>4</td>
</tr>
<tr>
<td>ETC 2313</td>
<td>Hydraulics and Pipe Flow</td>
<td>3</td>
</tr>
<tr>
<td>ETC 2521</td>
<td>Hydrology and Drainage</td>
<td>3</td>
</tr>
<tr>
<td>SUR 2201C</td>
<td>Highway Drafting and Route Design</td>
<td>4</td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED 14

RECOMMENDED ELECTIVES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCN 1272</td>
<td>Construction Blue Print Reading</td>
<td>3</td>
</tr>
<tr>
<td>POS 1041</td>
<td>U.S. Government I</td>
<td>3</td>
</tr>
<tr>
<td>BCN 1220</td>
<td>Heavy Construction Methods</td>
<td>3</td>
</tr>
<tr>
<td>BCN 2949</td>
<td>Cooperative Education: Building</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Construction Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1570</td>
<td>Microcomputer Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>COP 1200</td>
<td>Fortran Programming</td>
<td>3</td>
</tr>
<tr>
<td>ETD 1320</td>
<td>Introduction to CADD</td>
<td>3</td>
</tr>
<tr>
<td>ETD 1350</td>
<td>Advanced CADD</td>
<td>3</td>
</tr>
<tr>
<td>GEB 1011</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>GRA 2745C</td>
<td>Pictorial Rendering</td>
<td>3</td>
</tr>
<tr>
<td>INP 1301</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
</tbody>
</table>

*Students will select at least one elective course from any course outside the building construction technology specialization and at least three credit hours from the recommended electives. (These may include courses of one and two semester hours from departments with other than the BCN prefix.) Several recommended electives are shown above. See the department for counseling on other approved electives.

**Graduates of Mid-Florida Technical Institute's drafting program will be awarded credit in these courses after attending Valencia for one semester.

NOTE: Specialized program courses are offered on West Campus.
CARDIOVASCULAR TECHNOLOGY - INVASIVE
Associate in Science

This program is developed to prepare the student for employment as an invasive cardiovascular technologist in a cardiac catheterization laboratory. The technologist's role involves assisting the physician in the catheterization procedure, maintaining hemodynamic monitoring of the patient, performing hemodynamic calculations, and providing patient care. The cath team works together to diagnose and treat coronary artery and peripheral vascular disease.

Invasive cardiovascular technology is a challenging and rewarding profession with career opportunities offered nationwide. There is currently a great demand for technologists in this field. Specialized areas of cardiovascular technology offer training in angioplasty, electrophysiology studies, pediatric cardiology, and peripheral vascular studies.

Graduates will be prepared to take the national certifying registry examination.

A minimum grade of C must be achieved in all invasive cardiovascular technology courses and required general curriculum to meet a prerequisite or graduation requirement.

Year I

Session I

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101 Freshman Comp</td>
<td>3</td>
</tr>
<tr>
<td>HSC 1531 Medical Terminology</td>
<td>1</td>
</tr>
<tr>
<td>APB 1150 Biological Science</td>
<td>3</td>
</tr>
<tr>
<td>HSC 1230C Methods of Patient Care</td>
<td>2</td>
</tr>
<tr>
<td>HSC 1650 Principles of Allied Health</td>
<td>2</td>
</tr>
<tr>
<td>CVT 1100C Cardiovascular Clinical I</td>
<td>3</td>
</tr>
</tbody>
</table>

Session II

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 1012 General Psych</td>
<td>3</td>
</tr>
<tr>
<td>*MAT 103 Intermediate Algebra</td>
<td>3</td>
</tr>
<tr>
<td>HUM 2250 Humanities - 20th Century</td>
<td>3</td>
</tr>
<tr>
<td>APB 1810C Anatomy &amp; Physiology</td>
<td>3</td>
</tr>
<tr>
<td>CVT 1110C Cardiovascular Clinical II</td>
<td>3</td>
</tr>
</tbody>
</table>

Session V

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 1002 Applied Physics</td>
<td>3</td>
</tr>
<tr>
<td>APB 1292 Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>CVT 1400C CVT Diagnostic Procedures</td>
<td>4</td>
</tr>
<tr>
<td>CVT 1500 ECG Interpretation</td>
<td>2</td>
</tr>
</tbody>
</table>

*This is an elective class.

Computer Literacy for Health Care Professionals may be substituted.

Year II

Session I

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVT 2300C Non-Invasive Cardiovascular Diagnostics/Peds Cardio</td>
<td>5</td>
</tr>
<tr>
<td>RTE 2385 Radiation Bio/Protection</td>
<td>3</td>
</tr>
<tr>
<td>CVT 2200 Advanced Cardiovascular Physiology</td>
<td>3</td>
</tr>
<tr>
<td>CHM 1025C Introduction to General Chemistry</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVT 2600 Cardiovascular Physics</td>
<td>2</td>
</tr>
<tr>
<td>CVT 2210 Principles of Hemodynamics</td>
<td>2</td>
</tr>
<tr>
<td>CVT 2220 Cardiovascular Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>CVT 2510 Medical Instrumentation</td>
<td>2</td>
</tr>
<tr>
<td>CVT 2120 CVT Clinical III</td>
<td>3</td>
</tr>
</tbody>
</table>

Session V

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVT 2410 CVT Procedures II</td>
<td>2</td>
</tr>
<tr>
<td>CVT 2800 CVT Clinical Practicum</td>
<td>4</td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED 74
COMPUTER INTEGRATED MANUFACTURING TECHNOLOGY
Associate in Science

This program trains electronics specialists in areas such as programmable controllers, industrial computers and automated systems. Training is tailored for those first entering the job market as well as those who wish to upgrade their skills. Students will learn to evaluate performance of automated production-line equipment, to modify operational characteristics of production-line equipment, either by software modifications of computers and controllers, or by hardware modifications, and to use instrumentation to troubleshoot malfunctioning equipment.

The Florida High Technology and Industry Council has designated Valencia as a Center of Specialization in Computer Integrated Manufacturing. This program won the U.S. Secretary of Education Award as the Outstanding Technical Program in the Southeast for 1990. A wide range of career opportunities is available for electronics technicians, automated systems technicians, and systems integrators in manufacturing as well as the entertainment industries.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>Freshman Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1327</td>
<td>Mathematics for Electronics I</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1328</td>
<td>Mathematics for Electronics II</td>
<td>3</td>
</tr>
<tr>
<td>PHY 1053C</td>
<td>Introductory Physics I</td>
<td>4</td>
</tr>
<tr>
<td>EET 1015C</td>
<td>Fundamentals of DC Circuits</td>
<td>3</td>
</tr>
<tr>
<td>ECO 1000</td>
<td>Basic Economics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

25

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EET 1025C</td>
<td>Fundamentals of AC Circuits</td>
<td>3</td>
</tr>
<tr>
<td>EET 1141C</td>
<td>Electronics Circuits I</td>
<td>4</td>
</tr>
<tr>
<td>EET 2325C</td>
<td>Electronic Communication Systems I</td>
<td>4</td>
</tr>
<tr>
<td>CET 2112C</td>
<td>Digital Techniques</td>
<td>4</td>
</tr>
<tr>
<td>EET 2949</td>
<td>Cooperative Education</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electronics Field Experience or Elective*</td>
<td>3</td>
</tr>
</tbody>
</table>

18

ADVANCED SPECIALIZED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 2675C</td>
<td>Automation Systems I</td>
<td>3</td>
</tr>
<tr>
<td>EST 2676C</td>
<td>Automation Systems II</td>
<td>3</td>
</tr>
<tr>
<td>EST 2673C</td>
<td>Programmable Controllers I</td>
<td>4</td>
</tr>
<tr>
<td>EST 2674C</td>
<td>Programmable Controllers II</td>
<td>4</td>
</tr>
<tr>
<td>EST 2635</td>
<td>Computer Integrated Manufacturing</td>
<td>4</td>
</tr>
<tr>
<td>EST 2527C</td>
<td>Electromechanical Components and Mechanisms</td>
<td>4</td>
</tr>
<tr>
<td>EST 2538</td>
<td>Control Systems Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

28

TOTAL HOURS REQUIRED: 71

RECOMMENDED ELECTIVES

Persons wishing to transfer these courses to another institution should check with that institution. The statewide course numbering system assists this process.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 1041</td>
<td>U.S. Government</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1570</td>
<td>Microcomputer Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>ETD 1320</td>
<td>Introduction to CADD</td>
<td>3</td>
</tr>
<tr>
<td>COP 2220</td>
<td>C Programming</td>
<td>3</td>
</tr>
<tr>
<td>COP 2341</td>
<td>UNIX Operating System</td>
<td>3</td>
</tr>
<tr>
<td>EST 2661</td>
<td>Manufacturing Resources Planning</td>
<td>3</td>
</tr>
<tr>
<td>EET 2547</td>
<td>Power System Protection</td>
<td>4</td>
</tr>
<tr>
<td>ERM 2315C</td>
<td>Hydraulics and Fluid Power</td>
<td>4</td>
</tr>
<tr>
<td>EET 2541C</td>
<td>Power Systems</td>
<td>4</td>
</tr>
<tr>
<td>EET 2542C</td>
<td>Power Systems II</td>
<td>4</td>
</tr>
<tr>
<td>EST 2627C</td>
<td>Automation System I</td>
<td>3</td>
</tr>
<tr>
<td>EST 2673C</td>
<td>Programmable Controls I</td>
<td>4</td>
</tr>
<tr>
<td>EET 2521C</td>
<td>Motors and Controls</td>
<td>4</td>
</tr>
<tr>
<td>EET 2621</td>
<td>Surface Mount Design</td>
<td>4</td>
</tr>
<tr>
<td>EET 2622</td>
<td>Surface Mount Manufacturing</td>
<td>4</td>
</tr>
<tr>
<td>EET 2623</td>
<td>Electronics Testing and Reliability</td>
<td>4</td>
</tr>
<tr>
<td>EET 2527C</td>
<td>Electromechanical Components and Mechanism</td>
<td>4</td>
</tr>
<tr>
<td>EST 2538</td>
<td>Control Systems Instrumentation</td>
<td>4</td>
</tr>
<tr>
<td>CET 2485</td>
<td>Local Area Networks</td>
<td>4</td>
</tr>
<tr>
<td>EST 2261</td>
<td>Lasers in Medicine</td>
<td>4</td>
</tr>
</tbody>
</table>

* Students will select at least one elective course from any course outside the electronics specialization and at least three credit hours from the recommended electives. (These may include courses of one and two semester hours from departments with other than the EET prefix.) Several recommended electives are shown above. See the department for counseling on other approved electives.
COMPUTER PROGRAMMING AND ANALYSIS
Associate in Science

This program is designed for students who wish to develop skills in computer business applications, computer programming, computer operations and management, data base administration and systems analysis. This rapidly changing environment requires frequent updating of job skills.

Valencia offers advanced computer laboratories and has promoted business and industry partnerships, including the IBM Higher Education Software Consortium. This consortium provides access to up-to-date software packages for student use.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 1033</td>
<td>Intermediate Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1104</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction to Data Processing</td>
<td>3</td>
</tr>
<tr>
<td>CNM 1005</td>
<td>Introduction to Programming Concepts</td>
<td>3</td>
</tr>
<tr>
<td>GEB 1011</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>INF 1301</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>OET 1141</td>
<td>*Keyboarding Skills</td>
<td>3</td>
</tr>
</tbody>
</table>

21

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COP 1170</td>
<td>Basic Programming</td>
<td>3</td>
</tr>
<tr>
<td>COP 1200</td>
<td>FORTRAN Programming</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1570</td>
<td>Microcomputer Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2021</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUL 2111</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>COP 2126</td>
<td>COBOL Programming I</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>Freshman Composition II</td>
<td>3</td>
</tr>
<tr>
<td>ECO 1000</td>
<td>Basic Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECO 1023</td>
<td>Principles of Economics</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1600</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
</tbody>
</table>

24

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COP 2120</td>
<td>COBOL Programming II</td>
<td>3</td>
</tr>
<tr>
<td>CIS 2321</td>
<td>Data Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS 2410</td>
<td>Data Processing Management</td>
<td>3</td>
</tr>
<tr>
<td>CIS 2100</td>
<td>Data Base Management</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2071</td>
<td>Principles of Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

21

TOTAL HOURS REQUIRED 66

NOTE: Specialized program courses are offered on West Campus.

Persons wishing to transfer these courses to another institution should check with that institution. The statewide course numbering system assists this process.

RECOMMENDED ELECTIVES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 1041</td>
<td>U.S. Government I</td>
<td>3</td>
</tr>
<tr>
<td>COP 1170</td>
<td>BASIC Programming</td>
<td>3</td>
</tr>
<tr>
<td>COP 1200</td>
<td>FORTRAN Programming</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1570</td>
<td>Microcomputer Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>ETD 1320</td>
<td>Introduction to CADD</td>
<td>3</td>
</tr>
<tr>
<td>GRA 2800</td>
<td>Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>COP 1160</td>
<td>RPG Programming</td>
<td>3</td>
</tr>
<tr>
<td>CET 2112C</td>
<td>Digital Techniques</td>
<td>4</td>
</tr>
<tr>
<td>EST 2873C</td>
<td>Programmable Controllers</td>
<td>4</td>
</tr>
<tr>
<td>COP 2220</td>
<td>C Programming</td>
<td>3</td>
</tr>
<tr>
<td>COP 2341</td>
<td>UNIX Operating System</td>
<td>3</td>
</tr>
<tr>
<td>COP 2161</td>
<td>Advanced RPG/400</td>
<td>3</td>
</tr>
<tr>
<td>CIS 2300</td>
<td>CICS Command Level Programming</td>
<td>3</td>
</tr>
<tr>
<td>EST 2661</td>
<td>Manufacturing Resource Planning</td>
<td>3</td>
</tr>
<tr>
<td>COP 2351</td>
<td>Computer Operating (AS400) Systems</td>
<td>3</td>
</tr>
<tr>
<td>CET 2485</td>
<td>Local Area Networks</td>
<td>3</td>
</tr>
<tr>
<td>COP 2230</td>
<td>ADA Programming</td>
<td>3</td>
</tr>
</tbody>
</table>

* Students may demonstrate proficiency in this course by examination.

** Students will select at least one elective course from any course outside the computer programming and analysis specialization. Several of these are shown under approved electives (those not having COP or CGS prefixes are outside the discipline). See the department for counselling on other approved electives.
CRIMINAL JUSTICE TECHNOLOGY
Associate in Science

The program is designed to familiarize students with the criminal justice system.

The AS degree will transfer into similar upper division programs in certain Florida universities and colleges, but students wishing to transfer must accept the responsibility for getting approval in advance from the transferring institution. Additional coursework may be required to obtain junior status. Students are urged to consult the counseling departments or the criminal justice faculty regarding the benefits of earning both AA and AS degrees before transferring.

FOUNDATIONS COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 1041</td>
<td>U.S. Government I</td>
<td>3</td>
</tr>
<tr>
<td>SYG 2000</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>AMH 2010</td>
<td>U.S. History to 1865</td>
<td>3</td>
</tr>
<tr>
<td>INP 1301</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>CCJ 1020</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CCJ 1010</td>
<td>Criminology</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL FOUNDATIONS COURSES: 21

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPN 1000</td>
<td>Basic Spanish</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1103</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>SYG 1322</td>
<td>Juvenile Justice</td>
<td>3</td>
</tr>
<tr>
<td>CCJ 2230</td>
<td>Criminal Law and Legal Procedures I</td>
<td>3</td>
</tr>
<tr>
<td>CCJ 2400</td>
<td>Law Enforcement Administration</td>
<td>3</td>
</tr>
<tr>
<td>CCJ 2440</td>
<td>Corrections Admissions</td>
<td>3</td>
</tr>
<tr>
<td>CCJ 2330</td>
<td>Community Corrections: An Alternative to Incarceration</td>
<td>3</td>
</tr>
<tr>
<td>CJT 2110</td>
<td>Criminal Investigation I</td>
<td>3</td>
</tr>
<tr>
<td>CJT 2100</td>
<td>Criminal Investigation II</td>
<td>3</td>
</tr>
<tr>
<td>CCJ 2130</td>
<td>Criminal Justice and Community Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL INTERMEDIATE COURSES: 27

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCJ 2022</td>
<td>Contemporary Issues in Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CCJ 2331</td>
<td>Criminal Law and Legal Procedures II</td>
<td>3</td>
</tr>
<tr>
<td>CCJ 2934</td>
<td>Criminal Justice Seminar</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*1 Humanities/Fine Arts Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*2 Natural Science/Mathematics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*3 Electives Outside Specialization</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL ADVANCED COURSES: 18

TOTAL HOURS REQUIRED: 64

NOTE: Specialized, advanced course in this program are offered on East Campus

RECOMMENDED ELECTIVES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMH 2020</td>
<td>U.S. History 1865-1945</td>
<td>3</td>
</tr>
<tr>
<td>HIS 2206</td>
<td>Recent and Contemporary History</td>
<td>3</td>
</tr>
<tr>
<td>AFA 2150</td>
<td>African-American History</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1061</td>
<td>Introduction to Microcomputers</td>
<td>3</td>
</tr>
<tr>
<td>OST 1743C</td>
<td>Electronic Writing I</td>
<td>1</td>
</tr>
<tr>
<td>CCJ 2810</td>
<td>Crime Prevention</td>
<td>3</td>
</tr>
<tr>
<td>LEA 1013</td>
<td>Legal Research/Theory I</td>
<td>3</td>
</tr>
</tbody>
</table>

*1 Students must select a three-credit-hour course from Area 2 under the AS degree general education requirement.

*2 Students must select courses designated as natural science (such as biology, anatomy and physiology, chemistry, geology, formal logic, physical and earth science and physics) or a course in mathematics that is Intermediate Algebra or higher.

*3 Students must select at least one course outside area of specialization. (Not CCJ Prefix courses)
DENTAL HYGIENE
Associate in Science

This program is accredited by the Commission on Dental Accreditation, a specialized accrediting body recognized by the Council on Postsecondary Accreditation and the United States Department of Education.

This dental hygiene program is designed to prepare students for careers as dental hygienists. Graduates are eligible to take the national board and Florida or regional examinations for licensure as registered dental hygienists. Graduates also will be eligible to receive certification in expanded duties recognized by the Florida State Board of Dentistry. Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

A minimum grade of C must be achieved in all dental hygiene, required science, and social science courses to meet a prerequisite or graduation requirement.

Requirements and further information about admission to this program can be found in the admissions and records section of this catalog.

Students should contact the Health and Public Service Department for specific admission procedures and criteria.

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>APB 2821C</td>
<td>Anatomy and Physiology I and</td>
<td>8</td>
</tr>
<tr>
<td>APB 2822C</td>
<td>Anatomy and Physiology II</td>
<td></td>
</tr>
<tr>
<td>MCB 2010C</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>SPC 1600</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
<tr>
<td>DES 1020</td>
<td>Dental Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>DES 1020L</td>
<td>Dental Anatomy Lab</td>
<td>1</td>
</tr>
<tr>
<td>DEH 1001</td>
<td>Introduction to Clinical Procedures</td>
<td>1</td>
</tr>
<tr>
<td>DEH 1001L</td>
<td>Intro to Clinical Procedures Lab</td>
<td>1</td>
</tr>
<tr>
<td>DEH 1003</td>
<td>Fundamentals of Dental Hygiene</td>
<td>2</td>
</tr>
<tr>
<td>DEH 1003L</td>
<td>Dental Hygiene Instrumentation</td>
<td>2</td>
</tr>
<tr>
<td>DES 1200</td>
<td>Dental Radiography</td>
<td>2</td>
</tr>
<tr>
<td>DES 1200L</td>
<td>Dental Radiography Lab</td>
<td>1</td>
</tr>
<tr>
<td>DES 1030C</td>
<td>General and Oral Histology</td>
<td>2</td>
</tr>
<tr>
<td>DEH 1800</td>
<td>Dental Hygiene I</td>
<td>1</td>
</tr>
<tr>
<td>DEH 1800L</td>
<td>Clinical Dental Hygiene I</td>
<td>4</td>
</tr>
<tr>
<td>DEH 1820</td>
<td>Dental Office Emergencies</td>
<td>1</td>
</tr>
<tr>
<td>DES 1100</td>
<td>Dental Materials</td>
<td>2</td>
</tr>
<tr>
<td>DES 1100L</td>
<td>Dental Materials Lab</td>
<td>1</td>
</tr>
<tr>
<td>DEH 2502</td>
<td>Periodontics</td>
<td>2</td>
</tr>
<tr>
<td>DEH 2530L</td>
<td>Expanded Functions Lab</td>
<td>1</td>
</tr>
<tr>
<td>DEH 1802</td>
<td>Dental Hygiene II</td>
<td>2</td>
</tr>
<tr>
<td>DEH 1802L</td>
<td>Clinical Dental Hygiene II</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED 49

SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 1012</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>HUN 1001</td>
<td>Fundamentals of Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>DES 2044</td>
<td>General and Oral Pathology</td>
<td>3</td>
</tr>
<tr>
<td>DEH 2700</td>
<td>Community Dental Health I</td>
<td>3</td>
</tr>
<tr>
<td>DEH 2804</td>
<td>Dental Hygiene III</td>
<td>2</td>
</tr>
<tr>
<td>DEH 2804L</td>
<td>Clinical Dental Hygiene III</td>
<td>2</td>
</tr>
<tr>
<td>DEH 2805</td>
<td>Pharmacology</td>
<td>2</td>
</tr>
<tr>
<td>DEH 2701</td>
<td>Community Dental Health II</td>
<td>1</td>
</tr>
<tr>
<td>DEH 2806</td>
<td>Dental Hygiene IV</td>
<td>2</td>
</tr>
<tr>
<td>DEH 2806L</td>
<td>Clinical Dental Hygiene IV</td>
<td>5</td>
</tr>
<tr>
<td>DEH 2504</td>
<td>Advanced Principles of Dental Hygiene</td>
<td>2</td>
</tr>
<tr>
<td>SYG 2000</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Any humanities or fine arts elective</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED 36

85

68
Diagnostic Medical Sonography
Associate in Science

This program is designed to prepare the student for employment as a diagnostic medical sonographer. The sonographer should be skilled by academic and clinical training to perform ultrasound examinations under the supervision of a qualified physician.

Diagnostic medical sonography is a dynamic new field in the medical arena. It is presently being used to evaluate many soft tissue organs in the body. Some of these organs are the liver, gallbladder, kidneys, and pancreas. One of the most fascinating uses of diagnostic ultrasound is the examination and evaluation of the unborn child. With the most recent technical advances in ultrasound, the sonographer is now able to evaluate flow dynamics of many blood vessels of both the fetus and the adult patient.

Properly trained sonographers are in demand in hospitals, clinics, doctor’s offices, marketing, applications, and mobile services. A minimum grade of C must be achieved in all diagnostic medical sonography courses, and required general curriculum to meet prerequisite or graduation requirements.

Students should contact the Health and Public Service Department for specific admission procedures and criteria.

### YEAR I

#### Session I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>APB 1150</td>
<td>Biological Science</td>
<td>3</td>
</tr>
<tr>
<td>HSC 1531</td>
<td>Medical Terminology</td>
<td>1</td>
</tr>
<tr>
<td>HSC 1230C</td>
<td>Methods of Patient Care</td>
<td>2</td>
</tr>
<tr>
<td>HSC 1650</td>
<td>Principles of Allied Health</td>
<td>2</td>
</tr>
<tr>
<td>SON 1000</td>
<td>Intro to Sonography</td>
<td>1</td>
</tr>
</tbody>
</table>

- **12** Credit Hours

#### Session II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 1012</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>OST 1802</td>
<td>Computer Literacy for Healthcare Professionals or</td>
<td>3</td>
</tr>
<tr>
<td>MAT 1033</td>
<td>Intermediate Algebra</td>
<td>3</td>
</tr>
<tr>
<td>RTE 1703</td>
<td>Anatomy &amp; Physiology</td>
<td>3</td>
</tr>
<tr>
<td>HUM 2250</td>
<td>Humanities - 20th Century</td>
<td>3</td>
</tr>
<tr>
<td>SON 1001C</td>
<td>Fundamentals of Sonography</td>
<td>3</td>
</tr>
</tbody>
</table>

- **15** Credit Hours

#### Session V (III & IV)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 1002</td>
<td>Applied Physics</td>
<td>3</td>
</tr>
<tr>
<td>APB 1292</td>
<td>Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>SON 2112C</td>
<td>Abdominal Sonography</td>
<td>4</td>
</tr>
<tr>
<td>SON 2840</td>
<td>Clinical Sonography I</td>
<td>5</td>
</tr>
</tbody>
</table>

- **15** Credit Hours

### YEAR II

#### Session I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SON 2123C</td>
<td>OB/GYN Sonography I</td>
<td>3</td>
</tr>
<tr>
<td>SON 2614</td>
<td>Acoustical Physics &amp; Instr. I</td>
<td>2</td>
</tr>
<tr>
<td>SON 2416</td>
<td>Sonographic Film Critique I</td>
<td>1</td>
</tr>
<tr>
<td>SON 2850</td>
<td>Clinical Sonography II</td>
<td>6</td>
</tr>
</tbody>
</table>

- **12** Credit Hours

#### Session II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SON 2133</td>
<td>OB/GYN Sonography II</td>
<td>3</td>
</tr>
<tr>
<td>SON 2618</td>
<td>Acoustical Physics &amp; Instr. II</td>
<td>2</td>
</tr>
<tr>
<td>SON 2417</td>
<td>Sonographic Film Critique II</td>
<td>1</td>
</tr>
<tr>
<td>SON 2860</td>
<td>Clinical Sonography III</td>
<td>6</td>
</tr>
</tbody>
</table>

- **12** Credit Hours

#### Session III

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SON 2150C</td>
<td>Neurosonology &amp; Superficial Structures</td>
<td>3</td>
</tr>
<tr>
<td>SON 2418</td>
<td>Sonographic Film Critique III</td>
<td>1</td>
</tr>
<tr>
<td>SON 2867</td>
<td>Clinical Sonography IV</td>
<td>4</td>
</tr>
</tbody>
</table>

- **8** Credit Hours

### TOTAL HOURS REQUIRED

- **74** Total Credit Hours

---

[Image of medical student and equipment]
D I E T E T I C T E C H N I C I A N
Associate in Science

This program is designed for students who desire a career in dietetic technology. The student will develop skills as a dietetic technician to assist the dietitian, the administrator/dietitian and/or the consultant/dietitian in the provision of nutritional care services. This program includes laboratory and field experience which allows for the students to acquire knowledge, skills and attitudes essential to become a dietetic technician. This program is articulated between Orlando Vocational-Technical Center and Valencia Community College. It is accredited by the American Dietetic Association.

Students should contact the Health and Public Service Department for specific admission procedures and criteria.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUN 1201</td>
<td>Nutrition I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Basic Nutrition</td>
<td></td>
</tr>
<tr>
<td>DIE 1001</td>
<td>Health Field I</td>
<td>1</td>
</tr>
<tr>
<td>DIE 1270L</td>
<td>Nutrition Clinical Practice I</td>
<td>1</td>
</tr>
<tr>
<td>DIE 1271L</td>
<td>Nutrition Clinical Practice II</td>
<td>2</td>
</tr>
<tr>
<td>DIE 1006</td>
<td>Health Field II</td>
<td>1</td>
</tr>
<tr>
<td>FSS 1202C</td>
<td>Principles of Food Preparation</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1103</td>
<td>Business Math</td>
<td>3</td>
</tr>
<tr>
<td>HUN 1290</td>
<td>Nutrition II Diet Therapy</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>FOS 2201</td>
<td>Sanitation and Safety</td>
<td>2</td>
</tr>
<tr>
<td>FSS 1001</td>
<td>Introduction to Food Service Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>25</td>
</tr>
</tbody>
</table>

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIE 1412</td>
<td>Nutrition III</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Nutrition Counseling and Education</td>
<td></td>
</tr>
<tr>
<td>DIE 2272L</td>
<td>Nutrition Clinical Practice III</td>
<td>3</td>
</tr>
<tr>
<td>DIE 2100</td>
<td>Health Care Delivery Systems</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1300</td>
<td>Informal Communication or</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1600</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
<tr>
<td>EDP 2002</td>
<td>Educational Psychology or</td>
<td>3</td>
</tr>
<tr>
<td>EDF 1005</td>
<td>Orientation to Education</td>
<td>3</td>
</tr>
<tr>
<td>SYG 2000</td>
<td>Introductory Sociology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21</td>
</tr>
</tbody>
</table>

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSS 2221</td>
<td>Quantity Food Production and Food Management</td>
<td>3</td>
</tr>
<tr>
<td>HUN 1401</td>
<td>Nutrition IV - Application of Diet in Disease</td>
<td>3</td>
</tr>
<tr>
<td>DIE 2273L</td>
<td>Nutrition Clinical Practice IV</td>
<td>4</td>
</tr>
<tr>
<td>DIE 2500</td>
<td>Dietetic Seminar</td>
<td>1</td>
</tr>
<tr>
<td>INP 1301</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED 60

RECOMMENDED ELECTIVES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1010C</td>
<td>Fundamentals of Biology</td>
<td>4</td>
</tr>
<tr>
<td>APB 1150</td>
<td>Biological Sciences</td>
<td>3</td>
</tr>
<tr>
<td>CHM 1025C</td>
<td>Introduction to General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>APB 1390</td>
<td>Medical Terminology I</td>
<td>3</td>
</tr>
<tr>
<td>MCB 2010C</td>
<td>Microbiology</td>
<td>4</td>
</tr>
</tbody>
</table>
DRAFTING AND DESIGN TECHNOLOGY
Associate in Science

This program is designed to train technicians to assist engineers by translating ideas, rough sketches, specifications and calculations into complete and accurate working drawings. In addition, instruction is given in three CADD courses (Computer Aided Drafting and Design) which prepare the student for employment with those institutions using the modern facilities of the computer in drafting situations.

To transfer credits from this program to another institution, it is the student's responsibility to secure advance approval from that institution.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1000</td>
<td>Introduction to Data Processing</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ETD 1100C</td>
<td>Engineering Drawing</td>
<td>3</td>
</tr>
<tr>
<td>MAT 1033</td>
<td>Intermediate Algebra or</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1104</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>PHY 1053C</td>
<td>Introductory Physics I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1102</td>
<td>Freshman Composition II</td>
<td>3</td>
</tr>
<tr>
<td>ECO 1000</td>
<td>Basic Economics</td>
<td>3</td>
</tr>
<tr>
<td>ENG 1130C</td>
<td>Descriptive Geometry</td>
<td>3</td>
</tr>
<tr>
<td>ETD 1701C</td>
<td>Mechanical Drafting I</td>
<td>3</td>
</tr>
<tr>
<td>ETM 1822</td>
<td>Engineering Materials &amp; Processes</td>
<td>3</td>
</tr>
<tr>
<td>INP 1301</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>ETD 1320</td>
<td>Introduction to CADD</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1114</td>
<td>College Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>ETD 2218</td>
<td>Geometric Dimensioning and Tolerancing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETD 2643C</td>
<td>Electro Mechanical Drafting</td>
<td>4</td>
</tr>
<tr>
<td>ETD 1350</td>
<td>Advanced CADD</td>
<td>3</td>
</tr>
<tr>
<td>ETD 2702C</td>
<td>Mechanical Drafting II</td>
<td>3</td>
</tr>
<tr>
<td>ETD 2721C</td>
<td>Elements of Tool Design</td>
<td>3</td>
</tr>
<tr>
<td>EST 2661</td>
<td>Manufacturing Resources Planning</td>
<td>3</td>
</tr>
<tr>
<td>or EST 2675C</td>
<td>Automation Systems I</td>
<td>3</td>
</tr>
<tr>
<td>EST 2527C</td>
<td>Electromechanical Components and</td>
<td>4</td>
</tr>
<tr>
<td>Mechanisms</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Electives</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED: 69

NOTE: Specialized program courses are offered on West Campus.

Persons wishing to transfer these courses to another institution should check with that institution. The statewide course numbering system assists this process.

RECOMMENDED ELECTIVES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 1041</td>
<td>U.S. Government</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1600</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
<tr>
<td>CAP 2201</td>
<td>3-D CADD</td>
<td>3</td>
</tr>
<tr>
<td>CAP 2202</td>
<td>CADD Customization and Directories</td>
<td>3</td>
</tr>
<tr>
<td>EST 2675C</td>
<td>Automation Systems II</td>
<td>3</td>
</tr>
<tr>
<td>ETD 2949</td>
<td>Coop Education: D &amp; D Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>EET 2621</td>
<td>Surface Mount Design</td>
<td>4</td>
</tr>
<tr>
<td>ETM 2315C</td>
<td>Hydraulics and Fluid Power</td>
<td>4</td>
</tr>
</tbody>
</table>

NOTE: Specialized program courses are offered on West Campus.

* Students will select at least one elective course from any course outside the drafting and design technology specialization. Several of these are shown under recommended electives (those not having ETD prefix are outside the discipline). See the department for counseling on other approved electives.
ELECTRONICS
ENGINEERING
TECHNOLOGY

Associate in Science

This program is designed to produce skilled technicians capable of assisting in the design, production, operation and servicing of electrical and electronic systems and equipment. It is organized to provide an up-to-date curriculum in electronics technology, enabling students to gain responsible positions in one of the many clusters of occupations in the electronics field. Valencia is a Center of Electronics Emphasis in the Florida system and is equipped with special test equipment and advanced laboratories which provide the latest in "hands on" experience.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>Freshman Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1327</td>
<td>Mathematics for Electronics I</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1328</td>
<td>Mathematics for Electronics II</td>
<td>3</td>
</tr>
<tr>
<td>PHY 1053C</td>
<td>Introductory Physics I</td>
<td>4</td>
</tr>
<tr>
<td>EET 1015C</td>
<td>Fundamentals of DC Circuits</td>
<td>3</td>
</tr>
<tr>
<td>ECO 1000</td>
<td>Basic Economics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

25

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETD 2643C</td>
<td>Electromechanical Drawing</td>
<td>4</td>
</tr>
<tr>
<td>EET 1025C</td>
<td>Fundamentals of AC Circuits</td>
<td>3</td>
</tr>
<tr>
<td>EET 1141C</td>
<td>Electronics Circuits I</td>
<td>4</td>
</tr>
<tr>
<td>EET 2325C</td>
<td>Electronic Communication Systems I</td>
<td>4</td>
</tr>
<tr>
<td>CET 2112C</td>
<td>Digital Techniques</td>
<td>4</td>
</tr>
<tr>
<td>EET 2949</td>
<td>Cooperative Education:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electronics Field Experience or Elective*</td>
<td></td>
</tr>
</tbody>
</table>

22

ADVANCED SPECIALIZED COURSES

ADVANCED ELECTRONICS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EET 2142C</td>
<td>Electronic Circuits II</td>
<td>4</td>
</tr>
<tr>
<td>EET 2155C</td>
<td>Linear Operational Amplifiers</td>
<td>4</td>
</tr>
<tr>
<td>EET 2183</td>
<td>Electronic Troubleshooting Techniques</td>
<td>3</td>
</tr>
<tr>
<td>EET 2335C</td>
<td>Electronic Communication Systems II</td>
<td>4</td>
</tr>
<tr>
<td>CET 2123C</td>
<td>Fundamentals of Microcomputers</td>
<td>4</td>
</tr>
<tr>
<td>CET 2113C</td>
<td>Computer Systems Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>*Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

26

ELECTRICAL POWER SYSTEMS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EET 2501</td>
<td>Fundamentals of Electrical Power DC</td>
<td>3</td>
</tr>
<tr>
<td>EET 2502</td>
<td>Fundamentals of Electrical Power AC</td>
<td>3</td>
</tr>
<tr>
<td>EET 2541C</td>
<td>Power Systems I</td>
<td>4</td>
</tr>
<tr>
<td>EET 2542C</td>
<td>Power Systems II</td>
<td>4</td>
</tr>
<tr>
<td>EET 2546C</td>
<td>Power System Analysis</td>
<td>4</td>
</tr>
<tr>
<td>EET 2547C</td>
<td>Power System Protection</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>*Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

25

TOTAL HOURS REQUIRED 72

SURFACE MOUNT ASSEMBLY

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EET 2621</td>
<td>Surface Mount Design</td>
<td>4</td>
</tr>
<tr>
<td>EET 2622</td>
<td>Surface Mount Manufacturing</td>
<td>4</td>
</tr>
<tr>
<td>EET 2623</td>
<td>Electronics Testing and Reliability</td>
<td>4</td>
</tr>
<tr>
<td>EET 2521C</td>
<td>Motors and Controls</td>
<td>4</td>
</tr>
<tr>
<td>EST 2675C</td>
<td>Automation Systems I</td>
<td>3</td>
</tr>
<tr>
<td>EST 2673C</td>
<td>Programmable Controls I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>*Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

26

TOTAL HOURS REQUIRED 73

RECOMMENDED ELECTIVES

Persons wishing to transfer these courses to another institution should check with that institution. The statewide course numbering system assists this process.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 1041</td>
<td>U.S. Government</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1570</td>
<td>Microcomputer Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>ETD 1320</td>
<td>Introduction to CADD</td>
<td>3</td>
</tr>
<tr>
<td>COP 2220</td>
<td>C Programming</td>
<td>3</td>
</tr>
<tr>
<td>COP 2341</td>
<td>UNIX Operating System</td>
<td>3</td>
</tr>
<tr>
<td>EST 2661</td>
<td>Manufacturing Resources Planning</td>
<td>3</td>
</tr>
<tr>
<td>EET 2547</td>
<td>Power System Protection</td>
<td>4</td>
</tr>
<tr>
<td>ETM 2315C</td>
<td>Hydraulics and Fluid Power</td>
<td>4</td>
</tr>
<tr>
<td>EET 2541C</td>
<td>Power Systems</td>
<td>4</td>
</tr>
<tr>
<td>EET 2542C</td>
<td>Power Systems II</td>
<td>4</td>
</tr>
<tr>
<td>EST 2627C</td>
<td>Automation System I</td>
<td>3</td>
</tr>
<tr>
<td>EET 2521C</td>
<td>Motors and Controls</td>
<td>4</td>
</tr>
<tr>
<td>EET 2621</td>
<td>Surface Mount Design</td>
<td>4</td>
</tr>
<tr>
<td>EET 2622</td>
<td>Surface Mount Manufacturing</td>
<td>4</td>
</tr>
<tr>
<td>EET 2623</td>
<td>Electronics Testing and Reliability</td>
<td>4</td>
</tr>
<tr>
<td>EST 2627C</td>
<td>Electromechanical Components and Mechanism</td>
<td>4</td>
</tr>
<tr>
<td>EST 2538</td>
<td>Control Systems Instrumentation</td>
<td>4</td>
</tr>
<tr>
<td>CET 2485</td>
<td>Local Area Networks</td>
<td>4</td>
</tr>
<tr>
<td>EET 2261</td>
<td>Lasers in Medicine</td>
<td>4</td>
</tr>
</tbody>
</table>

* Students will select at least one elective course from any course outside the electronics specialization and at least three credit hours from the recommended electives. (These may include courses of one and two semester hours from departments with other than the EET prefix.) Several recommended electives are shown above. See the department for counseling on other approved electives.
EMERGENCY MEDICAL SERVICES TECHNOLOGY AND EMT/PARAMEDIC CERTIFICATES
Associate in Science

The EMS program is designed for students who desire a career in pre-hospital emergency medicine. The program will prepare the student for state board certification as an emergency medical technician and a paramedic.

Through a comprehensive program consisting of theory, clinical and field internship, the student will develop skills for assuming the role of basic life support provider and physician extender. Students must complete the state board certification for EMT before they take any advanced courses or before they sit for the state paramedic exam.

Students wishing to earn a certificate rather than the AS degree may obtain information from the EMS program director. Certificate students are encouraged to continue their studies for the AS degree. All credits for the certificate program are applicable towards this degree.

Florida-certified paramedics who completed a Florida-approved paramedic program will receive, through transfer, credits for the certificate program. They then will need to complete only the additional course for the AS degree.

A minimum grade of C must be achieved in all courses to meet prerequisite and graduation requirements. Any student admitted to the EMS program who fails or withdraws from any two EMS courses (can be the same course or two different courses) must petition the EMS Program Petition Committee for re-evaluation and readmission.

Students will be allowed to petition no more than one time. Requirements and further information about this program can be found in the admissions and records section of this catalog. Students should contact the Health and Public Service Department for specific admission procedures and criteria.

FOUNDATION COURSES

EMT CERTIFICATE PROGRAM

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS 1119</td>
<td>Fundamentals of Emergency Medical Technology*</td>
<td>4</td>
</tr>
<tr>
<td>EMS 1119L</td>
<td>Fundamentals of Emergency Medical Technology Practice*</td>
<td>3</td>
</tr>
<tr>
<td>EMS 1431</td>
<td>EMT Clinical Practicum*</td>
<td>3</td>
</tr>
<tr>
<td>EMS 2254</td>
<td>Paramedic I**</td>
<td>5</td>
</tr>
<tr>
<td>EMS 2254L</td>
<td>Paramedic I Lab**</td>
<td>1</td>
</tr>
<tr>
<td>EMS 2461</td>
<td>Paramedic I Clinical**</td>
<td>4</td>
</tr>
</tbody>
</table>

PARAMEDIC CERTIFICATE PROGRAM

| EMRS 2255 | Paramedic II* | 5            |
| EMRS 2255L | Paramedic II Lab* | 1            |
| EMRS 2462 | Paramedic II Clinical* | 4            |
| EMRS 2463 | Provisional Field Internship | 5            |

EMERGENCY MEDICAL SERVICES TECHNOLOGY DEGREE PROGRAM

<table>
<thead>
<tr>
<th>EMT Certificate Courses</th>
<th>10 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paramedic Certificate Courses</td>
<td>25 credits</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>35 credits</td>
</tr>
</tbody>
</table>

GENERAL EDUCATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>Freshman Composition II</td>
<td>3</td>
</tr>
<tr>
<td>POS 1041</td>
<td>U.S. Government</td>
<td>3</td>
</tr>
<tr>
<td>MAT 1033</td>
<td>Intermediate Algebra</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1012</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Elective: Outside area of specialization - Has to be at least one courses</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>(Not EMS prefix)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

Additional courses must be taken in one of the courses listed below. Completion of this degree may be made by taking a combination of any of the courses listed below to total at least 11 credits.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>APB 2821C</td>
<td>Human Anatomy &amp; Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>APB 2822C</td>
<td>Human Anatomy &amp; Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>CHM 1025C</td>
<td>Introduction to General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CGS 1061</td>
<td>Introduction to Microcomputers</td>
<td>3</td>
</tr>
<tr>
<td>SPN 1000</td>
<td>Basic Spanish</td>
<td>3</td>
</tr>
<tr>
<td>BSC 1010C</td>
<td>Fundamentals of Biology</td>
<td>4</td>
</tr>
<tr>
<td>MNA 2300</td>
<td>Personnel Management</td>
<td>3</td>
</tr>
<tr>
<td>OST 1335</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1210</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1600</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
<tr>
<td>EDF 1005</td>
<td>Orientation to Education</td>
<td>3</td>
</tr>
<tr>
<td>EDG 2941</td>
<td>Field Experience in Education</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED | 64

* Courses needed for State EMT Certificate.
** Prerequisites are EMS 1119, 1119L & 1431 and hold EMT State Certification. EMS 1119, EMS 1119L and EMS 1431 are open to the general public.

COMMENTS: EMS/Paramedic is a selective admissions, listed enrollment program. Students seeking admission must follow College admission procedures. All candidates must take the ASSET Assessment or equivalent Test and have advisement with a counselor.
ENVIRONMENTAL SCIENCE TECHNOLOGY
Associate in Science

This program seeks to produce responsible technicians in the environmental field who will study critical environmental issues and will learn how to make decisions to keep the environment safe.

Upon successful completion of the program, students will earn an AS degree in environmental science technology and will be prepared to work with organizations such as engineering firms, utility companies and environmental service agencies.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 1033</td>
<td>Intermediate Algebra or College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1104</td>
<td>Environmental Science</td>
<td>4</td>
</tr>
<tr>
<td>CHM 1025C</td>
<td>Introduction to General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>PCB 1440</td>
<td>Florida Environmental Systems or</td>
<td>3</td>
</tr>
<tr>
<td>APB 1120</td>
<td>Environmental Science</td>
<td>3</td>
</tr>
<tr>
<td>EVS 1861</td>
<td>Environmental Regulations</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1061</td>
<td>Introduction to Microcomputers or</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1570</td>
<td>Microcomputer-Business Applications</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>INP 1301</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>APB 1150</td>
<td>Biological Science (3 credits) or</td>
<td>3-4</td>
</tr>
<tr>
<td>BSC 1010C</td>
<td>Fundamentals of Biology (4 credits)</td>
<td></td>
</tr>
<tr>
<td>CHM 1205C</td>
<td>Introduction to Organic and Biochemistry</td>
<td>4</td>
</tr>
<tr>
<td>EVS 2215C</td>
<td>Hydraulics and Pipe Flow</td>
<td>3</td>
</tr>
<tr>
<td>EVS 1401</td>
<td>Basic Electricity, Blueprints and Energy Conservation</td>
<td>3</td>
</tr>
<tr>
<td>EVS 2601</td>
<td>Hazardous Materials</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>19-20</strong></td>
</tr>
</tbody>
</table>

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVS 2191</td>
<td>Environmental Sampling and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1210</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>EVS 2812</td>
<td>Environmental Microbiology (3 credits) or</td>
<td></td>
</tr>
<tr>
<td>MCB 2010C</td>
<td>Microbiology (4 credits)</td>
<td></td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td></td>
<td><strong>4-6</strong></td>
</tr>
<tr>
<td><strong>Recommended Elective Courses</strong></td>
<td></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>25-28</strong></td>
</tr>
</tbody>
</table>

**TOTAL HOURS REQUIRED**

63-67

**RECOMMENDED ELECTIVE COURSES**

Students must select nine credit hours from the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVS 2501</td>
<td>Solid Waste Management</td>
<td>3</td>
</tr>
<tr>
<td>STA 2014</td>
<td>Elementary Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MNA 2300</td>
<td>Personnel Management</td>
<td>3</td>
</tr>
<tr>
<td>MNA 2340</td>
<td>Basic Supervision</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1600</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
<tr>
<td>HSC 1400</td>
<td>First Aid/CPR</td>
<td>3</td>
</tr>
<tr>
<td>EVS 1333</td>
<td>Wastewater Treatment I</td>
<td>3</td>
</tr>
<tr>
<td>EVS 1343</td>
<td>Wastewater Treatment II</td>
<td>3</td>
</tr>
<tr>
<td>EVS 2353</td>
<td>Wastewater Treatment III</td>
<td>3</td>
</tr>
<tr>
<td>BOT 2010C</td>
<td>Botany</td>
<td>4</td>
</tr>
<tr>
<td>PCB 2302</td>
<td>Aquatic Biology</td>
<td>3</td>
</tr>
<tr>
<td>EVS 2224C</td>
<td>Hydrology and Drainage</td>
<td>3</td>
</tr>
<tr>
<td>PCB 2304</td>
<td>Natural History of Florida Rivers</td>
<td>1</td>
</tr>
<tr>
<td>EVS 1133</td>
<td>Water Treatment I</td>
<td>3</td>
</tr>
<tr>
<td>EVS 1143</td>
<td>Water Treatment II</td>
<td>3</td>
</tr>
<tr>
<td>EVS 2153</td>
<td>Water Treatment III</td>
<td>3</td>
</tr>
<tr>
<td>POS 1041</td>
<td>U.S. Government I</td>
<td>3</td>
</tr>
<tr>
<td>GLY 1001</td>
<td>Earth Science</td>
<td>3</td>
</tr>
<tr>
<td>PCB 2342</td>
<td>Sea Grass Ecology</td>
<td>1</td>
</tr>
<tr>
<td>PCB 2313</td>
<td>Manatee Ecology</td>
<td>1</td>
</tr>
<tr>
<td>OCE 1001</td>
<td>Introduction to Oceanography</td>
<td>3</td>
</tr>
<tr>
<td>ZOO 2013C</td>
<td>General Zoology</td>
<td>4</td>
</tr>
<tr>
<td>OCB 2003C</td>
<td>Marine Biology</td>
<td>4</td>
</tr>
</tbody>
</table>

Students may receive three semester hours of credit for each level of Florida's certification they hold in water and/or wastewater C, B, and A level certification. Students may apply up to nine semester hours toward the AS degree.

*Students must take at least one course outside the environmental science specialization area. Students may select electives from recommended electives except for courses with EVS prefix.
FILM PRODUCTION TECHNOLOGY
Associate in Science

The film production technology program is designed to prepare individuals for entry-level positions in film production. Emphasis is placed upon developing production-related skills in the following areas: camera, grip, electrical, sound, editing and set construction. Technical prerequisite courses are designed to develop fundamental technical skills and broaden future placement possibilities. The film production courses are taught as a series of master classes or "intensives" which may not conform to the normal class scheduling or to the College calendar. Enrollment in the production portion of this program will require a one-year full-time commitment. Requirements and further information about admission to this program can be found in the admission and record section of this catalog. Students wishing to transfer any credits from this program to another institution must accept responsibility for securing approval in advance from the transfer institution.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2100</td>
<td>Introduction to Film</td>
<td></td>
</tr>
<tr>
<td>THE 1020</td>
<td>Introduction to Theatre</td>
<td>3</td>
</tr>
<tr>
<td>TPA 1210</td>
<td>**Basic Stagecraft I</td>
<td>3</td>
</tr>
<tr>
<td>FIL 1270</td>
<td>Introduction to the Film Process</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*Natural Science</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Mathematics</td>
<td></td>
</tr>
</tbody>
</table>

** Total Credit Hours: 15

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 1041</td>
<td>U.S. Government I</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1210</td>
<td>Technical Communications</td>
<td>3</td>
</tr>
<tr>
<td>TPA 1211</td>
<td>**Basic Stagecraft II</td>
<td>3</td>
</tr>
<tr>
<td>TPA 2260</td>
<td>**Sound for the Stage</td>
<td>4</td>
</tr>
<tr>
<td>TPA 2220</td>
<td>**Introduction to Stage Lighting</td>
<td>4</td>
</tr>
<tr>
<td>TPA 2290</td>
<td>**Technical Theatre Production</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>***Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

** Total Credit Hours: 23

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIL 2200</td>
<td>Film Production (Repeated 3 times-4 Credits each)</td>
<td>12</td>
</tr>
<tr>
<td>FIL 2271</td>
<td>Film Camera Techniques</td>
<td>3</td>
</tr>
<tr>
<td>FIL 2274</td>
<td>Film Editing</td>
<td>4</td>
</tr>
<tr>
<td>FIL 2273</td>
<td>Film Gripping</td>
<td>3</td>
</tr>
<tr>
<td>FIL 2275</td>
<td>Film Sound</td>
<td>4</td>
</tr>
<tr>
<td>FIL 2272</td>
<td>Film Lighting</td>
<td>3</td>
</tr>
</tbody>
</table>

** Total Credit Hours: 29

TOTAL HOURS REQUIRED 67

* Students must select courses designated as natural science (such as biology, anatomy and physiology, chemistry, geology, formal logic, physical and earth science and physics) or a course in Mathematics that is Intermediate Algebra or higher.

** Technical core courses which need to be completed prior to beginning of advanced film courses.

*** Students must select at least one course outside of area of specialization.
## FINANCIAL SERVICES

Associate in Science

### FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>GEB 1011</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1103</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1600</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
<tr>
<td>OST 1141</td>
<td>Keyboarding Skills</td>
<td>3</td>
</tr>
<tr>
<td>BUL 2111</td>
<td>Business Law I</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 18

### INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2021</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUL 2112</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction to Data Processing</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1061</td>
<td>Introduction to Micro Computers</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*Humanities or Fine Arts</td>
<td></td>
</tr>
<tr>
<td>INP 1301</td>
<td>Psychology in Business Industry</td>
<td>3</td>
</tr>
<tr>
<td>OST 1335</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>MAR 2011</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 24

### ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2071</td>
<td>Principles of Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>FIN 2230</td>
<td>Money and Banking</td>
<td>3</td>
</tr>
<tr>
<td>FIN 2131</td>
<td>Principles of Finance</td>
<td>3</td>
</tr>
<tr>
<td>ECO 1000</td>
<td>Basic Economics or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Principles of Economics - Macro</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>**Natural Science or Mathematics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>***Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Outside of Specialization)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 18

### TOTAL HOURS REQUIRED

60

### RECOMMENDED ELECTIVES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAN 2021</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>POS 1041</td>
<td>U.S. Government I</td>
<td>3</td>
</tr>
<tr>
<td>TAX 2000</td>
<td>Federal Income Tax</td>
<td>3</td>
</tr>
<tr>
<td>SVL 2111</td>
<td>Financial Institutions</td>
<td>3</td>
</tr>
<tr>
<td>FIN 2100</td>
<td>Personal Financial</td>
<td>3</td>
</tr>
</tbody>
</table>

* Students must select a three-credit-hour course from Area 2 under the AS degree general education requirements.

** Students must select courses designated as natural science (such as biology, anatomy and physiology, chemistry, geology, formal logic, physical and earth science and physics) or a course in mathematics that is Intermediate Algebra or higher.

*** Students must select one course outside area of specialization (not FIN prefix course).
FINANCIAL SERVICES - BANKING
Associate in Science

This program is designed for persons employed in the field of banking. The banking courses are approved by the American Institute of Banking. Students wishing to transfer credits from this option to another institution must accept the responsibility for securing approval in advance from the transfer institution. This program is offered in conjunction with the Central Florida Chapter of the American Institute of Banking (AIB). Through this program the student can obtain coursework for AIB diplomas in general banking, bank operations, consumer credit, commercial lending and mortgage lending. The student also may complete the requirements for AIB certificates in customer service skills and supervisory skills.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>BAN 1004</td>
<td>Principles of Banking</td>
<td>3</td>
</tr>
<tr>
<td>(Note 1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECO 2013</td>
<td>Principles of Economics - Macro or</td>
<td>3</td>
</tr>
<tr>
<td>ECO 1000</td>
<td>Basic Economics</td>
<td>3</td>
</tr>
<tr>
<td>BAN 1800</td>
<td>Law and Banking: Principles</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAN 2111</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BAN 2511</td>
<td>Marketing for Bankers</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAR 2011</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1103</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2021</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BRC 1701</td>
<td>Microcomputers in the Banking Industry*</td>
<td>3</td>
</tr>
</tbody>
</table>

Total: 24

*CGS 1570 Microcomputer Business Applications or CGS 1061 Introduction to Microcomputers may be substituted.

Upon completion of the foundation courses the student is eligible for the AIB general banking diploma. Consult the diploma program guide for specific requirements.

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OST 1335</td>
<td>Business Communications (Note 2)</td>
<td>3</td>
</tr>
<tr>
<td>BAN 2501</td>
<td>Money and Banking for Commercial Bankers</td>
<td>3</td>
</tr>
<tr>
<td>BAN 2742</td>
<td>Commercial Bank Management or</td>
<td></td>
</tr>
<tr>
<td>MAN 2021</td>
<td>Principles of Management or</td>
<td></td>
</tr>
<tr>
<td>MNA 2300</td>
<td>Personnel Management (Note 3) or</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MNA 2340</td>
<td>Basic Supervision (Note 4)</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED: 60

PLUS ONE OF THE FOLLOWING OPTIONS

These are additional courses required to satisfy AIB diploma requirements. If students have taken courses in any other sequence, the proper AIB program guide should be consulted to determine possible earlier qualification for these diplomas.

Option 1: To qualify for the Bank Operations Diploma

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAN 1801</td>
<td>Law and Banking: Applications or</td>
<td>2</td>
</tr>
<tr>
<td>BUL 2112</td>
<td>Business Law II</td>
<td>3</td>
</tr>
</tbody>
</table>

Option 2: To qualify for the Consumer Credit Diploma

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAN 2210</td>
<td>Analyzing Financial Statements</td>
<td>3</td>
</tr>
<tr>
<td>BAN 2240</td>
<td>Consumer Lending</td>
<td>3</td>
</tr>
</tbody>
</table>

Option 3: To qualify for the Commercial Lending Diploma

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAN 2210</td>
<td>Analyzing Financial Statements</td>
<td>3</td>
</tr>
<tr>
<td>BAN 2231</td>
<td>Commercial Lending</td>
<td>3</td>
</tr>
</tbody>
</table>

Option 4: To qualify for the Mortgage Lending Diploma

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAN 2210</td>
<td>Analyzing Financial Statements</td>
<td>3</td>
</tr>
<tr>
<td>REE 2200</td>
<td>Real Estate Finance I</td>
<td>3</td>
</tr>
</tbody>
</table>

IMPORTANT: In addition to these courses the student wishing a mortgage lending diploma MUST also complete two correspondence courses through the national office of AIB. See the diploma program guide for details.

11-15

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>INP 1301</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Humanities/Fine Arts (Note 5)</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Natural Science/Math (Note 6)</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>Minimum of one course (Note 7)</td>
<td>3</td>
</tr>
<tr>
<td>Banking Electives (Note 8)</td>
<td>9-13</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED: 21-25

NOTES:

1. All courses with the College prefix BAN or BRC are banker-specific using AIB textbooks and instructors.

2. This is based on the expectation that this course will be pre-qualified to satisfy AIB requirements for both verbal and written communications.
3. Although carrying a general College prefix for management courses, this course is presented to banking students by banking instructors using AIB textbooks. This is the number assigned to “Supervisory Training.”

4. See Note 3. This is the number assigned to “Supervision.” To qualify for the AIB Supervisory Skills Certificate a student must complete Commercial Bank Management or Principles of Management Basic Supervision. See the program guide for complete requirements.

5. Any three-credit course meeting the Associate in Science general education requirements for Area 2, Humanities, may be used. The following are recommended:

- HUM 1020 Introduction to the Humanities
- ARH 1000 The Visual Arts Today
- MUL 1010 Music Appreciation

6. Any three-credit course meeting the Associate in Science general education requirements for Areas 3, mathematics (must be Intermediate Algebra or higher in the math area), or 4, natural and physical sciences, may be used. The following are recommended:

- PHI 2101 Formal Logic
- APB 1120 Environmental Science

7. The student is required to complete at least one course outside the field of concentration. Courses with the prefixes BAN, BRC or SVL may NOT be used to satisfy this requirement. The following are recommended:

- POS 1041 U.S. Government (3 credits)
- OST 2763 Display Write
- OST 2764 Microsoft Word
- OST 2765 Multimate
- OST 2766 Word Perfect
- OST 2767 Word Star
- OST 2821 Pagemaker
- OST 2930 Selected topics (1 - 3 credits)

These topics may be chosen to provide or expand skills in the use of microcomputers and their various operating programs to include word processors, data bases, spreadsheets, etc.

8. Banking electives should be chosen from the following list (the appropriate AIB guide should be referred to when qualifying for a certificate).

To qualify for the Customer Services Skills Certificate:

- BAN 1423 Customer Service (1 credit)
- BAN 1424 Product Knowledge (1 credit)
- BAN 1425 Selling Bank Services (1 credit)
- Seminar Bank Security for Customer Contact Person (1 credit)

To qualify for the Securities Services Skills Certificate:

- BAN 1161 Corporate Securities Services (3 credits)
- BAN 1405 Trust Operations (3 credits)
- BAN 1413 Securities Processing (3 credits)

To qualify for the Supervisory Skills Certificate (Also see Note 4):

- BAN 2531 Preparing for Supervision (1 credit)
  For those desiring this certificate, this introduction should be completed prior to enrolling in other management or supervision courses.
- Seminar Personnel and the Law (0 credit)

The following list shows those other courses most frequently offered. It is not meant to be inclusive and may be expanded when the demand for other existing or new courses is established.

- BAN 1114 Deposit Operations (2 credits)
- BAN 2135 Bank Accounting (3 credits)
- BAN 2155 International Banking (3 credits)
- BAN 2241 Banking and the Plastic Card (3 credits)
- BAN 2412 Financial Planning for Bankers (3 credits)
- BAN 2782 Bank Investments and Funds Management (3 credits)
- BAN 1400 The Trust Business (3 credits)
**FINANCIAL SERVICES - SAVINGS AND LOAN**

**Associate in Science**

**FOUNDATION COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1103</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>INP 1301</td>
<td>Psychology in Business &amp; Industry</td>
<td>3</td>
</tr>
<tr>
<td>OST 1335</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>SVL 1001</td>
<td>Introduction to the Savings</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Institutions Business</td>
<td></td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction to Data Processing</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CGS 1061</td>
<td>Introduction to Microcomputers</td>
<td>3</td>
</tr>
</tbody>
</table>

**INTERMEDIATE COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 1023</td>
<td>Principles of Micro Economics</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2021</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1600</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
<tr>
<td>BUL 2111</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>SVL 2113</td>
<td>Deposit Accounts and Service</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SVL 2121</td>
<td>Managing Deposit Accounts and Service</td>
<td></td>
</tr>
<tr>
<td>SVL 2401</td>
<td>Personal Money Management</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIN 2010</td>
<td>Personal Investments: Stocks and Bonds</td>
<td></td>
</tr>
<tr>
<td>FIN 2230</td>
<td>Money and Banking</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL HOURS REQUIRED**

63

**ADVANCED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNA 2300</td>
<td>Personnel Management</td>
<td>3</td>
</tr>
<tr>
<td>REE 1000</td>
<td>Real Estate Principles and Practices</td>
<td>3</td>
</tr>
<tr>
<td>MAN 2021</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAN 2011</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>SVL 2211</td>
<td>Consumer Lending</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*1 Humanities or Fine Arts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*2 Natural Science or Mathematics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*3 Electives (Outside of Specialization)</td>
<td>3</td>
</tr>
</tbody>
</table>

**RECOMMENDED ELECTIVES OUTSIDE OF SPECIALIZATION:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 1041</td>
<td>U.S. Government I</td>
<td>3</td>
</tr>
<tr>
<td>BUL 2112</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>MAN 2021</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MAR 2011</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>TAX 2000</td>
<td>Federal Income Tax</td>
<td>3</td>
</tr>
<tr>
<td>FIN 2100</td>
<td>Personal Finance</td>
<td>3</td>
</tr>
</tbody>
</table>

*1 Students must select 3 credit hours from Area II under A.S. degree general education requirement.

*2 Students must select courses designated as natural science (such as biology, anatomy and physiology, chemistry, geology, formal logic, physical and earth science and physics) or a course in mathematics that is Intermediate Algebra or higher.

*3 Students must take at least one course outside the savings and loan specialization, students may select electives from recommended electives except for courses with SVL or FIN prefix.
# FIRE SCIENCE TECHNOLOGY

Associate in Science

This program is designed for fire fighters, fire fighters aspiring to become officers, officers wanting Florida state fire officers and fire inspector’s certification, and those desiring to expand their technical, theoretical and general knowledge.

A student wishing to earn a certificate rather than an A.S. degree may do so by completing the fire science courses.

Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

## FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>POS 2112</td>
<td>State and Local Government</td>
<td>3</td>
</tr>
<tr>
<td>POS 1041</td>
<td>U.S. Government I</td>
<td>3</td>
</tr>
<tr>
<td>INP 1301</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1103</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>FFP 1000</td>
<td>Introduction to Fire Science Technology</td>
<td>3</td>
</tr>
<tr>
<td>FFP 1130</td>
<td>Company Officer Leadership**</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1600</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
</tbody>
</table>

**21**

## INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1210</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>FFP 1410</td>
<td>Fire Fighting Strategy and Tactics**</td>
<td>3</td>
</tr>
<tr>
<td>FFP 2500</td>
<td>Hazardous Materials I**</td>
<td>3</td>
</tr>
<tr>
<td>FFP 2150</td>
<td>Methods &amp; Techniques of Instruction**</td>
<td>3</td>
</tr>
<tr>
<td>CHM 1025C</td>
<td>Introduction to General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>SYG 2000</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td><strong>Humanities Elective</strong></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Elective</strong></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**25**

## ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFP 2200</td>
<td>Introduction to Fire Inspection**</td>
<td>3</td>
</tr>
<tr>
<td>FFP 2620</td>
<td>Fire Protection Systems and Extinguishing Agents**</td>
<td>3</td>
</tr>
<tr>
<td>FFP 2300</td>
<td>Building Construction and Fundamentals**</td>
<td>3</td>
</tr>
<tr>
<td>FFP 2501</td>
<td>Hazardous Materials II**</td>
<td>3</td>
</tr>
<tr>
<td>FFP 2326</td>
<td>Building Plans Review for Fire Service**</td>
<td>3</td>
</tr>
</tbody>
</table>

**18**

## TOTAL HOURS REQUIRED

**64**

*Courses required for State Fire Inspector Certification. 
+Courses required for State Fire Officer Certification. 
**Student must select course from Area II of general education for A.S. degree.

NOTE: Specialized program courses are offered on West Campus.

***One elective course from outside fire science specialization (not FFP prefix course).
GRAPHIC ARTS TECHNOLOGY - MANAGEMENT
Associate in Science

This program prepares students who wish to pursue a career in graphic arts with special emphasis on the business and managerial aspects of a printing/production/art department operation. Emphasis is placed on the use of modern computer graphics in layout, planning, animation and design.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>END 1102</td>
<td>Freshman Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MAT 1033</td>
<td>Intermediate Algebra</td>
<td>3</td>
</tr>
<tr>
<td>or MAC 1104</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>INP 1301</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>GRA 1500</td>
<td>Introduction to Graphic Communication</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction to Data Processing</td>
<td>3</td>
</tr>
<tr>
<td>GEB 1011</td>
<td>Introduction to Business or</td>
<td>3</td>
</tr>
<tr>
<td>MAR 2011</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>ECO 1000</td>
<td>Basic Economics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 24

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRA 2800</td>
<td>Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>GRA 1540C</td>
<td>Layout, Design, and Copy Preparation</td>
<td>3</td>
</tr>
<tr>
<td>GRA 1530C</td>
<td>Fundamentals of Typography</td>
<td>3</td>
</tr>
<tr>
<td>MAR 2011</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>CES 1570</td>
<td>Microcomputer Business Application</td>
<td>3</td>
</tr>
<tr>
<td>ART 1301C</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 1201C</td>
<td>Design I</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 21

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRA 2702</td>
<td>Graphics Production Management or</td>
<td>3</td>
</tr>
<tr>
<td>EST 2661</td>
<td>Manufacturing Resources Planning</td>
<td>3</td>
</tr>
<tr>
<td>GRA 2810</td>
<td>Desktop Publishing</td>
<td>3</td>
</tr>
<tr>
<td>GRA 2571C</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>GRA 2706</td>
<td>Graphic Arts Estimating</td>
<td>3</td>
</tr>
<tr>
<td>GRA 2949</td>
<td>COOP Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours: 24

TOTAL HOURS REQUIRED: 63

Persons wishing to transfer these courses to another institution should check with that institution. The state-wide course numbering system assists this process.

RECOMMENDED ELECTIVES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 1041</td>
<td>U.S. Government</td>
<td>3</td>
</tr>
<tr>
<td>GRA 2696C</td>
<td>Binding Operations</td>
<td>3</td>
</tr>
<tr>
<td>GRA 2704C</td>
<td>Production Scheduling</td>
<td>3</td>
</tr>
<tr>
<td>GRA 2692</td>
<td>Printing Problems</td>
<td>3</td>
</tr>
<tr>
<td>ART 1201C</td>
<td>Design I</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1114</td>
<td>College Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>GRA 2635C</td>
<td>Reproduction Processes</td>
<td>3</td>
</tr>
</tbody>
</table>

*Students will select one elective course, from any course outside the graphic arts technology specialization and a minimum of three credit hours from the recommended electives. (These may include courses of one and two semester hours from departments with other than the GRA prefix.) Several recommended electives are shown above. See the department for counseling on other approved electives.
# GRAPHIC DESIGN TECHNOLOGY

**Associate in Science**

This program prepares students for employment as designers, commercial artists, mechanical artists. It includes drawing, mechanical and layout preparation, design for communication, typesetting, and photographic skills.

## FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>GRA 1500</td>
<td>Introduction to Graphic Communication</td>
<td>3</td>
</tr>
<tr>
<td>ARH 1009</td>
<td>Visual Arts Today</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARH 2050</td>
<td>Art History I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARH 2051</td>
<td>Art History II</td>
<td>3</td>
</tr>
<tr>
<td>ART 1301C</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 1201C</td>
<td>Design I</td>
<td>3</td>
</tr>
<tr>
<td>*1 Natural Science or Mathematics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>POS 1041</td>
<td>U.S. Government I</td>
<td>3</td>
</tr>
<tr>
<td>*2 General Education Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours Required:** 24

## INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1302C</td>
<td>Drawing II</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>ART 2510C</td>
<td>Painting</td>
</tr>
<tr>
<td>ART 1203C</td>
<td>Design II</td>
</tr>
<tr>
<td>GRA 1540C</td>
<td>Layout, Design, and Copy Preparation</td>
</tr>
<tr>
<td>GRA 2800</td>
<td>Computer Graphics</td>
</tr>
<tr>
<td>GRA 1530C</td>
<td>Fundamentals of Typography</td>
</tr>
<tr>
<td>GRA 1951</td>
<td>Portfolio/Resume</td>
</tr>
<tr>
<td>GRA 2545C</td>
<td>Advanced Graphic Design I</td>
</tr>
<tr>
<td>PGY 2101C</td>
<td>Photography I</td>
</tr>
</tbody>
</table>

**Total Hours Required:** 22

## ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRA 2740C</td>
<td>Graphic Presentation</td>
<td>3</td>
</tr>
<tr>
<td>GRA 2743C</td>
<td>Illustrating</td>
<td>3</td>
</tr>
<tr>
<td>GRA 1951</td>
<td>Portfolio/Resume</td>
<td>1</td>
</tr>
<tr>
<td>GRA 2810</td>
<td>Graphic Design for Desktop Publishing</td>
<td>3</td>
</tr>
<tr>
<td>GRA 2635C</td>
<td>Graphic Reproduction Processes</td>
<td>3</td>
</tr>
<tr>
<td>GRA 2949C</td>
<td>Co-Operative Education or Elective</td>
<td>3</td>
</tr>
<tr>
<td>GRA 2546C</td>
<td>Advanced Graphic Design II</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRA 2803</td>
<td>Computer Animation I</td>
<td>3</td>
</tr>
<tr>
<td>*3Elective (outside specialization)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours Required:** 68

*1 Students must select courses designated as natural science (such as biology, anatomy, physiology, chemistry, geology, physics, formal logic, physical and earth science) or a course in mathematics that is Intermediate Algebra or higher.

*2 Students may select a course as designated in Area 5 general education elective, AS degree.

*3 Students must take at least one course outside their area of specialization (not GRA prefix) and not already used to satisfy the general education requirements.

## RECOMMENDED ELECTIVES

- JOU 1420L  College Newspaper
- JOU 1440L  College Magazine
- SPC 1600   Fundamentals of Speech
- FIL 1270   Intro to Film Processes
- SLS 1301   Career Development
- MKA 2511   Advertising
HOSPITALITY MANAGEMENT
Associate in Science

This program is designed for persons desiring employment in the field of hospitality management as well as for those currently employed who desire advancement. This program includes work experience in local hospitality organizations. Students wishing to transfer credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1103</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>HFT 1000</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HFT 1700</td>
<td>Introduction to Tourism</td>
<td>3</td>
</tr>
<tr>
<td>HFT 1410</td>
<td>Front Office Management</td>
<td>3</td>
</tr>
<tr>
<td>INF 1301</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1600</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
</tbody>
</table>

21

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OST 1335</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2021</td>
<td>*1 Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUL 2111</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2200</td>
<td>Hospitality Management</td>
<td>3</td>
</tr>
<tr>
<td>FSS 2222C</td>
<td>Quantity Food Production and Food Management</td>
<td>3</td>
</tr>
<tr>
<td>FSS 2251</td>
<td>Food and Beverage Management</td>
<td>3</td>
</tr>
</tbody>
</table>

21

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSS 2500</td>
<td>Food and Beverage Control</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2600</td>
<td>Hospitality Law</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2941</td>
<td>Hospitality Seminar and Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>HFT 2500</td>
<td>Marketing and Sales in Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>SPN 1000</td>
<td>Basic Spanish or other Foreign Language</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*3 Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*4 Math/Natural Science</td>
<td>3</td>
</tr>
</tbody>
</table>

21

TOTAL HOURS REQUIRED

63

*3 Students will select at least one elective course from any course outside the hospitality specialization (not HFT, FSS prefix courses). Suggestions: any one, two or three credit hour courses from the office system technology or business programs or U.S. government.

*4 If a student selects natural science, the course may be in biology, anatomy and physiology, chemistry, geology, formal logic, physical and earth sciences, or physics. If the student selects mathematics, the course must be Intermediate Algebra or higher.

*1 APA 1111 Basic Accounting may be substituted for ACG 2021.

*2 Students will select elective hours from any business, offices systems technology or hospitality management courses.
LAND SURVEYING TECHNOLOGY
Associate in Science

The surveying program is designed to train technicians to enter the land surveying profession in one of several areas related to the total occupational cluster.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2021</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 1033</td>
<td>Intermediate Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1104</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>SUR 2600</td>
<td>Surveying Calculations</td>
<td>3</td>
</tr>
<tr>
<td>SUR 2321</td>
<td>Basic Surveying and Measurements (Surveying I)</td>
<td>4</td>
</tr>
<tr>
<td>SUR 2660</td>
<td>Professional Drafting for Surveyors</td>
<td>2</td>
</tr>
<tr>
<td>ECO 1000</td>
<td>Basic Economics</td>
<td>3</td>
</tr>
</tbody>
</table>

21

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1102</td>
<td>Freshman Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1114</td>
<td>College Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>GLY 2100</td>
<td>Historical Geology</td>
<td>3</td>
</tr>
<tr>
<td>SUR 2201C</td>
<td>Highway Drafting and Route Design</td>
<td>4</td>
</tr>
<tr>
<td>SUR 2300</td>
<td>Topography and Mapping</td>
<td>3</td>
</tr>
<tr>
<td>SUR 2330</td>
<td>Photogrammetry</td>
<td>2</td>
</tr>
<tr>
<td>SUR 2400</td>
<td>Legal Aspects of Surveying</td>
<td>3</td>
</tr>
<tr>
<td>SUR 2610</td>
<td>Intermediate Survey Computation (Surveying II)</td>
<td>3</td>
</tr>
<tr>
<td>CES 1570</td>
<td>Microcomputer Business Application</td>
<td>3</td>
</tr>
</tbody>
</table>

33

*Electives

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUR 2402</td>
<td>Land Surveying and Descriptions</td>
<td>3</td>
</tr>
<tr>
<td>SUR 2460</td>
<td>Subdivisions</td>
<td>3</td>
</tr>
<tr>
<td>SUR 2500</td>
<td>Electronic and Geodetic Surveying</td>
<td>3</td>
</tr>
<tr>
<td>SUR 2640</td>
<td>Advanced Survey Computations (Surveying III)</td>
<td>4</td>
</tr>
</tbody>
</table>

13

TOTAL HOURS REQUIRED 67

Persons wishing to transfer these courses to another institution should check with that institution. The statewide course numbering system assists this process.

RECOMMENDED ELECTIVES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 1641</td>
<td>U.S. Government I</td>
<td>3</td>
</tr>
<tr>
<td>BCN 1272</td>
<td>Construction Blueprint Reading</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction to Data Processing</td>
<td>3</td>
</tr>
<tr>
<td>COP 1200</td>
<td>FORTRAN Programming</td>
<td>3</td>
</tr>
<tr>
<td>ETD 1320</td>
<td>Introduction to CADD</td>
<td>3</td>
</tr>
<tr>
<td>ETD 1350</td>
<td>Advanced CADD</td>
<td>3</td>
</tr>
<tr>
<td>GEB 1011</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>GRA 2745C</td>
<td>Pictorial Rendering</td>
<td>3</td>
</tr>
<tr>
<td>INP 1301</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
</tbody>
</table>

30

* Students will select at least one elective course, from any course outside the land surveying technology specialization. Several of these are shown under recommended electives (those not having SUR prefix are outside the discipline). See the department for counseling on other approved electives.
## Laser/Electro Optic Engineering Technology

**Associate in Science**

### Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>Freshman Composition II</td>
<td>3</td>
</tr>
<tr>
<td>ECO 1000</td>
<td>Basic Economics</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1137</td>
<td>Math for Electronics I</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1328</td>
<td>Math for Electronics II</td>
<td>3</td>
</tr>
<tr>
<td>PHY 1053C</td>
<td>Introductory Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHY 1402C</td>
<td>Optical Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total: 23 Credit Hours**

### Intermediate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EET 1015C</td>
<td>Fundamentals of DC Circuits</td>
<td>3</td>
</tr>
<tr>
<td>EET 1025C</td>
<td>Fundamentals of AC Circuits</td>
<td>3</td>
</tr>
<tr>
<td>EET 1141C</td>
<td>Electronic Circuits I</td>
<td>4</td>
</tr>
<tr>
<td>EET 2142C</td>
<td>Electronic Circuits II</td>
<td>4</td>
</tr>
<tr>
<td>CET 2112C</td>
<td>Digital Techniques</td>
<td>4</td>
</tr>
</tbody>
</table>
| EET 2183C| Electronic Troubleshooting Techniques | 3 | **Total: 21 Credit Hours**

### Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EET 2201C</td>
<td>Fundamentals of Laser Systems</td>
<td>4</td>
</tr>
<tr>
<td>EET 2221C</td>
<td>Optical Components and Instruments</td>
<td>4</td>
</tr>
<tr>
<td>EET 2231C</td>
<td>Gas Lasers</td>
<td>4</td>
</tr>
<tr>
<td>EET 2232C</td>
<td>Solid State Lasers</td>
<td>4</td>
</tr>
<tr>
<td>EET 2252C</td>
<td>Laser Application Designs</td>
<td>3</td>
</tr>
<tr>
<td>EET 2251C</td>
<td>Selected Laser Topics or</td>
<td></td>
</tr>
<tr>
<td>EST 2261</td>
<td>Lasers in Medicine</td>
<td>6</td>
</tr>
</tbody>
</table>

*Students will select at least one elective course from any course outside the electronics specialization and at least three credit hours from the recommended electives. (These may include courses of one and two semester hours from departments other than the EET prefix.) Several recommended electives are shown above. See the department for counseling on other approved electives.

**Recommended Electives**

Persons wishing to transfer these courses to another institution should check with that institution. The statewide course numbering system assists this process.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 1041</td>
<td>U.S. Government</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1570</td>
<td>Microcomputer Business Apps</td>
<td>3</td>
</tr>
<tr>
<td>ETD 1320</td>
<td>Introduction to CADD</td>
<td>3</td>
</tr>
<tr>
<td>COP 2220</td>
<td>C Programming</td>
<td>3</td>
</tr>
<tr>
<td>COP 2341</td>
<td>UNIX Operating System</td>
<td>3</td>
</tr>
<tr>
<td>EET 2661</td>
<td>Manufacturing Resources Planning</td>
<td>3</td>
</tr>
<tr>
<td>EET 2547</td>
<td>Power System Protection</td>
<td>4</td>
</tr>
<tr>
<td>ETM 2315C</td>
<td>Hydraulics and Fluid Power</td>
<td>4</td>
</tr>
<tr>
<td>EET 2541C</td>
<td>Power Systems</td>
<td>4</td>
</tr>
<tr>
<td>EET 2542C</td>
<td>Power Systems II</td>
<td>4</td>
</tr>
<tr>
<td>EET 2627C</td>
<td>Automation System II</td>
<td>3</td>
</tr>
<tr>
<td>EET 2673C</td>
<td>Programmable Controls I</td>
<td>4</td>
</tr>
<tr>
<td>EET 2521C</td>
<td>Motors and Controls</td>
<td>4</td>
</tr>
<tr>
<td>EET 2621</td>
<td>Surface Mount Design</td>
<td>4</td>
</tr>
<tr>
<td>EET 2622</td>
<td>Surface Mount Manufacturing</td>
<td>4</td>
</tr>
<tr>
<td>EET 2623</td>
<td>Electronics Testing and Reliability</td>
<td>4</td>
</tr>
<tr>
<td>EET 2527C</td>
<td>Electromechanical Components and Mechanism</td>
<td>4</td>
</tr>
<tr>
<td>EST 2538</td>
<td>Control Systems Instrumentation</td>
<td>4</td>
</tr>
<tr>
<td>CET 2485</td>
<td>Local Area Networks</td>
<td>4</td>
</tr>
<tr>
<td>EST 2261</td>
<td>Lasers in Medicine</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Hours Required:** 73
LEGAL ASSISTING

Associate in Science

This program is designed to prepare the student for gainful employment as a lay employee assisting lawyers, banks, corporations, and government agencies in the performance of legal services. It is organized to permit the student to receive both classroom instruction and work experience during the program. Students wishing to transfer credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

Although scheduling may not always permit strict adherence, students should use the following sequence of foundation, intermediate and advanced courses as a guide to planning their program.

Only students with proficiency in reading and writing skills should consider enrolling in LEA 1013 and LEA 1201 before completing BUL 2111 and ENC 1101.

Students are encouraged to seek approval for modifications in the program to suit their background interests and needs.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1103</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BUL 2111</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>PLA 1105</td>
<td>Legal Research &amp; Theory I</td>
<td>3</td>
</tr>
<tr>
<td>PLA 1506</td>
<td>Real Property I</td>
<td>3</td>
</tr>
<tr>
<td>OST 1141</td>
<td>*Keyboarding Skills</td>
<td>3</td>
</tr>
</tbody>
</table>

** 18

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 1041</td>
<td>U.S. Government I</td>
<td>3</td>
</tr>
<tr>
<td>PLA 2516</td>
<td>Real Property II</td>
<td>3</td>
</tr>
<tr>
<td>BUL 2112</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>OST 1335</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>INP 1301</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1600</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
<tr>
<td>APA 1111</td>
<td>Basic Accounting or</td>
<td></td>
</tr>
<tr>
<td>ACG 2021</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>PLA 2226</td>
<td>Civil Litigation I</td>
<td>3</td>
</tr>
<tr>
<td>PLA 2216</td>
<td>Civil Litigation II</td>
<td>3</td>
</tr>
<tr>
<td>PLA 2606</td>
<td>Wills, Trusts &amp; Estate</td>
<td>3</td>
</tr>
<tr>
<td>PLA 2626</td>
<td>Administration I</td>
<td>3</td>
</tr>
<tr>
<td>PLA 1115</td>
<td>Legal Research &amp; Theory II</td>
<td>3</td>
</tr>
</tbody>
</table>

** 36

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUL 2114</td>
<td>Business Organizations</td>
<td>3</td>
</tr>
<tr>
<td>PLA 2940</td>
<td>Internship as a Legal Assistant</td>
<td>3</td>
</tr>
<tr>
<td>PLA 2803</td>
<td>Family Law</td>
<td></td>
</tr>
<tr>
<td></td>
<td>**Humanities or Fine Arts Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>***Natural Science or Mathematics Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>****Elective (Outside of Specialization)</td>
<td>3</td>
</tr>
</tbody>
</table>

** 15

TOTAL HOURS REQUIRED ** 69

RECOMMENDED ELECTIVES OUTSIDE OF SPECIALIZATION

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCJ 2230</td>
<td>Criminal Law and Legal Procedures I</td>
<td>3</td>
</tr>
<tr>
<td>TAX 2000</td>
<td>Federal Income Tax</td>
<td>3</td>
</tr>
<tr>
<td>OST 1100</td>
<td>Beginning Typewriting</td>
<td>3</td>
</tr>
<tr>
<td>OST 1110</td>
<td>Intermediate Typewriting</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction to Data Processing</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1210</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>REE 1000</td>
<td>Real Estate Principles and Practices</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1061</td>
<td>Introduction to Micro Computers</td>
<td>3</td>
</tr>
</tbody>
</table>

* Students may take credit by exam for keyboarding skills.

** Students must select a three credit hour course from Area 2 under the AS degree general education requirement.

*** Students must select courses designated as natural science (such as biology, anatomy and physiology, chemistry, geology, formal logic, physical and earth science and physics) or a course in mathematics that is Intermediate Algebra or higher.

**** Students must select at least one course outside area of specialization (not LEA prefix courses).

NOTE: Specialized program courses are offered at East Campus.
MEDICAL LABORATORY TECHNOLOGY
Associate in Science

This program has been planned with local hospital officials and representatives of the medical related programs in the State Department of Education.

The medical laboratory technology program is designed for persons who desire preparation for employment as medical laboratory technicians. Graduates are eligible to take the State Medical Laboratory Technician examination for licensure and a national registry examination. Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

A minimum grade of C must be achieved in all medical laboratory technology, required science and social science courses to meet a prerequisite or graduation requirement.

Any student admitted to the medical laboratory technology program who fails or withdraws from any two medical laboratory technology courses (can be the same course or two different courses) must petition the Medical Laboratory Technology Petition Committee for reevaluation or readmission. Students will be allowed to petition one time.

Requirements and further information about admission to this program can be found in the admissions and records section of this catalog.

Students should contact the Health and Public Service Department for specific admission procedures and criteria.

YEAR I

SESSION I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>HSC 1531</td>
<td>Medical Terminology</td>
<td>1</td>
</tr>
<tr>
<td>HSC 1650</td>
<td>Principles of Allied Health</td>
<td>2</td>
</tr>
<tr>
<td>APB 1150</td>
<td>Biological Science</td>
<td>3</td>
</tr>
<tr>
<td>CHM 1025C</td>
<td>Introduction to General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>HSC 1230C</td>
<td>Methods of Patient Care/</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Risk Management</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SESSION II</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 2250</td>
</tr>
<tr>
<td>PSY 1012</td>
</tr>
<tr>
<td>MCB 2010C</td>
</tr>
<tr>
<td>RTE 1703</td>
</tr>
<tr>
<td>OST 1802</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED: 33

SESSION II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>APB 1292</td>
<td>Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>MLT 2300C</td>
<td>Serology/Immunology</td>
<td>3</td>
</tr>
<tr>
<td>MLT 2210C</td>
<td>Urinalysis</td>
<td>2</td>
</tr>
<tr>
<td>MLT 1400C</td>
<td>Medical Microbiology</td>
<td>5</td>
</tr>
</tbody>
</table>

| TOTAL HOURS REQUIRED | 13 |

YEAR II

SESSION I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLT 2300C</td>
<td>Hematology/Coagulation</td>
<td>5</td>
</tr>
<tr>
<td>MLT 2526C</td>
<td>Immunohematology</td>
<td>3</td>
</tr>
<tr>
<td>MLT 2620</td>
<td>Clinical Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>MLT 2762</td>
<td>Instrumentation</td>
<td>1</td>
</tr>
</tbody>
</table>

| TOTAL HOURS REQUIRED | 14 |

SESSIONS II & III

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLT 2809L</td>
<td>MLT Practicum - Hematology/Coagulation/Urinalysis</td>
<td>5</td>
</tr>
<tr>
<td>MLT 2810L</td>
<td>MLT Practicum - Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>MLT 2811L</td>
<td>MLT Practicum - Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>MLT 2808L</td>
<td>MLT Practicum - Serology/Immunology</td>
<td>1</td>
</tr>
<tr>
<td>MLT 2807L</td>
<td>MLT Practicum - Blood Bank</td>
<td>2</td>
</tr>
</tbody>
</table>

| TOTAL HOURS REQUIRED | 16 |

87
NUCLEAR MEDICINE TECHNOLOGY
Associate in Science

This program prepares the student for employment as a nuclear medicine technologist (NMT). Members of the medical imaging team, nuclear medicine technologists prepare and administer tracer radiopharmaceuticals to patients and operate gamma cameras and other detection equipment according to standard procedures in order to produce images (scans) of the distribution of the tracers for the diagnosis and treatment of disease.

Nuclear medicine technologists perform diagnostic procedures on virtually every organ system in the human body by using highly sophisticated computerized detection systems. These health care workers are in great demand nationwide. NMTs are employed in hospitals, clinics, and research.

Graduates are eligible to take the Nuclear Medicine Technology Certification Board examination (NMTCB), the American Registry of Radiologic Technologists examination for nuclear medicine (ARRT), and meet Florida licensure requirements.

A minimum of C must be achieved in all discipline-specific courses and required core curriculum to meet prerequisite or graduation requirements.

### YEAR I

#### SESSION I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>APB 1150</td>
<td>Biological Science</td>
<td>3</td>
</tr>
<tr>
<td>HSC 1531</td>
<td>Medical Terminology</td>
<td>1</td>
</tr>
<tr>
<td>HSC 1650</td>
<td>Principles of Allied Health</td>
<td>2</td>
</tr>
<tr>
<td>HSC 1230</td>
<td>Methods of Patient Care</td>
<td>2</td>
</tr>
<tr>
<td>NMT 1002C</td>
<td>Introduction to Nuclear Medicine Technology</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

#### SESSION II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 1033</td>
<td>Intermediate Algebra or</td>
<td></td>
</tr>
<tr>
<td>OST 1802</td>
<td>Computer Literacy for Health Care Professionals</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1012</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>RTE 1703</td>
<td>Anatomy &amp; Physiology</td>
<td>3</td>
</tr>
<tr>
<td>NMT 1808C</td>
<td>Nuclear Medicine Tech Clinical Evaluation I</td>
<td>3</td>
</tr>
<tr>
<td>NMT 1714C</td>
<td>Nuclear Medicine Tech Methodology I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

### SESSION V

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 1002</td>
<td>Applied Physics</td>
<td>3</td>
</tr>
<tr>
<td>APB 1292</td>
<td>Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>NMT 1818C</td>
<td>Nuclear Medicine Tech Clinical Education II</td>
<td>3</td>
</tr>
<tr>
<td>NMT 2723C</td>
<td>Nuclear Medicine Tech Methodology II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

### YEAR II

#### SESSION I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 1025C</td>
<td>Introduction to General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>RTE 2385</td>
<td>Radiation Biology and Protection</td>
<td>3</td>
</tr>
<tr>
<td>NMT 2828C</td>
<td>Nuclear Medicine Tech Clinical Education III</td>
<td>4</td>
</tr>
<tr>
<td>NMT 2534C</td>
<td>Nuclear Medicine Tech Instrumentation I</td>
<td>2</td>
</tr>
<tr>
<td>NMT 2733C</td>
<td>Nuclear Medicine Tech Methodology III</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

#### SESSION II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 2250</td>
<td>Humanities - 20th Century</td>
<td>3</td>
</tr>
<tr>
<td>NMT 2535C</td>
<td>Nuclear Medicine Tech Instrumentation II</td>
<td>4</td>
</tr>
<tr>
<td>NMT 2838C</td>
<td>Nuclear Medicine Tech Clinical Education IV</td>
<td>4</td>
</tr>
<tr>
<td>NMT 2743</td>
<td>Nuclear Medicine Tech Methodology IV</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

#### SESSION III

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMT 2805</td>
<td>Nuclear Medicine Tech Practicum</td>
<td>4</td>
</tr>
<tr>
<td>NMT 2931</td>
<td>Seminars in Nuclear Medical Technology</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

**TOTAL HOURS REQUIRED:** 74
NURSING, R.N.

Associate in Science

This registered nursing program has been coordinated with local health care agencies, the State Department of Education and the State Board of Nursing. It is accredited by the State Board of Nursing and the National League for Nursing.

Graduates of this program are prepared to administer nursing care as general staff nurses and are eligible to take the National Council Licensure Exam (NCLEX) to become registered nurses.

According to the laws governing state licensure, any candidate who has been arrested or convicted of any offense other than minor traffic violations will be required to petition the Board of Nursing for permission to sit for the licensing exam.

A minimum grade of C must be achieved in all nursing courses with a clinical component, required science and social science courses to meet a prerequisite or graduation requirement.

To continue in the nursing program any student who has withdrawn and/or failed two (2) nursing courses with a clinical component must be readmitted to the nursing program through the readmission petition procedure. Students will be allowed to petition one time.

Transfer students must be evaluated on math and clinical skills before beginning the nursing program. Transfer students are admitted on a space available basis.

Requirements and further information about admission to this program can be found in the admissions and records section of this catalog.

Entry level assessment must be taken before admission to the nursing program. Deficiencies identified in entry level assessment must be made up before entrance into nursing.

FOUNDATION COURSES

Course | Title | Credit Hours
---|---|---
APB 2821C | Human Anatomy and Physiology I | 4
PSY 1012 | General Psychology | 3
MTB 1371 | Mathematics for Health Professionals | 3
NUR 1023C | Fundamentals of Nursing | 10
APB 2822C | Human Anatomy and Physiology II | 4
ENC 1101 | Freshman Composition I | 3
NUR 1212C | Common Responses to Illness | 10
NUR 1141 | Pharmacology for Health Professionals | 1

---|---|---

38

INTERMEDIATE COURSES

Course | Title | Credit Hours
---|---|---
NUR 2460C | Maternal Child Health Nursing | 10
MCB 2010C | Microbiology | 4
DEP 2004 | Developmental Psychology | 3

---|---|---

15

TOTAL HOURS REQUIRED

63

*Prerequisite courses for admission to LPN/RN transition program.

**Student will select elective hours of choice.

ADVANCED COURSES

Course | Title | Credit Hours
---|---|---
NUR 2730C | Complex Responses to Illness | 10
SYG 2000 | Introductory Sociology | 3
HUM 2250 | Humanities - 20th Century | 3
NUR 2520C | Psychiatric/Mental Health Nursing | 5
NUR 2810C | Clinical Practicum in Patient Care Management | 4

---|---|---

25

TOTAL HOURS REQUIRED

80

LPN-RN TRANSITION TRACK

This track is specially designed for LPNs (licensed practical nurses) who are seeking an Associate in Science degree in nursing.

FOUNDATION COURSES

Course | Title | Credit Hours
---|---|---
MTB 1371 | Mathematics for Health Professionals* | 3
NUR 1141 | Pharmacology for Health Professionals | 1
APB 2821C | Human Anatomy and Physiology I* | 4
APB 2822C | Human Anatomy and Physiology II* | 4
MCB 2010C | Microbiology* | 4
PSY 1012 | General Psychology* | 3
DEP 2004 | Developmental Psychology* | 3
NUR 1001C | Transition | 5
NUR 1410C | Transition Maternal Child Health | 5

---|---|---

32

INTERMEDIATE COURSES

Course | Title | Credit Hours
---|---|---
NUR 2700C | Transition Medical Surgical Nursing | 10
ENC 1101 | Freshman Composition I | 3
SYG 2000 | Introductory Sociology | 3

---|---|---

16

ADVANCED COURSES

Course | Title | Credit Hours
---|---|---
NUR 2520C | Psychiatric/Mental Health Nursing | 5
NUR 2810C | Clinical Practicum in Patient Care Management | 4
HUM 2250 | Humanities 20th Century | 3
**General Elective | 3

---|---|---

15

TOTAL HOURS REQUIRED

63

*Prerequisite courses for admission to LPN/RN transition program.

**Student will select elective hours of choice.
OFFICE SYSTEMS TECHNOLOGY
Associate in Science

This program is designed to meet the needs of students desiring college-level training in office support positions. Included within the program are provisions for skills training to meet the clerical requirement (see Office Systems Specialist). Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>OST 1100</td>
<td>Beginning Typewriting*1</td>
<td>3</td>
</tr>
<tr>
<td>OST 1271</td>
<td>Speedwriting II</td>
<td>3</td>
</tr>
<tr>
<td>OST 1355</td>
<td>Introduction to Records Information</td>
<td>3</td>
</tr>
<tr>
<td>OST 2401</td>
<td>Office Technology Practices</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1103</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>GEB 1101</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
</tbody>
</table>

21

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OST 1110</td>
<td>Intermediate Typewriting I</td>
<td>3</td>
</tr>
<tr>
<td>OST 2272</td>
<td>Speedwriting II</td>
<td>3</td>
</tr>
<tr>
<td>OST 2766</td>
<td>WordPerfect</td>
<td>3</td>
</tr>
<tr>
<td>APA 1111</td>
<td>Basic Accounting*2</td>
<td>3</td>
</tr>
<tr>
<td>OST 1335</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>OST 1601</td>
<td>Machine Transcription</td>
<td>3</td>
</tr>
<tr>
<td>OST 2313</td>
<td>Plan/DataPerfect - Spreadsheet and Database for Office Personnel</td>
<td>3</td>
</tr>
</tbody>
</table>

21

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OST 2120</td>
<td>Office Applications</td>
<td>2</td>
</tr>
<tr>
<td>OST 1108</td>
<td>Building Typing Speed and Accuracy</td>
<td>1</td>
</tr>
<tr>
<td>INP 1301</td>
<td>Psychology of Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>POS 1041</td>
<td>U.S. Government I</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Humanities/Fine Arts*3</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Natural Sciences/Mathematics*4</td>
<td>3</td>
</tr>
<tr>
<td>One Elective</td>
<td>Outside Major Specialization*5</td>
<td>3</td>
</tr>
</tbody>
</table>

18

TOTAL HOURS REQUIRED 60

*1 Students with prior instruction and/or experience should enroll in the next higher shorthand and/or typewriting course. They should select electives in lieu of OST 1271, OST 1100, or OST 1110 or take credit by exam (CE) for the course waived. Recommended electives as substitutes are: OST 2763, OST 2764, OST 2765, OST 2767, OST 2821, OST 2501.

*2 Interested students are encouraged to take ACG 2021 Principles of Financial Accounting in lieu of APA 1111.

*3 Students may select a course in art, foreign language, literature, music, humanities, philosophy, religion, theatre, Freshman Composition II.

*4 If the student selects natural science, the course may be in biology, anatomy and physiology, chemistry, geology, formal logic, physical and earth sciences, or physics. If the student selects mathematics, the course must be Intermediate Algebra or higher.

*5 Electives: Students must select at least one elective course outside the office systems technology specialization. Suggested electives are: BUL 2111, BUL 2112, MAN 2021, MKA 2021 (not DST prefix courses).
OFFICE SYSTEMS TECHNOLOGY-LEGAL SECRETARIAL TECHNOLOGY
Associate in Science

Students desiring clerical-secretarial employment dealing primarily with law should elect the legal secretarial two-year degree program. This program includes a seminar and work experience in local law offices, as well as legal terminology. Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>OST 1271</td>
<td>Speedwriting I</td>
<td>3</td>
</tr>
<tr>
<td>OST 1100</td>
<td>Beginning Typewriting*</td>
<td>3</td>
</tr>
<tr>
<td>GEB 1011</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>OST 1355</td>
<td>Introduction to Records Information</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>APA 1111</td>
<td>Basic Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2021</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>OST 1110</td>
<td>Intermediate Typewriting*</td>
<td>3</td>
</tr>
<tr>
<td>OST 2272</td>
<td>Speedwriting II</td>
<td>3</td>
</tr>
<tr>
<td>BUL 2111</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>INP 1301</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>OST 1335</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OST 2431</td>
<td>Legal Secretary Practices and Procedures I</td>
<td>3</td>
</tr>
<tr>
<td>OST 2120</td>
<td>Office Applications</td>
<td>2</td>
</tr>
<tr>
<td>OST 2401</td>
<td>Office Technology and Practices</td>
<td>3</td>
</tr>
<tr>
<td>OST 1108</td>
<td>Speed and Accuracy Building</td>
<td>3</td>
</tr>
<tr>
<td>OST 2432</td>
<td>Legal Secretary Practice and Procedures II</td>
<td>3</td>
</tr>
<tr>
<td>OST 1601</td>
<td>Machine Transcription</td>
<td>3</td>
</tr>
<tr>
<td>OST 2766</td>
<td>Word Perfect</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*1 Humanities or Fine Arts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*2 Natural Science or Mathematics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*3 Electives (Outside of Specialization)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*4 General Education Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED 60
OFFICE SYSTEMS TECHNOLOGY - MEDICAL SECRETARIAL TECHNOLOGY
Associate in Science

This program is designed to meet the needs of students desiring employment as medical secretaries and medical transcriptionists in medical offices and hospitals. This program includes work experience in local hospitals and doctors' offices. Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>OST 1100</td>
<td>Beginning Typewriting*1</td>
<td>3</td>
</tr>
<tr>
<td>OST 1611</td>
<td>Medical Transcription I</td>
<td>3</td>
</tr>
<tr>
<td>OST 1257</td>
<td>Medical Terminology for the Office</td>
<td>3</td>
</tr>
<tr>
<td>OST 2766</td>
<td>Word Perfect</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1103</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>GEB 1011</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
</tbody>
</table>

  

21

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OST 1110</td>
<td>Intermediate Typewriting*1</td>
<td>3</td>
</tr>
<tr>
<td>OST 1335</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>OST 2612</td>
<td>Medical Transcription II</td>
<td>3</td>
</tr>
<tr>
<td>OST 1461</td>
<td>Medical Office Technology</td>
<td>3</td>
</tr>
<tr>
<td>APA 1111</td>
<td>Basic Accounting*2</td>
<td>3</td>
</tr>
<tr>
<td>INP 1301</td>
<td>Psychology of Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>POS 1041</td>
<td>U.S. Government I</td>
<td>3</td>
</tr>
</tbody>
</table>

  

21

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OST 2120</td>
<td>Office Applications</td>
<td>2</td>
</tr>
<tr>
<td>OST 1108</td>
<td>Building Typing Speed and Accuracy</td>
<td>1</td>
</tr>
<tr>
<td>OST 2613</td>
<td>Medical Transcription III</td>
<td>3</td>
</tr>
<tr>
<td>OST 2471</td>
<td>Office Systems Tech Seminar &amp; Workshop</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Humanities/Fine Arts*3</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Natural Sciences/Mathematics*4</td>
<td>3</td>
</tr>
<tr>
<td>2 Electives</td>
<td>Outside Major Specialization*5</td>
<td>3</td>
</tr>
</tbody>
</table>

  

18

TOTAL HOURS REQUIRED

60

*1 Students with prior instruction and/or experience in OST 1100 or OST 1110 may enroll in the next higher typewriting course or select elective courses or take credit by exam (CE) for the course waived. Recommended electives are: OST 1271, OST 2272, OST 2763, OST 2764, OST 2765, OST 2767, OST 2821, OST 2501, OST 2313.

*2 Interested students are encouraged to take ACC 2021 Principles of Financial Accounting in lieu of APA 1111.

*3 Students may select a course in art, foreign language, literature, music, humanities, philosophy, religion, theater, Freshman Composition II.

*4 If the student selects natural science, the course may be in biology, anatomy and physiology, chemistry, geology, formal logic, physical and earth sciences, or physics. If the student selects mathematics, the course must be Intermediate Algebra or higher.

*5 Electives: Students must select at least one elective course outside the medical secretarial technology specialization (not OST prefix courses). Suggested electives are: BUL 2111, BUL 2112, SPN 1030-31.

NOTE: Specialized program courses are offered on West Campus.
OFFICE SYSTEMS TECHNOLOGY-WORD PROCESSING TECHNOLOGY
Associate in Science

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>OST 1100</td>
<td>Beginning Typewriting</td>
<td>3</td>
</tr>
<tr>
<td>OST 1355</td>
<td>Introduction to Records Information</td>
<td>3</td>
</tr>
<tr>
<td>OST 2401</td>
<td>Office Technology Practices</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1103</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>APA 1111</td>
<td>Basic Accounting*2</td>
<td>3</td>
</tr>
<tr>
<td>GEB 1101</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OST 1110</td>
<td>Intermediate Typewriting*1</td>
<td>3</td>
</tr>
<tr>
<td>OST 1601</td>
<td>Machine Transcription</td>
<td>3</td>
</tr>
<tr>
<td>OST 1335</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>OST 2766</td>
<td>Word Perfect</td>
<td>3</td>
</tr>
<tr>
<td>OST 2821</td>
<td>PageMaker</td>
<td>3</td>
</tr>
<tr>
<td>OST 2313</td>
<td>Plan/DataPerfect - Spreadsheet and Database for Office Personnel</td>
<td>3</td>
</tr>
<tr>
<td>INP 1301</td>
<td>Psychology of Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OST 2120</td>
<td>Office Applications</td>
<td>2</td>
</tr>
<tr>
<td>OST 1108</td>
<td>Building Typing Speed and Accuracy</td>
<td>1</td>
</tr>
<tr>
<td>OST 2501</td>
<td>Office Management</td>
<td>3</td>
</tr>
<tr>
<td>POS 1041</td>
<td>U.S. Government</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Humanities/Fine Arts*3</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Natural Science/Mathematics*4</td>
<td>3</td>
</tr>
<tr>
<td>Two Electives</td>
<td>Outside Major Specialization*5</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

**TOTAL HOURS REQUIRED**

**60**

*1 Students with prior instruction and/or experience should enroll in the next higher typewriting course. They should select electives in lieu of OST 1100 and OST 1110 or take credit by exam (CE) for the course waived. Recommended electives as substitutes: OST 2763, OST 2764, OST 2765, OST 2767, OST 1271, OST 2272, OST 2501.

*2 Interested students are encouraged to take ACG 2021 Principles of Financial Accounting in lieu of APA 1111.

*3 Students may select a course in art, foreign language, literature, music, humanities, philosophy, religion, theater, Freshman Composition II.

*4 If the student selects natural science, the course may be in biology, anatomy and physiology, chemistry, geology, formal logic, physical and earth sciences, or physics. If the student selects mathematics, the course must be Intermediate Algebra or higher.

*5 Electives: Student must select at least one elective course outside the office systems technology — word processing technology specialization (not OST prefix courses). Suggestions are: BUL 2111, BUL 2112, MAN 2021, MKA 2021.
OFFICE SYSTEMS TECHNOLOGY- OFFICE SYSTEMS SPECIALIST CERTIFICATE

This certificate program is comprised of selected courses offered as a part of the Office Systems Technology Program. It is designed to provide the student with the fundamentals in typewriting on a computer keyboard, word processing and office and business applications that will be valuable to the student working in an office support position. Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Courses</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>OST 1100</td>
<td>Beginning Typewriting*1</td>
<td>3</td>
</tr>
<tr>
<td>OST 2766</td>
<td>Word Perfect</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Courses</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OST 1335</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>OST 1110</td>
<td>Intermediate Typewriting*1</td>
<td>3</td>
</tr>
<tr>
<td>OST 1355</td>
<td>Introduction to Records Information</td>
<td>3</td>
</tr>
<tr>
<td>OST 2401</td>
<td>Office Technology Practices</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Courses</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OST 2120</td>
<td>Office Applications</td>
<td>2</td>
</tr>
<tr>
<td>OST 1108</td>
<td>Building Typing Speed and Accuracy</td>
<td>1</td>
</tr>
<tr>
<td>OST 2821</td>
<td>PageMaker</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED 27

*1 Students selecting this option with prior instruction and/or experience should enroll in the next higher typewriting course and are encouraged to enroll in elective courses relating to this career area by use of the waiver in lieu of credit by examination where possible.
ORNAMENTAL HORTICULTURE TECHNOLOGY
Associate in Science

This program is designed to provide the necessary skills for individuals desiring employment in the field of ornamental horticulture. Students may choose from three specializations: (1) maintenance and Construction, (2) international horticulture business and (3) production. Instruction in these specializations provides a balanced curriculum of general education and horticulture-related subjects. Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

MAINTENANCE AND CONSTRUCTION SPECIALIZATION

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>HOS 1010</td>
<td>Introduction to Horticulture Science</td>
<td>3</td>
</tr>
<tr>
<td>BSC 1010C</td>
<td>Fundamentals of Biology</td>
<td>4</td>
</tr>
<tr>
<td>ORH 1510</td>
<td>Ornamental Plant Materials I</td>
<td>3</td>
</tr>
<tr>
<td>ORH 1511</td>
<td>Ornamental Plant Materials II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19</td>
</tr>
</tbody>
</table>

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORH 1234</td>
<td>Ornamental Plant Maintenance</td>
<td>4</td>
</tr>
<tr>
<td>ORH 2842</td>
<td>Landscape Construction</td>
<td>4</td>
</tr>
<tr>
<td>AGE 2230</td>
<td>Irrigation - Design, Construction, and Maintenance</td>
<td>4</td>
</tr>
<tr>
<td>ORH 1831</td>
<td>Landscaping - Design and Implementation</td>
<td>3</td>
</tr>
<tr>
<td>ORH 1873</td>
<td>Interiorscaping - Design and Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>OST 1141</td>
<td>Keyboarding Skills</td>
<td>3</td>
</tr>
<tr>
<td>PLS 2220</td>
<td>Plant Propagation</td>
<td>3</td>
</tr>
<tr>
<td>BOT 2501</td>
<td>Plant Physiology</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>*2General Education Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>31</td>
</tr>
</tbody>
</table>

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOS 2102</td>
<td>Soils and Fertilizers</td>
<td>3</td>
</tr>
<tr>
<td>PMA 2502</td>
<td>Diagnostic Techniques for Plant Problems</td>
<td>4</td>
</tr>
<tr>
<td>ORH 2251</td>
<td>Nursery Operations and Management</td>
<td>3</td>
</tr>
<tr>
<td>ORH 2949</td>
<td>Cooperative Placement in the Industry</td>
<td>2</td>
</tr>
<tr>
<td>ORH 2942</td>
<td>Horticultural Work Experience</td>
<td></td>
</tr>
<tr>
<td>ORH 2930</td>
<td>Horticultural Research and Seminar</td>
<td>3</td>
</tr>
<tr>
<td>INP 1301</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>HOS 2030</td>
<td>Horticultural Equipment - Operations, Maintenance, and Safety</td>
<td>3</td>
</tr>
<tr>
<td>ETO 1320</td>
<td>*3Humanities/Fine Arts</td>
<td>3</td>
</tr>
<tr>
<td>SUR 1100</td>
<td>Basic Surveying and Measurements</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED 74

*1 Students will select at least one elective course from any course outside the ornamental horticulture specialization (not AEB, AGE, AGG, AOM, BOT, ENY, FRC, HOS, IPM, ORH, PLP, PLS, PMA, SOS, VEC prefix courses). Suggestions: any one, two or three credit hour courses from the office systems technology, business, U.S. government or general education courses.

2 General education elective: A three-credit hour course must be selected from Area 5, AS degree general education requirements.

3 Students must select a course from Area 2 of the general education requirements for an AS degree.

INTERNATIONAL HORTICULTURAL BUSINESS SPECIALIZATION

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>HOS 1010</td>
<td>Introduction to Horticultural Science</td>
<td>3</td>
</tr>
<tr>
<td>BSC 1010C</td>
<td>Fundamentals of Biology</td>
<td>4</td>
</tr>
<tr>
<td>ORH 1510</td>
<td>Ornamental Plant Materials I</td>
<td>3</td>
</tr>
<tr>
<td>ORH 1511</td>
<td>Ornamental Plant Materials II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>31</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 1000</td>
<td>Basic Economics</td>
<td></td>
</tr>
<tr>
<td>ECO 2013</td>
<td>Principles of Economics-Macro</td>
<td>3</td>
</tr>
<tr>
<td>ACG 2021</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>APA 1111</td>
<td>Basic Accounting</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1700</td>
<td>Cross Cultural Communications</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
</tr>
</tbody>
</table>
INTERMEDIATE COURSES

OST 1335  Business Communications  3
BOT 2501  Plant Physiology  4
PLS 2220  Plant Propagation  3
  Foreign Language  3
GEB 1014  Introduction to International Business  3
AEB 2662  International Agricultural Economics  3
AOM 2012  Types and Systems of Agricultural Operation  3
AEB 2020  Sociological Problems and Programs in the Agricultural Community  3
AGG 2433  Geography and Agricultural Applications  3

28

ADVANCED COURSES

FIN 2612  International Banking and Finance  3
MAR 2241  International Marketing and Distribution  3
SOS 2102  Soils and Fertilizers  3
PMA 2502  Diagnostic Techniques for Plant Problems  4
ORH 2251  Nursery Operations and Management  3
  *Electives  6
ORH 2949  Cooperative Placement in the Industry
  or
ORH 2942  Horticultural Work Experience
  or
ORH 2930  Horticultural Research and Seminar  9

26

TOTAL HOURS REQUIRED  71

*1 Electives must be selected from the following list of courses. Minimum Six Hours Required

Course  Title  Credit Hours
AGE 2230  Irrigation - Design, Construction and Maintenance  4
ORH 2274  Commercial Foliage Production  4
ORH 2220  Introduction to Lawn and Turfgrass Culture  3
ORI 2281  Introduction to Ornithology  3
ORH 1831  Landscaping - Design and Implementation  3
ORH 1873  Interiorscaping - Design and Maintenance  3
HOS 2030  Horticultural Equipment - Operations, Maintenance, and Safety  3
ORH 2261  Flori Crops Production and Use  3
HOS 2932  Selected Topics in Horticulture  3
ENY 1002  Basic Entomology  3
ENY 1102  Insect Identification  3
ENY 1220  Pesticides  3
ENY 2227  Wood Destroying Pests and Their Controls  3
ENY 2231  Lawn and Ornamental Pests and Their Controls  3
BOT 2100C  Botany  4

*2 general education elective: A three-credit hour course must be selected from Area 5 AS degree general education requirements.

*3 Students will select at least one elective from any course outside the ornamental horticulture specialization (not AEB, AGE, AOM, BOT, ENY, FRC, HOS, IPM, ORH, PLP, PLS, PMA, SOS, VEC prefix courses). Suggestions: any one, two or three credit hour courses from the office systems technology (ex. Electronic Writing I, II, III), business, U.S. Government I, or general education courses.

*4 Students must select a course from Area 2 of the general education requirements for an AS degree.
POSTAL SERVICE MANAGEMENT
Associate in Science

This program is designed for current postal employees ranging from mail carriers to managers. Instruction in this program provides a balanced curriculum of general education and courses in mail processing, delivery and collection, employee and labor relations, finance, customer service and delivery services. Postal employees who already have a College degree, take courses in the postal management program to better understand the workings of the postal service. Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MNA 1395</td>
<td>Mail Processing I</td>
<td>3</td>
</tr>
<tr>
<td>MNA 1391</td>
<td>Introduction to Postal Management</td>
<td>3</td>
</tr>
<tr>
<td>SPC 1600</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
<tr>
<td>GEB 1011</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1103</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>OST 1141</td>
<td>Keyboard Skills</td>
<td>3</td>
</tr>
</tbody>
</table>

21

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNA 1392</td>
<td>Postal Management Delivery Services</td>
<td>3</td>
</tr>
<tr>
<td>MNA 1393</td>
<td>Postal Management Customer Services</td>
<td>3</td>
</tr>
<tr>
<td>*1 Elective</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>ACC 2021</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MAN 2021</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>OST 1335</td>
<td>Business Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

21

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNA 2397</td>
<td>Postal Human Resources</td>
<td>3</td>
</tr>
<tr>
<td>MNA 2394</td>
<td>Postal Finance</td>
<td>3</td>
</tr>
<tr>
<td>MNA 2396</td>
<td>Mail Processing II</td>
<td>3</td>
</tr>
<tr>
<td>*3 Humanities or Fine Arts</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>INP 1301</td>
<td>Psychology in Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>*4 Electives</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>*5 Math or Natural Science</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

21

TOTAL HOURS REQUIRED

63

*1 Students will select elective hours from any postal service, business, office systems technology or hospitality management courses.

*2 APA 1111 Basic Accounting may be substituted for ACC 2021.

*3 Students may select a course from Area 2 of the general education requirements for an AS degree.

*4 Students will select at least one elective course from any course outside the postal management specialization (not MNA prefix courses). Suggestions: any one, two or three-credit hour courses from the office systems technology, business, or hospitality management programs for U.S. government.

*5 If a student selects natural science, the course may be in biology, anatomy and physiology, chemistry, geology, formal logic, physical and earth science, and physics. If a student selects a mathematics course to meet this requirement, Intermediate Algebra or higher must be taken.
RADIATION THERAPY
TECHNOLOGY
Associate in Science

This program is designed to prepare students for careers as radiation therapy technologists. The program is seeking accreditation by the American Medical Association Committee on Allied Health and Accreditation and approved by the Department of Health and Rehabilitative Services.

Radiation therapists work under the supervision of a physician and/or radiation oncologist to prepare patients for treatment of disease by administering prescribed doses of ionizing radiation to specific body parts. Technologists operate many kinds of equipment, including various high-energy linear accelerators with electron capabilities. Graduates are prepared to work in major cancer management centers.

A minimum grade of C must be achieved in all discipline specific courses and required core curriculum to meet prerequisite or graduation requirements.

If a student achieves less than a C or withdraws from more than one core course, they will not be able to continue in the course sequencing. If a student achieves less than a C or withdraws from any discipline-specific course, they will not be able to continue in the course sequencing. The student must make a petition to the allied health program directors for readmission to the program.

Discipline specific courses include all courses specific to each program. Core curriculum includes science/medical courses shared by all allied health programs at ORMC.

YEAR I
SESSION I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>APB 1150</td>
<td>Biological Science</td>
<td>3</td>
</tr>
<tr>
<td>HSC 1531</td>
<td>Medical Terminology</td>
<td>1</td>
</tr>
<tr>
<td>HSC 1650</td>
<td>Principles of Allied Health</td>
<td>2</td>
</tr>
<tr>
<td>HSC 1230C</td>
<td>Methods of Patient Care</td>
<td>2</td>
</tr>
<tr>
<td>RAT 1800C</td>
<td>Radiation Oncology I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

SESSION II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 1012</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>RTE 1703</td>
<td>Anatomy &amp; Physiology</td>
<td>3</td>
</tr>
<tr>
<td>HUM 2250</td>
<td>Humanities - 20th Century</td>
<td>3</td>
</tr>
<tr>
<td>RAT 1810C</td>
<td>Radiation Oncology II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

SESSION V

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 1002</td>
<td>Applied Physics</td>
<td>3</td>
</tr>
<tr>
<td>APB 1292</td>
<td>Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>RAT 2840C</td>
<td>Radiation Oncology III</td>
<td>3</td>
</tr>
<tr>
<td>RAT 2001</td>
<td>Treatment Planning I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

YEAR II

SESSION I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAT 2614C</td>
<td>Radiation Physics I</td>
<td>3</td>
</tr>
<tr>
<td>RTE 2385</td>
<td>Radiation Biology</td>
<td>3</td>
</tr>
<tr>
<td>RAT 2023</td>
<td>Oncologic Medicine I</td>
<td>3</td>
</tr>
<tr>
<td>RAT 2850</td>
<td>Radiation Oncology IV</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

SESSION II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAT 2618C</td>
<td>Radiation Physics II</td>
<td>3</td>
</tr>
<tr>
<td>RAT 2242</td>
<td>Oncologic Medicine II</td>
<td>3</td>
</tr>
<tr>
<td>RAT 2021</td>
<td>Treatment Planning II</td>
<td>3</td>
</tr>
<tr>
<td>RAT 2680</td>
<td>Radiation Oncology V</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

SESSION III

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAT 2805</td>
<td>Clinical Practice</td>
<td>2</td>
</tr>
<tr>
<td>RAT 2022L</td>
<td>Treatment Planning Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>RAT 2902</td>
<td>Simulation Laboratory</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED 74
RADIOGRAPHY

Associate in Science

This program is designed to prepare the student for employment as a radiographer. The radiographer's primary role is to operate imaging equipment and perform technical procedures to produce x-ray studies for the diagnosis and treatment of injury and disease.

Radiography is a challenging and growing profession with additional career opportunities in computed tomography, magnetic resonance imaging, mammography, and angiography. Properly trained radiographers are in demand in hospitals, clinics, dental laboratories, factories, educational and governmental institutions and in the aerospace field.

The program is accredited by the Joint Review Committee on Education in Radiologic Technology in accordance with the Council on Allied Health Education and Accreditation of the American Medical Association. Graduates are eligible to take the national certifying examination administered by the American Registry of Radiologic Technologists and meet state licensure requirements.

A minimum grade of C must be achieved in all discipline specific courses and required core curriculum to meet prerequisite or graduation requirements.

YEAR I

SESSION I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>HSC 1531</td>
<td>Medical Terminology</td>
<td>1</td>
</tr>
<tr>
<td>APB 1150</td>
<td>Biological Science</td>
<td>3</td>
</tr>
<tr>
<td>HSC 1650</td>
<td>Principles of Allied Health</td>
<td>2</td>
</tr>
<tr>
<td>HSC 1230C</td>
<td>Methods of Patient Care</td>
<td>2</td>
</tr>
<tr>
<td>RTE 1505</td>
<td>Introduction to Radiography</td>
<td>4</td>
</tr>
</tbody>
</table>

15

SESSION II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 1012</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td>OST 1802</td>
<td>Computer Literacy for</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health Care Professionals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>MAT 1033</td>
<td>Intermediate Algebra</td>
<td>3</td>
</tr>
<tr>
<td>RTE 1703</td>
<td>Anatomy &amp; Physiology</td>
<td>3</td>
</tr>
<tr>
<td>RTE 1516C</td>
<td>Radiologic Procedures I</td>
<td>3</td>
</tr>
<tr>
<td>RTE 1819L</td>
<td>Radiologic Clinical Education I</td>
<td>4</td>
</tr>
</tbody>
</table>

16

YEAR II

SESSION I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTE 2385</td>
<td>Radiation Biology</td>
<td>3</td>
</tr>
<tr>
<td>RTE 2418</td>
<td>Radiographic Exposure</td>
<td>2</td>
</tr>
<tr>
<td>RTE 2523C</td>
<td>Radiologic Procedures III</td>
<td>3</td>
</tr>
<tr>
<td>RTE 2824</td>
<td>Radiologic Clinical Education III</td>
<td>5</td>
</tr>
</tbody>
</table>

13

SESSION II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTE 2473C</td>
<td>Radiologic Quality Assurance</td>
<td>2</td>
</tr>
<tr>
<td>RTE 2613C</td>
<td>Imaging Modalities</td>
<td>3</td>
</tr>
<tr>
<td>HUM 2250</td>
<td>Humanities - 20th Century</td>
<td>3</td>
</tr>
<tr>
<td>RTE 2879L</td>
<td>Radiologic Clinical Education IV</td>
<td>4</td>
</tr>
</tbody>
</table>

12

SESSION III

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTE 2930</td>
<td>Radiologic Seminar</td>
<td>2</td>
</tr>
<tr>
<td>RTE 2867L</td>
<td>Radiologic Clinical Practicum</td>
<td>5</td>
</tr>
</tbody>
</table>

7

TOTAL HOURS REQUIRED

75
REAL ESTATE MANAGEMENT
Associate in Science

This program is designed for the student who wishes to become gainfully employed in the real estate profession. Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REN 1400</td>
<td>FLORIDA REAL ESTATE LAW*</td>
<td>3</td>
</tr>
<tr>
<td>ECO 1000</td>
<td>BASIC ECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>ECO 1024</td>
<td>MICRO ECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>ECO 2013</td>
<td>MACRO ECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>FRESHMAN COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>GEB 1011</td>
<td>INTRODUCTION TO BUSINESS</td>
<td>3</td>
</tr>
<tr>
<td>INP 1301</td>
<td>PSYCHOLOGY IN BUSINESS AND INDUSTRY</td>
<td>3</td>
</tr>
<tr>
<td>MTB 1103</td>
<td>BUSINESS MATHEMATICS</td>
<td>3</td>
</tr>
<tr>
<td>REN 1000</td>
<td>REAL ESTATE PRINCIPLES AND PRATICES*</td>
<td>3</td>
</tr>
<tr>
<td>POS 1041</td>
<td>U.S. GOVERNMENT I</td>
<td>3</td>
</tr>
</tbody>
</table>

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>APA 1111</td>
<td>BASIC ACCOUNTING</td>
<td>3</td>
</tr>
<tr>
<td>ACC 2021</td>
<td>PRINCIPLES OF FINANCIAL ACCOUNTING</td>
<td>3</td>
</tr>
<tr>
<td>MAR 2011</td>
<td>PRINCIPLES OF MARKETING</td>
<td>3</td>
</tr>
<tr>
<td>REE 1010</td>
<td>HOUSING AND HOME OWNERSHIP</td>
<td>3</td>
</tr>
<tr>
<td>REN 2200</td>
<td>REAL ESTATE FINANCE</td>
<td>3</td>
</tr>
<tr>
<td>REN 2100</td>
<td>REAL ESTATE APPRAISING</td>
<td>3</td>
</tr>
<tr>
<td>OST 1355</td>
<td>BUSINESS COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>BUL 2111</td>
<td>BUSINESS LAW I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*Humanities/Fine Arts Elective</td>
<td></td>
</tr>
</tbody>
</table>

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REN 2000</td>
<td>REAL ESTATE INVESTMENT</td>
<td>3</td>
</tr>
<tr>
<td>REN 2000</td>
<td>REAL ESTATE MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>OST 1141</td>
<td>**KEYBOARDING SKILLS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*2Natural Science or Mathematics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*3Electives</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(Outside of Specialization)</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED 60

RECOMMENDED ELECTIVES OUTSIDE OF SPECIALIZATION

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEA 1013</td>
<td>LEGAL RESEARCH AND THEORY I</td>
<td>3</td>
</tr>
<tr>
<td>POS 1041</td>
<td>U.S. GOVERNMENT I</td>
<td>3</td>
</tr>
<tr>
<td>OST 1100</td>
<td>BEGINNING TYPINGWRITING</td>
<td>3</td>
</tr>
<tr>
<td>OST 1110</td>
<td>INTERMEDIATE TYPINGWRITING</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>INTRODUCTION TO DATA PROCESSING</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1061</td>
<td>INTRODUCTION TO MICRO COMPUTERS</td>
<td>3</td>
</tr>
<tr>
<td>BUL 2112</td>
<td>BUSINESS LAW II</td>
<td>3</td>
</tr>
<tr>
<td>OST 2766</td>
<td>WORD PERFECT 5.1</td>
<td>3</td>
</tr>
</tbody>
</table>

* These courses are co-requisites.

** Students may take credit by exam (CE) for keyboarding skills.

*1 Students must select a three-credit hour course from Area 2 under the AS degree general education requirement.

*2 Students must select courses designated as natural science (such as biology, anatomy, and physiology, chemistry, geology, formal logic, physical and earth science and physics) or a course in mathematics that is Intermediate Algebra or higher.

*3 Students must select at least one course outside area of specialization (not REN prefix courses).

Experiential learning credit: Students may receive six semester hours credit (REN 1000 and REN 1400) if they hold an active license or if they have already met the state pre-licensure education requirement. See the department chairman for Business and Public Service, East Campus.
RESPIRATORY CARE

Associate in Science

This program is approved by the American Medical Association and the Joint Review Committee for Respiratory Therapy Education.

The respiratory care program is designed for students who desire preparation for employment as respiratory therapists, and graduates are eligible for registry examination. Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

A minimum grade of C must be achieved in all respiratory care and required science courses to meet a prerequisite or graduation requirement.

Any student admitted to the respiratory care program who fails or withdraws from any two respiratory care courses (can be the same course or two different courses) must petition the Health Related Programs Admissions Committee for reevaluation and readmission.

Students will be allowed to petition one time.

Upon approval by the American Medical Association, the Joint Review committee for Respiratory Education and the appropriate school boards, an articulation process between Seminole Community College, University of Central Florida and Valencia will be instituted to provide a means to ensure students continuous advancement in learning by efficient and effective movement of students among said institutions.

Requirements and further information about admission to this program can be found in the admissions section of this catalog.

Students should contact the Health and Public Service Department for specific admission procedures and criteria.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1010C</td>
<td>Fundamentals of Biology</td>
<td>4</td>
</tr>
<tr>
<td>*MAT 1033</td>
<td>Intermediate Algebra</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>MAC 1104 College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>RET 1025C</td>
<td>Principles of Respiratory</td>
<td>6</td>
</tr>
<tr>
<td>RET 1485C</td>
<td>Cardiopulmonary Physiology</td>
<td>4</td>
</tr>
<tr>
<td>APB 2821C</td>
<td>Anatomy &amp; Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>*ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>**Elective</td>
<td>(Outside of Specialization)</td>
<td>3</td>
</tr>
</tbody>
</table>

Intermediate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RET 1275C</td>
<td>Clinical Care Tech</td>
<td>4</td>
</tr>
<tr>
<td>RET 1450C</td>
<td>Basic Physical Monitoring</td>
<td>3</td>
</tr>
<tr>
<td>RET 1295C</td>
<td>Chest Medicine</td>
<td>4</td>
</tr>
<tr>
<td>RET 1874L</td>
<td>Clinical Practicum I</td>
<td>4</td>
</tr>
<tr>
<td>RET 1264C</td>
<td>Principles of Mechanical</td>
<td>4</td>
</tr>
<tr>
<td>RET 1875L</td>
<td>Clinical Practicum II</td>
<td>4</td>
</tr>
<tr>
<td>APB 2822C</td>
<td>Human Anatomy &amp; Physiology II</td>
<td>4</td>
</tr>
</tbody>
</table>

Advanced Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>*RET 2244</td>
<td>Life Support</td>
<td>3</td>
</tr>
<tr>
<td>RET 2350</td>
<td>Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>*MCB 2010C</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>*PHY 1001C</td>
<td>Physics</td>
<td>4</td>
</tr>
<tr>
<td>*RET 2714C</td>
<td>Pediatric Respiratory Care</td>
<td>4</td>
</tr>
<tr>
<td>*RET 2876L</td>
<td>Clinical Practice III</td>
<td>4</td>
</tr>
<tr>
<td>*ENC 1102</td>
<td>Freshman Composition II</td>
<td>3</td>
</tr>
<tr>
<td>*PSY 1012</td>
<td>General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours Required 78

*These courses are required for the AS degree in addition to the above.

NOTE: BSC 1010C Fundamentals of Biology is a prerequisite to Anatomy and Physiology I and Microbiology.
MAT 1033 Intermediate Algebra is a prerequisite or co-requisite to physics.
MAC 1104 College Algebra is a university-required math.

** Suggested Courses:
- U.S. Government (PCS 1041)
- Computers for Everyone (CGS 2060)
- Elementary Statistics (STA 2014)
THEATER AND ENTERTAINMENT TECHNOLOGY
Associate in Science

This program is designed to produce skilled technicians capable of functioning independently or as part of a production team in the preparation and performance of theatrical/entertainment events. The curriculum balances general education, basic theater and specialized technical courses. Students wishing to transfer any credits from this program to another institution must accept the responsibility for securing approval in advance from the transfer institution.

FOUNDATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>THE 1020</td>
<td>Introduction to Theater or</td>
<td></td>
</tr>
<tr>
<td>HUM 1020</td>
<td>Introduction to Humanities</td>
<td>3</td>
</tr>
<tr>
<td>THE 1301</td>
<td>Development of Theater</td>
<td>3</td>
</tr>
<tr>
<td>THE 1302</td>
<td>Beginnings to Ibsen</td>
<td></td>
</tr>
<tr>
<td>TPA 1210</td>
<td>Development of Theater</td>
<td>3</td>
</tr>
<tr>
<td>INP 1301</td>
<td>Ibsen to Present</td>
<td>3</td>
</tr>
<tr>
<td>TPA 1210</td>
<td>Basic Stagecraft I</td>
<td>3</td>
</tr>
<tr>
<td>INP 1301</td>
<td>Psychology in Business &amp;</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Industry</td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Natural Science or</td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>

INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 1041</td>
<td>U.S. Government I</td>
<td>3</td>
</tr>
<tr>
<td>ENC 1210</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>TPA 1211</td>
<td>Basic Stagecraft II</td>
<td>3</td>
</tr>
<tr>
<td>ETD 1100C</td>
<td>Engineering Drawing</td>
<td>3</td>
</tr>
<tr>
<td>TPA 2220</td>
<td>Introduction to Stage Lighting</td>
<td>4</td>
</tr>
<tr>
<td>TPA 2260</td>
<td>Sound for the Stage</td>
<td>4</td>
</tr>
<tr>
<td>TPA 1230</td>
<td>Costume Techniques and Wardrobe Practices</td>
<td>2</td>
</tr>
<tr>
<td>TPA 1250</td>
<td>Makeup for the Stage</td>
<td>2</td>
</tr>
</tbody>
</table>

ADVANCED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPA 2010</td>
<td>Basic Theater Design</td>
<td>3</td>
</tr>
<tr>
<td>TPP 2310</td>
<td>Directing I</td>
<td>3</td>
</tr>
<tr>
<td>TPA 2282</td>
<td>Theater Equipment Maintenance</td>
<td>4</td>
</tr>
<tr>
<td>**TPA 2280</td>
<td>Technical Theater Production</td>
<td>6</td>
</tr>
<tr>
<td>**TPA 2942</td>
<td>Theater Internship</td>
<td>3</td>
</tr>
<tr>
<td>**</td>
<td>Electives (Outside of Specialization)</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL HOURS REQUIRED: 66

* Students must select courses designated as natural science (such as biology, anatomy and physiology, chemistry, geology, formal logic, physical and earth science and physics) or a course in mathematics that is Intermediate Algebra or higher.

** A total of nine (9) hours is required between these two courses. At least six must be taken in Technical Theater Production. Additional hours in Technical Theater Production can be substituted for Theater Internship.

*** Students must select at least one course outside of area of specialization. This may not be a THE or TPP course in the theater area.

RECOMMENDED THEATER ELECTIVES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPP 2310</td>
<td>Directing I</td>
<td>3</td>
</tr>
<tr>
<td>TPP 1110</td>
<td>Acting I</td>
<td>3</td>
</tr>
<tr>
<td>TPP 1111</td>
<td>Acting II</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: Specialized program courses are offered on East Campus.
**FLORIDA STATEWIDE COURSE NUMBERING SYSTEM**

Valencia Community College credit-courses are numbered according to a statewide system of letters and numbers used by all Florida public postsecondary and participating private institutions. This system makes transferring easy, for equivalent courses have common numbers, no matter where they are taught in the state. Equivalent courses carry similar three-letter prefixes and last three digits.

Faculty in each academic discipline classified and numbered the courses. All of Florida's postsecondary institutions regularly provide criticism and suggest changes to keep the system up to date.

The course numbering system is descriptive, not prescriptive. It does not control what or how courses may be taught. Neither does it affect course titles nor descriptions. It merely designates the courses clearly for students, faculty, and other interested users.

A receiving institution is not precluded from using non-equivalent courses to satisfy requirements.

**GENERAL RULE FOR COURSE EQUIVALENCES**

The numbering system assures that equivalent courses will transfer without misunderstanding. Each public institution accepts for transfer credit any course which carries the same prefix and last three digits. If a student has passed SYG 1000 at Valencia, for instance, that student will receive credit for SYG 2000 at any public community college or university in Florida. The course will, if appropriate, satisfy degree requirements at the transfer institution.

**FIRST DIGIT**

The institution assigns the first digit of the course number to indicate the year it is offered: 1 indicates freshman year, 2 indicates sophomore year. SYG 1000 at Valencia is a freshman course; SYG 2000 at the University of Florida is a sophomore course. The first digit does not affect its equivalency. If the last three digits are the same, the courses are considered equivalent.

**TITLES**

Each institution supplies its own course titles. Even though SYG 1000 may be titled Introductory Sociology or General Sociology or Principles of Sociology, the title does not affect the equivalency. The prefix and last three digits identify them as equivalent.

**LAB INDICATORS**

Lab courses carry a letter suffix after the numbers. The suffix L means either (a) the content of the course is entirely laboratory or (b) the laboratory component of the lecture-lab sequence is offered at a different time/place from the lecture. The suffix C means a combined lecture-lab course in which the lecture and lab are offered at the same time/place.

**Examples**

Marine Biology  
OCB 1013 (lecture only)
Marine Biology  
OCB-1013L (lab only)
OCB-1013C (lecture/lab combined)

**EXPLANATION OF PREFIXES AND NUMBERS**

Prefixes and numbers in the system describe course content in an organized fashion. Generally, each major classification in a discipline is represented by a three-letter prefix. In some disciplines, one three-letter prefix is sufficient. A discipline may use as many prefixes as necessary to accommodate several major classifications. History, for example, includes AFA, African History; AMH, American History; ASH, Asian History; EUH, European History; HIS, Recent History; LAH, Latin American History; WOH, World History. All history courses in the state carry one of these prefixes.

Here's how to read the common course number for AMH 2070:

```
A M H, 2 0 7 0  History of Florida

First digit: indicates the subject area
Second digit: indicates the level
Third and fourth digits: indicate course number
```

**Anthropology**  
ANT
**Art**  
ART, ART, PCY
**APB, BOT, BSC, MCB, OCB, PCB, ZOO**
**BRC, BUL, ECS, FIN, GED, MAN, MAR, MKA, MNA, MTB, OST, SVL, TAX**
<table>
<thead>
<tr>
<th>Career Development</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry</td>
<td>SLS</td>
<td>CHM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Science/</td>
<td>CET, CGS, CIS,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Processing</td>
<td>COP, CNM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>BCN, COT, ETC,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ETM, SUR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiovascular (Invasive)</td>
<td>CVT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>CCJ, CJT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dental Hygiene</td>
<td>DEH, DES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnostic Medical</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sonography</td>
<td>SON</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dietetic</td>
<td>DIE, FOS, FSG</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drafting and Design</td>
<td>HUN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>CAP, EGS, ETC,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>ETD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electronics Engine/</td>
<td>ECO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laser Optics/Computer</td>
<td>EDF, EDG, EEX,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated</td>
<td>SPA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Medical</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services/EMT/Paramedic</td>
<td>EMS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English as a Second</td>
<td></td>
<td>ENS, ESL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td></td>
<td>EVS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Science</td>
<td></td>
<td>FIL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Film Production</td>
<td></td>
<td>FFP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Science</td>
<td></td>
<td>FRE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>French</td>
<td></td>
<td>GEA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td></td>
<td>GER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>German</td>
<td></td>
<td>GRA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphics</td>
<td></td>
<td>HSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Related</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>History</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horticulture</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospitality</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interdisciplinary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journalism</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal Assisting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Laboratory</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tech</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nursing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutrition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philosophy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical and Earth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portuguese</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiation Therapy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiography</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respiratory Care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speech</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Life Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surveying</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Televisio</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theater</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTB, NSP, NUR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AST, GLY, MET,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCE, PSC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DAA, PEL, PEM,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEN, PEO, PET</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPO, INR, POS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLP, DEP, EDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INP, PSY, SOP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAT, RTE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RTE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RET</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SYG</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPN, SPW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORI, SPC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RTV</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>THE, TPA, TPP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 105 |
ANTHROPOLOGY

ANT 2000  3 Credits
INTRODUCTORY ANTHROPOLOGY
Introduction to study of man and culture with special attention to physical anthropology, archaeology and linguistics. Emphasis on social, political, religious and economic institutions in selected preliterate societies.

ANT 2000H  3 Credits
INTRODUCTION TO ANTHROPOLOGY - HONORS
Same as ANT 2000 with honors level content. Honors program permission required.

ART

ART 1001C  3 Credits
INTRODUCTION TO ART HISTORY I
Survey of development of visual art forms from prehistory through Middle Ages.

ART 1001H  3 Credits
INTRODUCTION TO ART HISTORY II
Prerequisite: ENC 1101 or ENC 1101H. Survey of development of the visual arts from Renaissance to present. Requires 6,000 words of writing.

ART 2050  3 Credits
INTRODUCTION TO APPLIED ART
Introductory studio art course for non-art majors. Emphasis on creative expression and critical evaluation, using variety of two-dimensional media, such as painting, stitchery, printmaking and three-dimensional media, such as clay, wood, fibers. (Special Fee)

ART 201C  3 Credits
DESIGN I
Introduction to studio art through analytical use of elements and principles of two-dimensional design and color theory. Includes extra periods.

ART 202C  3 Credits
DESIGN II
Prerequisite: ART 1201C. Continuation of ART 1201C through study of visual elements and principles and their application in three-dimensional form and color theory. Includes extra periods.

ART 203C  3 Credits
DRAWING I
Introductory drawing class with emphasis on basic skills and concepts. Includes extra periods. (Special Fee)

ART 204C  3 Credits
DRAWING II
Prerequisite: ART 203C. Continuation of ART 203C with emphasis on further development of technique and exploration of personal imagery and content. Includes extra periods. (Special Fee)

ART 2104C  3 Credits
INTRODUCTION TO DRAWING AND PAINTING
Laboratory course for non-art majors who wish to explore drawing and painting techniques and media. (Special Fee)

ART 2110C  3 Credits
CERAMICS I
Introductory course in pottery design: handbuilding techniques, glazing and firing. Includes extra periods. (Special Fee)

ART 2111C  3 Credits
CERAMICS II
Prerequisite: ART 2110C. Continuation of ART 2110C with emphasis on wheel throwing, advanced glaze formulation, kiln loading and firing. Includes extra periods. (Special Fee)

ART 2130C  3 Credits
INTRODUCTION TO WEAVING: OFF-LOOM TECHNIQUES
Introduction to fiber processes, including primitive loom building, carding, spinning, stitchery. Emphasis on use of fiber as medium for expression in visual arts. Includes extra periods. (Special Fee)

ART 2400C  3 Credits
PRINTMAKING I
Basic mastery of graphic techniques of intaglio and/or relief printmaking. Consists of studio work, demonstrations of each technique to be mastered and selected studies of history of printmaking. Includes extra periods. (Special Fee)

ART 2401C  3 Credits
PRINTMAKING II
Prerequisite: ART 2400C or departmental approval. Consists of experimental approach to individual expression with emphasis on imagery, content and refinement of techniques of printmaking. Includes extra periods. (Special Fee)

ART 2501C  3 Credits
PAINTING I
Prerequisite: ART 2501C or departmental approval. Introduction to basic concepts and techniques of painting. Includes extra periods. (Special Fee)

ART 2502C  3 Credits
PAINTING II
Prerequisite: ART 2501C. Emphasis on continued exploration into painting technique, color and composition. Includes extra periods. (Special Fee)

ART 2701C  3 Credits
SCULPTURE I
Experiences with variety of three-dimensional media such as wood, metal (cast and fabricated), clay and plastics, designed to introduce student to handling of materials and tools necessary to understand arrangement and relationship of three-dimensional forms. Includes extra periods. (Special Fee)

ART 2800C  1-6 Credits
SELECTED TOPICS IN ART
Seminars for students interested in further study in specific art area.
ART 2950
SPANISH ART
Prerequisite: Departmental approval. Combination of classroom preparation plus travel to include sketching, painting, native crafts, etc. Taught only in Seville, Spain.

ART 2949
COOPERATIVE EDUCATION: ART FIELD EXPERIENCE
Prerequisite: Departmental approval. Allows students to earn credit by working in supervised training assignment directly related to their college major. May be repeated for credit.

PGY 2101C
PHOTOGRAPHY I
Introduction to black and white photography with emphasis upon use of camera, darkroom procedures of developing, printing, and study of visual design in photography. Student should have camera with adjustable lens and shutter speeds. Includes extra periods. (Special Fee)

PGY 2102C
PHOTOGRAPHY II
Prerequisite: PGY 2101C. Continuation of PGY 2101C with emphasis on imagery, content and refinement of techniques of medium. Includes extra periods. (Special Fee)

BIOLOGY

APB 1101L
LAB IN APPLIED BIOLOGY
Lab designed to supplement lectures in APB 1120, APB 1150, or PCB 1440. Laboratory experiences provide students with science lab requirements of many universities and may be taken concurrently with any one of above courses. Department approval.

APB 1120
ENVIRONMENTAL SCIENCE
General education non-lab course provides understanding of man's interdependence with and responsibility for environment. Investigates such aspects of environment as pollution, urbanization, population trends and changes in lifestyles. Treats present and projected solutions to problems.

APB 1150
BIOLOGICAL SCIENCE
General education non-lab course for students not majoring in biology. Includes study of human body, human evolution, genetics, reproduction, development and diseases of man. Emphasis on human organism as central figure in biosphere. Not prerequisite for any other biology course.

APB 1253
BIOLOGY OF HUMAN SEXUALITY
General, non-lab course designed to introduce students to various biological aspects of human sexuality, including sexual genetics and sex determination, sexual anatomy, physiology and development, processes of fertilization, pregnancy, birth control, sexually transmitted diseases, menstruation, menopause and aging. Other appropriate areas may be discussed when time permits.

APB 2821C
HUMAN ANATOMY AND PHYSIOLOGY I
Prerequisite: CHM 1025C and BSC 1010C or departmental approval. Structure and function of integumentary, skeletal, muscular, circulatory, and nervous systems, and organs of special sense. Lab exercises emphasize anatomic and physiological principles associated with classroom work. Six hours lecture/lab instruction. (Special Fee)

APB 2822C
HUMAN ANATOMY AND PHYSIOLOGY II
Prerequisite: Completion of APB 2821C with grade of C or better. Continuation of APB 2821C, including endocrine, reproductive, respiratory, digestive and excretory systems with considerable emphasis on biochemistry of metabolic processes and body fluids. Six hours lecture/lab instruction. (Special Fee)

BOT 2010C
BOTANY
Prerequisite: BSC 1010C. Study of structural organization, classification, physiology, reproduction, heredity and evolution of plants. Includes survey of plant kingdom and comparison of various plant groups. Six hours lecture/lab instruction. (Special Fee)

BSC 1010C
FUNDAMENTALS OF BIOLOGY
Introduction to fundamental biological principles emphasizing common attributes of all living organisms. Unifying concepts include chemical structure of living matter, structure and function of the cell, specialized cells, major metabolic functions, control systems, reproduction, genetics, evolution and ecology. Prerequisite for advanced biology courses. Six hours lecture/lab instruction. (Special Fee)

BSC 1010CH
FUNDAMENTALS OF BIOLOGY - HONORS
Same as BSC 1010C with honors content. Honors program permission required.

BSC 2933
SELECTED TOPICS IN BIOLOGY
Prerequisite: Departmental approval. Selected topics in biological sciences based on historical, traditional or contemporary approach as background and interest of students and professor dictate.

BSC 2949
COOPERATIVE EDUCATION: BIOLOGY FIELD EXPERIENCE
Prerequisite: Departmental approval. Student earns credit by working in supervised training assignment directly related to college major. May be repeated for credit.

MCB 2010C
MICROBIOLOGY
Prerequisite: BSC 1010C and prerequisite or corequisite: CHM 1025C or CHM 1045C. Survey of microbial forms with emphasis on bacteria, their morphology, physiology and genetic mechanisms. Pathogenic processes and microbes discussed in detail. Six hours lecture/lab instruction. (Special Fee)
OCB 2003C
MARINE BIOLOGY
4 Credits
Prerequisite: BSC 1010C or departmental approval. Survey course with lecture and lab. Topics include ocean as environment (currents, tides, water chemistry, etc.); survey of marine animals and plants; and marine ecosystems. Field trips required. (Special Fee)

PCB 1440
FLORIDA ENVIRONMENTAL SYSTEMS
3 Credits
Focuses on Florida ecology. Combination of lecture, lab, field and computer lab techniques used to study variety of habitats. Topics include energy flow through food chains, environmental modeling and general ecology. Prior exposure to general biology topics recommended. No prior experience required.

PCB 1440H
FLORIDA ENVIRONMENTAL SYSTEMS- HONORS
3 Credits
Same as PCB 1440 with honors content. Honors program permission required.

PCB 2303C
AQUATIC BIOLOGY
3 Credits
Prerequisite: BSC 1010C or departmental approval. Lecture, lab and field biological survey of lakes and streams including taxonomy, ecology and life cycles of freshwater organisms with emphasis on invertebrates. Covers physical and chemical factors of freshwater ecosystems such as origin of lakes, evolution of streams and biogeochemical cycles of freshwater. Biology of polluted water discussed. (Special Fee)

PCB 2304
NATURAL HISTORY OF FLORIDA RIVERS
1 Credit
Field ecology course. Topics include plants, animals, water chemistry, stream flow dynamics, fresh water resources and management and pollution. All day field trip required.

PCB 2313
NATURAL HISTORY OF FLORIDA MANATEES
1 Credit
Field ecology course. Topics include manatee anatomy, physiology and behavior as well as discussion of reasons for population decline. Winter habitat (warm water refuge) explored by boat and snorkel. All day field trip required.

PCB 2342
NATURAL HISTORY OF COASTAL SEA GRASS COMMUNITIES
1 Credit
Field ecology course. Topics include seagrasses of Florida coastal waters, chemistry of sea water, associated plant and animal life of grass flats and role of grass flats in fisheries economics. All day field trip required.

ZOO 2013C
GENERAL ZOOLOGY
4 Credits
Prerequisite: BSC 1010C or departmental approval. Lecture and lab study of animals from simple to complex. Emphasis on taxonomy, structure, function, evolution, and development of biological skills needed for advanced biology courses. Six hours lecture/lab instruction. (Special Fee)

ZOO 2013CH
GENERAL ZOOLOGY - HONORS
4 Credits
Same as 2013C with honors content. Honors program permission required.

ZOO 2303C
VERTEBRATE ZOOLOGY
4 Credits
Prerequisites: BSC 1010C and ZOO 2013C or departmental approval. Lectures and lab study of chordate zoology with emphasis on taxonomy, ecology, evolution, function and structure of vertebrates and development of biological skills needed for advanced biology courses. Six hours lecture/lab instruction. (Special Fee)

BUSINESS

ACG 2021
PRINCIPLES OF FINANCIAL ACCOUNTING
3 Credits
Prerequisites: MAT 1033, MTB 1103, or departmental approval.
Accounting concepts, principles, procedures, and underlying theories applicable to nature of accounting; financial statements; accounting cycle; current assets; plant and equipment, long-term investments, intangible assets, payroll, current liabilities, long-term debt, and owner’s equity; including accounting for sole proprietorships, partnerships, and corporations.

ACG 2071
PRINCIPLES OF MANAGERIAL ACCOUNTING
3 Credits
Prerequisite: ACG 2021. Accounting for business information requirements with cost accounting concepts and relationships; statement of cash flows, financial statement analysis, cost-volume-profit analysis, variance analysis, budgeting, pricing decisions, capital expenditure decisions, and management accounting analysis for decision-making.

ACG 2100
INTERMEDIATE ACCOUNTING I
3 Credits
Prerequisite: ACG 2071. Overview of accounting and its theoretical foundation, including recognition, measurement, and reporting of income and assets.

ACG 2110
INTERMEDIATE ACCOUNTING II
3 Credits
Prerequisite: ACG 2100. Overview of accounting and its theoretical foundations, including recognition, measurement and reporting of liabilities and owner’s equity, special problems in determination and reporting of income on financial statements.

ACG 2360
COST ACCOUNTING
3 Credits
Prerequisite: ACG 2071. Accounting principles and procedures used in analysis and control of cost for manufacturing and service businesses. Topics include preparation of statements and schedules, analysis of costs, selling, general and administrative expenses, and variances.

ACG 2350
COMPUTER ACCOUNTING I
3 Credits
Prerequisite: ACG 2021. Introduction to use of computers to process and organize accounting information. Includes analysis of transactions, data entry, and preparation and analysis of computer generated financial statements and reports.
ACG 2460
COMPUTER ACCOUNTING II
3 Credits
Prerequisite: ACG 2071 or departmental approval. Introduction to use of Lotus spreadsheets in accounting. Students use Lotus spreadsheets to complete accounting cycle, prepare financial statements and reports, and perform financial analysis.

ACG 2949
COORDERATIVE EDUCATION: ACCOUNTING FIELD EXPERIENCE
2-4 Credits
Prerequisite: Departmental approval. Students earn credit by working in supervised training assignment directly related to college major. May be repeated for credit.

APA 1111
BASIC ACCOUNTING
3 Credits
Prerequisite: MTB 1103 or equivalent. Instruction and practice in fundamentals of financial recordkeeping and reporting for professionals, service and merchandising enterprises.

ACG 2934
SELECTED TOPICS IN ACCOUNTING
1-3 Credits
For students interested in discussion, exploration and observation of special topics in accounting.

BAN 1004
PRINCIPLES OF BANKING
3 Credits
Survey of how a commercial bank functions. How various components of a commercial bank interact within the institution. American Institute of Banking course for employees of commercial banks.

BAN 1114
DEPOSIT OPERATIONS
2 Credits
Examination of deposit operations of banks in context of U.S. payments system. Explores how banks operate relative to their deposit-taking activities and management of deposited funds. Emphasizes system rather than product. Covers impact of external environment on determining why banks operate as they do. American Institute of Banking course for employees of commercial banks.

BAN 1405
TRUST OPERATIONS
3 Credits
Presents concepts and ideas that comprise various trust functions and their translations into workable procedures. Focus on development of knowledge and attitudes required to perform various tasks within the trust function. American Institute of Banking course for employees of commercial banks.

BAN 1413
SECURITIES PROCESSING
3 Credits
For bank operations personnel who wish to develop broad knowledge of the securities business and its application to banking environment. Emphasis on operational aspects of processing various securities, administering consumer and corporate trust accounts, and the bank's own investment portfolio. American Institute of Banking course for employees of commercial banks.

BAN 1423
CUSTOMER SERVICE
1 Credit
Effective communication skills to benefit bank customer contact personnel. How to establish contact, define and resolve problems and close an encounter. American Institute of Banking course for employees of commercial banks.

BAN 1424
PRODUCT KNOWLEDGE
1 Credit
Provides students with generic knowledge of range of services their bank offers in customer products, corporate products and trust products. Comprised of three separate modules. American Institute of Banking course for employees of commercial banks.

BAN 1425
SELLING BANK SERVICES
1 Credit
Provides bank customer contact personnel with skills they need to sell bank services and meet customer needs. Cultivates positive attitude towards selling and develops specific selling techniques. American Institute of Banking course for employees of commercial banks.

BAN 1800
LAW AND BANKING: PRINCIPLES
3 Credits
A banker's guide to law and legal issues with special emphasis on Uniform Commercial Code. Summarizes law pertaining to contracts, real estate and bankruptcy and legal implications of consumer lending. American Institute of Banking course for employees of commercial banks.

BAN 1801
LAW AND BANKING: APPLICATIONS
2 Credits
Introduction to laws pertaining to secured transactions, letters of credit and bank collection process. Includes material on check losses and a broad range of legal issues related to processing of checks. Also, collateral, perfection and default. Case histories used extensively. American Institute of Banking course for employees of commercial banks.

BAN 2135
BANK ACCOUNTING
3 Credits
Accounting principles applied to typical bank financial statements. Aspects of accounting unique to banking. American Institute of Banking course for employees of commercial banks.

BAN 2155
INTERNATIONAL BANKING
3 Credits
How money is transferred among countries; how international trade is financed; what international financing agencies do; what instruments are used in international financial markets and how Eurodollar market operates. American Institute of Banking course for employees of commercial banks.

BAN 2210
ANALYZING FINANCIAL STATEMENTS
3 Credits
Basic skills of financial statement analysis for prospective bank lender/credit analyst already familiar with fundamental accounting procedures and practices. American Institute of Banking course for employees of commercial banks.

BAN 2231
COMMERCIAL LENDING
3 Credits
Conceptual framework for study of commercial lending. Emphasis on how commercial lending business is organized and how it focuses on bank profitability. Also, commercial lending process from application to collection. American Institute of Banking course for employees of commercial banks.
BAN 2240 3 Credits
CONSUMER LENDING
Survey of credit risk evaluation, setting policy, handling loans from application through closing. Also servicing and collection, compliance methods, portfolio management and marketing. American Institute of Banking course for employees of commercial banks.

BAN 2241 3 Credits
BANKING AND THE PLASTIC CARDS
How bank cards function in U.S. economy, their operational aspects, how they interface with payments systems and their relationship to EFT technology. American Institute of Banking course for employees of commercial banks.

BAN 2400 3 Credits
THE TRUST BUSINESS
Introduction to trust functions of commercial bank for all banking personnel. Place of trust department in bank, services it provides and how those services are delivered. American Institute of Banking course for employees of commercial banks.

BAN 2412 3 Credits
FINANCIAL PLANNING FOR BANKERS
Fundamental concepts of financial planning. Goal not to train bankers to be professional financial planners, but to provide them with general appreciation of topic and its application to the banking environment. American Institute of Banking course for employees of commercial banks.

BAN 2501 3 Credits
MONEY AND BANKING FOR COMMERCIAL BANKERS
Role of commercial banks and Federal Reserve Bank in monetary system of United States. How other financial institutions affect commercial banks and supply of money. American Institute of Banking course for employees of commercial banks.

BAN 2511 3 Credits
MARKETING FOR BANKERS
What motivates customers to buy financial services. How to develop a successful marketing plan. How to integrate public relations, advertising, sales promotion, selling and service distribution functions of bank. American Institute of Banking course for employees of commercial banks.

BAN 2531 1 Credit
PREPARING FOR SUPERVISION
Prepares student for supervisory role through case studies, role playing and discussion. American Institute of Banking course for employees of commercial banks.

BAN 2742 3 Credits
COMMERCIAL BANK MANAGEMENT
Management concepts applied to managing commercial bank. Includes formulation of objectives and policies; management of assets and liabilities; sources and uses of funds; and administration of deposits, loans and other investments. American Institute of Banking course for employees of commercial banks.

BAN 2761 3 Credits
RETAIL BANKING SERIES
Consolidates BAN 2762, BAN 2763 and BAN 2764 into single three-credit presentation. Individual short courses reported to AIB for credit. American Institute of Banking course for employees of commercial banks.

BAN 2762 1 Credit
RETAIL BANKING
Focuses on communication, human resources, time management, and leadership skills needed for successful operations of retail banking establishment. American Institute of Banking course for employees of commercial banks.

BAN 2763 1 Credit
SALES MANAGEMENT
Concentration on responsibilities of sales manager, including successfully setting goals and increasing sales results. Includes discussion of tracking, measuring and rewarding. American Institute of Banking course for employees of commercial banks.

BAN 2764 1 Credit
FINANCIAL PERFORMANCE OF BANKS
Concentration on measuring bank's profitability. Ten decisions manager can make to influence profitability. American Institute of Banking course for employees of commercial banks.

BAN 2782 3 Credits
BANK INVESTMENTS AND FUNDS MANAGEMENT
Develops knowledge and skills needed to implement bank's investment and funds management strategies to earn acceptable return without undue risk. American Institute of Banking course for employees of commercial banks.

BAN 2930 1 Credit
SELECTED TOPICS IN BANKING
Reserved for presentation of special courses that may be required on essentially "one-time" basis; and introduction of new courses that may be developed by American Institute of Banking and requiring immediate implementation prior to processing of formal change to curriculum. American Institute of Banking course for employees of commercial banks.

BRC 1701 3 Credits
MICROCOMPUTERS IN THE BANKING INDUSTRY
Orientation to microcomputer and disk operating system. Orientation and practical experience in major uses of microcomputer in banking to include word processing, spreadsheet analysis and data base management, and integration of these functions through utilities program.

BRC 2400 2 Credits
CREDIT LAWS AND REGULATIONS
Prerequisites: GEB 1101 and BUL 2111. Study of Florida state and federal laws and regulations which affect credit transactions. Impact of each law explained in such important operations as installment sales, consumer loans, credit cards, debt adjustments, fine-print clauses, default, collection, truth-in-lending, credit bureaus, credit reports and civil penalties.

BRC 2949 2-4 Credits
COOPERATIVE EDUCATION: FINANCE FIELD EXPERIENCE
Prerequisite: Departmental approval. Student earns credit by working in supervised training assignment directly related to college major. May be repeated for credit.
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Title</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUL 2111</td>
<td>3</td>
<td>BUSINESS LAW I</td>
<td></td>
<td>Introduction to law, its social forces and agencies for enforcement; effects of governmental regulation on business and society, including environmental law, community planning and consumer protection; contracts; personal property, including bailments and sales.</td>
</tr>
<tr>
<td>BUL 2112</td>
<td>3</td>
<td>BUSINESS LAW II</td>
<td>BUL 2111</td>
<td>Continuation of study of law, including commercial paper, creditors' rights under secured transactions, insurance, bankruptcy, agency, employment, partnerships, corporations and real property.</td>
</tr>
<tr>
<td>BUL 2114</td>
<td>3</td>
<td>BUSINESS ORGANIZATIONS</td>
<td></td>
<td>Emphasis on primary entities under which business is conducted in Florida: sole proprietorship, partnership and corporation. Study of Pictitious Name Statute and several partnership agreements. Attention to procedure and form preparation in filing documents to create and operate corporations, employment agreements, stock operations and stock restrictions. Security Exchange Commission filing and New York Stock and American Stock Exchange filings.</td>
</tr>
<tr>
<td>ECS 2001</td>
<td>3</td>
<td>INTERNATIONAL BUSINESS AND ECONOMICS</td>
<td></td>
<td>A comparative study of economic systems in selected Western and non-Western nations, including economic systems' impact on cultures, commerce, public policy and institutions.</td>
</tr>
<tr>
<td>FIN 2010</td>
<td>3</td>
<td>PERSONAL INVESTMENTS: STOCKS AND BONDS</td>
<td></td>
<td>Basic principles of stock market as they affect individual investor in stocks and bonds. Investments in these securities studied from standpoint of short-term and long-term investor and includes portfolio construction, security analysis and element of risk, and impact of taxes.</td>
</tr>
<tr>
<td>FIN 2100</td>
<td>3</td>
<td>PERSONAL FINANCE</td>
<td></td>
<td>Study of economic and personal goals, including personal budgeting, credit buying, borrowing money and banking. Also discusses various insurance, such as life insurance, casualty insurance, medical insurance, home ownership and retirement plans. Covers general investments, e.g., mutual funds, etc.</td>
</tr>
<tr>
<td>FIN 2230</td>
<td>3</td>
<td>MONEY AND BANKING</td>
<td></td>
<td>Introduction to principles of money credit and banking including consideration of monetary systems, foreign exchanges and commercial banking with emphasis on Federal Reserve System of the United States.</td>
</tr>
<tr>
<td>FIN 2612</td>
<td>3</td>
<td>INTERNATIONAL BANKING AND FINANCE</td>
<td></td>
<td>Study of international banking and finance principles and practices for import-export, tourism, banking and other industries dealing in international business. Include areas of exchange rates, import-export collections, international documents, international governmental regulation.</td>
</tr>
<tr>
<td>GEB 1011</td>
<td>3</td>
<td>INTRODUCTION TO BUSINESS</td>
<td></td>
<td>Fundamentals of business organization and procedures to acquaint student with management, terms, organization and control of large and small business.</td>
</tr>
<tr>
<td>GEB 1014</td>
<td>3</td>
<td>INTRODUCTION TO INTERNATIONAL BUSINESS</td>
<td></td>
<td>Study of international marketing and distribution principles and practices for import-export, tourism, banking and other industries involved in international business. Includes areas of import-export documentation, transportation, pricing, trade shows and other skills necessary in international marketing and distribution.</td>
</tr>
<tr>
<td>MAN 1800</td>
<td>3</td>
<td>SMALL BUSINESS MANAGEMENT</td>
<td></td>
<td>Basic principles needed for success in small business. Includes procedures for planning, locating, opening, operating, evaluating and controlling small business. Presents basic foundations of budgeting, marketing, research, promotion, profit analysis and advertising.</td>
</tr>
<tr>
<td>MAN 2021</td>
<td>3</td>
<td>PRINCIPLES OF MANAGEMENT</td>
<td>GEB 1011</td>
<td>Principles encompassed in managerial functions of planning, organizing, staffing, coordinating and controlling and their application to operation of a business enterprise.</td>
</tr>
<tr>
<td>MAN 2934</td>
<td>1-3</td>
<td>SELECTED TOPICS IN BUSINESS</td>
<td>Departmental approval</td>
<td>For students interested in discussion, exploration and observation of special topics in business.</td>
</tr>
<tr>
<td>MAN 2940</td>
<td>3</td>
<td>WORK SEMINAR</td>
<td>Departmental approval</td>
<td>Student works in selected offices in community a maximum of 15 hours each week during final session. Seminar held weekly to evaluate personal experiences and different aspects of secretarial work.</td>
</tr>
<tr>
<td>MAN 2949</td>
<td>2-4</td>
<td>COOPERATIVE EDUCATION: MANAGEMENT FIELD EXPERIENCE</td>
<td>Departmental approval</td>
<td>Student earns credit by working in supervised training assignment directly related to college major. May be repeated for credit.</td>
</tr>
<tr>
<td>MAR 2011</td>
<td>3</td>
<td>PRINCIPLES OF MARKETING</td>
<td>GEB 1011</td>
<td>Functions, institutions, methods and problems of marketing goods and services.</td>
</tr>
<tr>
<td>MKA 1402</td>
<td>3</td>
<td>FASHION MERCHANDISING</td>
<td></td>
<td>Study of fashion merchandising industry, including historical perspectives, nature of fashion, materials of fashions, consumer demand, budgeting, buying and promotion.</td>
</tr>
</tbody>
</table>
**MKA 2021**
**PRINCIPLES OF SELLING**
Prerequisite: GEB 1011 or experience. Combination of principles and techniques of selling. Emphasis on person-to-person situations, consumer motivations, persuasion and problems dealing with psychology of sales situations.

**MKA 2022**
**PRINCIPLES OF SALESMANSHIP**
Self-development program emphasizing sales objectives of contacts, relationships, follow-up on calls, suggestions, objections, resistance, acceptance and repeat business. Maximum use of case studies.

**MKA 2041**
**RETAILING**
Prerequisite: GEB 1011 or experience. Introduction to nature and scope of retail merchandising as seen within total economic structure. Emphasis on the many functions of a retail establishment, including employee services and consumer relationships.

**MKA 2241**
**INTERNATIONAL MARKETING AND DISTRIBUTION**
Study of international marketing and distribution principles and practices for import-export, tourism, banking and other industries involved in international business. Includes import-export documentation, transportation, pricing, trade shows and other skills necessary in international marketing and distribution.

**MKA 2511**
**ADVERTISING**
Prerequisite: GEB 1011 or experience. Study of modern advertising from marketing, communications, consumer and legal viewpoints. Emphasis on media selection, sales promotion and creative development of advertising.

**MKA 2949**
**COORDERATIVE EDUCATION: MARKETING FIELD EXPERIENCE**
Prerequisite: GEB 1011 or experience. Student earns credit by working in supervised training assignment directly related to College major. May be repeated for credit.

**MNA 1391**
**INTRODUCTION TO POSTAL MANAGEMENT**
Provides students with overall working knowledge of management responsibilities in five postal functional areas: customer service, finance, employee and labor relations, mail processing and delivery services.

**MNA 1392**
**POSTAL MANAGEMENT DELIVERY SERVICES**
Provides students with working knowledge of postal-related customer services such as retail operations, sales, and consumer services such as retail operations, sales, and consumer services.

**MNA 1393**
**POSTAL MANAGEMENT CUSTOMER SERVICE**
Provides students with working knowledge of postal-related customer services such as retail operations, sales, and consumer services.

**MNA 1395**
**MAIL PROCESSING I**
Covers mail classification and rates; service standards; postal terminology; four functions of mail processing; distribution systems; mail processing objectives and responsibilities; mail preparation; manual distribution; revenue protection; and bulk mail centers.

**MNA 2300**
**PERSONNEL MANAGEMENT**
Personnel management and practices with emphasis on techniques of recruiting, selecting, transferring, promoting, classifying and training workers.

**MNA 2340**
**BASIC SUPERVISION**
Study of supervisory function, decision making and responsibilities of supervision. Also conflict areas of employees and supervisors.

**MNA 2394**
**POSTAL FINANCE**
Explores areas of how postal revenue is received and controlled. Procedures of Board of Governors' and Postmaster General's Annual Report and explanation of three major sources of postal revenue. Also covers financial accounting and reporting, timekeeping, and travel regulations.

**MNA 2396**
**MAIL PROCESSING II**
Covers postal mechanization; machine distribution; human resources management in mail processing; reporting systems and data analysis; operation planning; scheduling and staffing; analysis; operation planning; scheduling and staffing; budgeting and functional coordination with customer services.

**MNA 2937**
**POSTAL HUMAN RESOURCES**
Study of employee and labor relations as it applies to people at work in United States Postal Service. Involves job specifications and structures of interlocking duties and responsibilities together with policies governing those relationships. Presents overview of laws and practices related to labor-management in Postal Service. Emphasis on national and local agreements, various bargaining units and associations in U.S. Postal Service, grievance procedures, disciplinary action procedures, and National Labor Relations Board.

**MTB 1103**
**BUSINESS MATHEMATICS**
Practical application of mathematics to computational problems of business and consumerism. Business applications include decimals, fractions, percentages, interest rates, bank records, payroll and merchandising.

**OST 1100**
**BEGINNING TYPEWRITING**
Techniques and basic skill in typewriting, mastery of keyboard, operation and care of computer. Students prepare business letters, reports and tabulated applications. For students with little or no typewriting experience.
OST 1108
BUILDING TYPING SPEED AND ACCURACY
1 Credit
Computerized diagnostic tests identify individual weaknesses in
typing accuracy. Alphabetic, number, and speed drills improve
typing accuracy. Includes ten-key number pad.

OST 1110
INTERMEDIATE TYPEWRITING
3 Credits
Prerequisite: OST 1100 or one year of high school typewriting.
Continuation of skills of typewriting, including their application
to more advanced styles of correspondence, statistical typing and
manuscripts. Instruction on computers. Students use automated
functions of equipment while typing problems.

OST 1141
KEYBOARDING SKILLS
3 Credits
Instruction in touch system of alphabetic and numeric typewriting
keyboard on a computer as well as ten-key pad. These
keyboarding skills can be used on typewriter and electronic
terminals. Not recommended for secretarial science students.

OST 1219
SHORTHAND THEORY REFRESHER
1 Credit
Prerequisite: Knowledge of Gregg shorthand. Reviews Gregg
shorthand theory, including alphabet, brief forms, punctuation,
word beginnings, and endings, alphabet combinations, and
phrases.

OST 1257
MEDICAL TERMINOLOGY FOR THE OFFICE
3 Credits
Covers basic word building system for defining using spelling,
and pronouncing medical words for medical office employees. A
programmed text approach to development of medical vocabulary
with use of audio tapes so students can learn at their own pace
and are at same time able to listen to professionals pronounce
medical words correctly.

OST 1271
SPEEDWRITING I
3 Credits
Basic principles of speedwriting, a notetaking system based on
alphabet, abbreviations and other shortcuts. Helps students select
key points from oral and written text and take notes in useful
form. Emphasis on reading, writing and transcribing
speedwriting notes.

OST 1304
USING OFFICE REFERENCE MANUALS
1 Credit
Trains students to locate in office reference manual rules that
apply to most business writing. Refresher course in punctuation,
spelling, grammar, and letter, memo and report format.

OST 1305
PROOFREADING
1 Credit
Proofreading of original, revised or corrected documents for
content and consistency, style, format, typographical errors,
capitalization, grammar, punctuation, and spelling. Also covers
proofreading of statistical material.

OST 1335
BUSINESS COMMUNICATIONS
3 Credits
Prerequisite: ENC 1101. Practice in developing effective oral and
written business communication skills to create successful human
relations. Emphasis on written business correspondence.

OST 1351
BASIC FILING
1 Credit
Introduction to filing procedures, including alphabetic,
geographic, numeric, and subject filing. May not be substituted in
degree program for OST 1355.

OST 1355
INTRODUCTION TO RECORDS INFORMATION
3 Credits
General overview of records management from entry-level
position, enabling student to develop skills in manual filing
systems and procedures, creation and organization of files as well
as scheduling, maintaining, storing and retrieving records.
Students introduced to micrographics. Students survey
employment potential in field and prepare task analysis of records
management position.

OST 1356
RECORDS TECHNOLOGY
3 Credits
Prerequisite: OST 1355. Provides basic understanding of use of
micrographics as method of reducing, protecting and simplifying
information flow. Includes how this medium interfaces with
computers. Students conduct feasibility study of converting from
paper to micrographics. Hands-on experience with micrographic
equipment. (Special Fee)

OST 1357
RECORDS MANAGEMENT
3 Credits
Prerequisite: OST 1355. Designed to develop managerial,
decision-making techniques for records manager: Study of
systems and analysis, forms development, archival
administration, personnel development and establishment of
records management system.

OST 1461
MEDICAL OFFICE TECHNOLOGY
3 Credits
Provides student with experience of performing realistic
administrative duties of medical assistant. Besides providing
information on appropriate organization and formatting of
medical documents, it includes maintaining patients' files,
scheduling appointments, handling telephone messages, dealing
with emergencies, maintaining billing and collections systems,
establishing priorities, and preparing health insurance claim
forms, itineraries and travel expense reports.

OST 1601
MACHINE TRANSCRIPTION
3 Credits
Prerequisite or corequisite: OST 1110. Emphasizes development
of competent machine transcription skills as applied to various
types of businesses and production of mailable business letters
and documents. Includes a comprehensive program of basic
language skills which includes grammar, punctuation, spelling,
proofreading and editing.

OST 1611
MEDICAL TRANSCRIPTION I
3 Credits
Prerequisite: OST 1100 or one year of high school typewriting.
Emphasizes fundamentals of transcribing simple medical reports
and correspondence using transcribing machine.
OST 1743  
ELECTRONIC WRITING I  
1 Credit  
Develops skills necessary to use microcomputer keyboard and word processing software to facilitate writing term papers, essays, reports, etc.

OST 1744  
ELECTRONIC WRITING II  
1 Credit  
Covers advanced features of WordPerfect: search and replace text, move and copy text, headers and footers, page numbers, page breaks, flush right, superscripts, subscripts, fonts (size and appearance). Includes advanced printing features, windows, switching, and creating and using columns.

OST 1745  
ELECTRONIC WRITING III  
1 Credit  
Covers more advanced features of WordPerfect for producing research papers and personal documents: outlines, footnotes and endnotes, tables, tables of contents, indexes, lists, graphics for desktop publishing and importing into document files.

OST 1803  
COMPUTER LITERACY FOR HEALTH CARE PROFESSIONALS  
3 Credits  
Students learn computer literacy foundations for working in health care fields. Students have hands-on experience and training with PC DOS, word processing, spreadsheet, database, desktop publishing and graphic software programs as well as training in searching national databases for medical information. Special presentations by hospital medical personnel about computer imaging applications used by medical agencies.

OST 2120  
OFFICE APPLICATIONS  
2 Credits  
Emphasizes production of wide variety of office documents from numerous input sources — typed, handwritten, and dictated. Students use features of word processing packages to produce mailable business letters, forms and reports.

OST 2272  
SPEEDWRITING II  
3 Credits  
Prerequisite: OST 1271 or equivalent in another shorthand system. Continuation of Speedwriting I with continued emphasis on theory and development of transcription skills.

OST 2313  
PLAN/DATA PERFECT - SPREADSHEET AND DATABASE FOR OFFICE PERSONNEL  
3 Credits  
Introduces basics of spreadsheet applications and database applications to specific office-related functions for office support personnel. Students have hands-on training with spreadsheet and database software on IBM-PC or compatible.

OST 2401  
OFFICE TECHNOLOGY PRACTICES  
3 Credits  
Prerequisite: OST 1100 or one year of high school typing. Includes role of office support personnel and office concepts and applications including telephone techniques, electronic calculator operations, reprographic decisions, mail and shipping duties, public relations, planning for travel, conferences and meetings and using commercial data bases. Also includes techniques for abstracting and doing research for business reports and helps build basic employability skills and good business grooming habits.

OST 2431  
LEGAL SECRETARY PRACTICE AND PROCEDURES I  
3 Credits  
Prerequisite or corequisites: OST 1212 and OST 1110, or their equivalents. Basic course designed for students and legal secretaries who have little or no law office experience or whose experience has been limited to specialized areas of law. Covers fundamental principles in both general and specialized areas of legal practice.

OST 2432  
LEGAL SECRETARY PRACTICE AND PROCEDURES II  
3 Credits  
Prerequisite: OST 2431. Continuation of Legal Secretary Practice and Procedures I. More intensive practice in handling legal forms, filing and records. Legal vocabulary and terminology and legal office routines.

OST 2491  
OFFICE SYSTEMS TECHNOLOGY SEMINAR AND INTERNSHIP  
3 Credits  
Prerequisite: Departmental approval. Students work in selected legal offices in community 15 hours a week. Weekly seminar to answer questions, share experiences and gain further knowledge of varying aspects of legal secretarial work.

OST 2501  
OFFICE MANAGEMENT  
3 Credits  
Prerequisite: Departmental approval. Student works in selected business office a minimum of 15 hours per week. Seminars to answer questions, share experiences and give further knowledge of varying aspects of secretarial work.

OST 2612  
MEDICAL TRANSCRIPTION II  
3 Credits  
Prerequisite: OST 1611 or equivalent. Advanced machine transcription of physician-dictated medical documents using more difficult terminology than in OST 1611.

OST 2613  
MEDICAL TRANSCRIPTION III  
3 Credits  
Prerequisite: OST 2612 or equivalent. Includes sophisticated medical terminology in machine transcription of physician-dictated reports. Emphasis on medical and surgical specialties.

OST 2763  
DISPLAYWRITE  
3 Credits  
Covers operation of DisplayWrite software. Students use software to input, store, output, retrieve, edit and spellcheck documents. Includes all basic and advanced functions. Exercises provide practical experience in using software.
OST 2764  MICROSOFT WORD
Covers specific functions of Microsoft Word word processing program on IBM PC. Students use various features of program to input, edit, store, and output documents. Out-of-class lab time needed to complete work.

OST 2765  MULTIMATE ADVANTAGE II
Covers operation of Multimate software. Students use software to input, store, output, retrieve, edit, spellcheck documents. Includes all basic and advanced functions. Exercises provide practical experience in using software.

OST 2766  WORDPERFECT
Covers specific functions of WordPerfect word processing software on IBM PC. Students use various features of program to input, edit, store, and output data. Includes all basic and advanced functions, including copy, move, style, columns, tables, math, graphics, and desktop publishing.

OST 2767  WORDSTAR
Covers operation of WordStar software. Students use software to input, store, output, retrieve, and edit documents. Includes all basic and advanced functions. Exercises provide practical experience in using software.

OST 2821  PAGEMAKER
Covers operation of PageMaker software for office support personnel. Emphasis on creating office publications such as flyers, newsletters, bulletins, in-house brochures, transparency masters, and covers for reports. Students learn elements of desktop publishing features of PageMaker software, working with Windows environment and importing graphics into PageMaker documents.

OST 2930  SELECTED TOPICS IN OFFICE SYSTEMS TECHNOLOGY
Departmental approval. For students interested in acquiring knowledge and skills in areas not included in other office systems technology courses.

SVL 1001  INTRODUCTION TO THE SAVINGS ASSOCIATION

SVL 1101  SAVINGS ASSOCIATION OPERATIONS
Overview of internal operations of savings association, including responsibilities of various departments and interrelationship of job assignments. Valencia Institute of Financial Education course.

SVL 1111  TELLER OPERATIONS
Examines importance of bank teller in creating and maintaining good customer relations and specific operational procedures necessary for successful performance of this function. Valencia Institute of Financial Education course.

SVL 1113  SAVINGS ACCOUNTS
Includes discussion of nature of savings accounts, types of savings account ownership and problems unique to savings accounts. Valencia Institute of Financial Education course.

SVL 2011  FINANCIAL INSTITUTIONS

SVL 2015  COMMERCIAL BANKING
Introduces operation of commercial banks in deregulated financial environment. Examines branch banking, securities, current laws, profitability, lending policies, and comparison of commercial banks and savings institutions. Valencia Institute of Financial Education course.

SVL 2113  DEPOSIT ACCOUNTS AND SERVICES
Introduces deposit accounts in deregulated market and procedures for their enhancement by new services of savings institutions. Emphasizes savings accounts, certificates and access accounts. Valencia/Institute of Financial Education course.

SVL 2121  MANAGING DEPOSIT ACCOUNTS AND SERVICES
Explores services offered by financial institutions. Studies impact of federal regulations on managing deposit accounts and services. Includes methods of explaining institutional policies to customers and helping them take advantages of services. Valencia/Institute of Financial Education course.

SVL 2124  FUNDS TRANSFER SERVICES
Introduces retail electronic services and electronic fund transfers. Includes automatic teller machines, bank credit cards, point of sale services, check truncation, automated clearinghouses, home banking and other types of existing electronic funds transfers or systems. Valencia/Institute of Financial Education course.

SVL 2201  FINANCIAL STATEMENT ANALYSIS
Analysis of financial statements submitted by prospective businesses and self-employed borrowers. Provides opportunities to construct financial statements and learn analytical techniques in commercial lending. Valencia/Institute of Financial Education course.

SVL 2211  CONSUMER LENDING
Introduces consumer credit, compares credit providers, examines types and features of loans, reviews laws and regulations, analyzes load mathematics and organization of credit evaluation, operation, and collection. Valencia/Institute of Financial Education course.
SVL 2221  2 Credits
RESIDENTIAL MORTGAGE LENDING
Introduction to residential mortgage lending operations of savings associations. Includes conventional lending procedures, analysis of mortgage loan organization, processing and servicing and overviews of government loan programs and secondary mortgage market. Valencia/Institute of Financial Education course.

SVL 2231  2 Credits
COMMERCIAL LENDING FOR SAVINGS INSTITUTIONS
Overview of terms, concepts and techniques of commercial lending. Includes use of commercial lending to reduce vulnerability to economic fluctuations. Examines institutions' concerns in marketing, loan commitments and loan administration. Valencia/Institute of Financial Education course.

SVL 2232  2 Credits
INCOME PROPERTY LENDING
Introduces information on negotiating, closing and administering construction and permanent loans. Covers income-producing projects such as apartment buildings, office buildings, and shopping centers. Emphasis on using market studies, appraisals and financial ratios to evaluate borrowers and projects. Valencia/Institute of Financial Education course.

SVL 2241  2 Credits
MORTGAGE LOAN SERVICING

SVL 2401  2 Credits
PERSONAL MONEY MANAGEMENT
Emphasizes how to plan, control and direct one's financial resources effectively and profitably by choosing wisely among financial alternatives. Valencia/Institute of Financial Education course.

SVL 2403  2 Credits
INDIVIDUAL RETIREMENT ACCOUNTS/KEOGH PLANS
Includes discussion of legal requirements for establishing and contributing to retirement accounts, including IRAs, spousal IRAs, rollovers, simplified employee pension plans and Keoghs. Valencia/Institute of Financial Education course.

SVL 2405  2 Credits
FINANCIAL PLANNING BASICS
Provides basic financial planning information to answer customer questions on financial matters. Includes factors needed to devise financial plan. Examines taxation, risk and return, safety, insurance, investments, retirement planning, and planning areas. Valencia/Institute of Financial Education course.

SVL 2411  2 Credits
TECHNIQUES FOR CUSTOMER COUNSELING

SVL 2603  2 Credits
COMMUNICATION SKILLS FOR BUSINESS TALKING AND LISTENING
Emphasizes practical techniques for effective listening, persuasion, problem solving, managing conflicts with customers and coworkers, maintaining poise under pressure, and responding to others positively and effectively. Valencia/Institute of Financial Education course.

TAX 2000  3 Credits
FEDERAL INCOME TAX
Prerequisite: ACC 2021. Fundamental regulations covering federal income tax applicable to individuals. Includes computation of tax, preparation of forms and tax planning.

CARDIOVASCULAR TECHNOLOGY (INVASIVE)

CVT 2200  3 Credits
ADVANCED CARDIOVASCULAR PHYSIOLOGY
Study of structural anatomy and embryological development of heart, physiologic functioning of cardiovascular and pulmonary systems, and pathologic changes associated with cardiovascular system.

CVT 2220  3 Credits
CARDIOVASCULAR PHARMACOLOGY
Designed for cardiovascular technology students. Emphasizes medications used in treatment of cardiovascular patients. Studies mechanisms of drug actions, dosages, indications, and precautions of various drugs.

CVT 1100C  3 Credits
CARDIOVASCULAR CLINICAL I
Introduces students to clinical setting providing opportunity to use cardiovascular instrumentation and techniques and develop cognitive skills.

CVT 1110  3 Credits
CARDIOVASCULAR CLINICAL II
Intensive course providing continuing clinical experience. Stresses patient-technologist and physician-technologist relationships. Students begin to rotate into non-invasive areas of cardiology, cath-recovery, and pediatric cardiology.

CVT 1400C  4 Credits
CVT DIAGNOSTIC PROCEDURE I
Gives students overall view of diagnostic catheterization procedures. Students begin to integrate responsibilities of scrub, circulating, and monitoring techniques required to perform safely cardiac catheterization.

CVT 2510  2 Credits
MEDICAL INSTRUMENTATION
Intensive study of calibration, operation, trouble shooting, and maintenance of all technical equipment incorporated in cath lab. Introduces principles involved in use of X-ray equipment, monitors, special diagnostic cardiac equipment and film developing equipment.
CVT 2410  
CVT PROCEDURES II  
2 Credits  
Prepares student to move into cath lab as fully functioning team member. Emphasizes responsibilities and policies pertaining to cardiovascular technologists. Students become familiar with catheters, wires, and interventional devices used in cardiac procedures.

CVT 2210  
PRINCIPLES OF HEMODYNAMICS  
2 Credits  
Intensive study of cardiovascular hemodynamic principles. Presents data collection, calculation, analysis, and regulation of blood flow through the cardiac, systemic, and pulmonary circulation along with pressure dynamics.

CVT 1500  
ECG INTERPRETATION  
2 Credits  
Designed to study electrophysiological properties of heart. ECG principles applied to patient monitoring, EPS procedures, and insertion of pacemakers.

CVT 2600  
CARDIOVASCULAR PHYSICS  
2 Credits  
Study of principles involved in operation of X-ray and monitoring equipment used in cath lab. Discusses physics principles involved in new cardiovascular techniques.

CVT 2300C  
NON-INVASIVE CARDIOVASCULAR DIAGNOSTICS AND PEDIATRIC CARDIOLOGY  
5 Credits  
Introduces principles and techniques of non-invasive cardiovascular diagnostics. Study of invasive and non-invasive principles involved in pediatric cardiology and diagnosis of congenital anomalies. Stresses clinical experience in these areas.

CVT 2800  
CVT CLINICAL PRACTICUM  
4 Credits  
Provides extensive hands-on experience with minimal supervision. Students have more opportunity to assist in interventional procedures. Students must pass all competency testing in practicum to complete program.

CVT 2120  
CARDIOVASCULAR CLINICAL III  
3 Credits  
Students perfect technical skills. Focus on precision and speed of duties performed. Integrate three technical positions required to produce quality diagnosis and treatment.

CHEMISTRY

CHM 1020  
CHEMISTRY IN EVERYDAY LIFE  
3 Credits  
Meets general education requirement for non-science major. Study of some basic concepts in inorganic chemistry, organic chemistry and biochemistry. Students apply principles as they analyze, discuss and make decisions on chemically related problems that affect everyday life. (Will not serve as prerequisite for any other science course.)

CHM 1025C  
INTRODUCTION TO GENERAL CHEMISTRY  
4 Credits  
Prerequisites: One year of high school algebra or MAT 0024. Prepares students without high school chemistry or those with an inadequate background for CHM 1045C. Modern chemical theories used to develop understanding of fundamentals of inorganic chemistry and its applications. Emphasis on quantitative relationships, using dimensional analysis to solve problems. Laboratory experiences integral part of course. May not be taken for credit subsequent to earning grade of C or better in CHM 1045C. Six hours lecture/laboratory instruction. (Special Fee)

CHM 1045C  
GENERAL CHEMISTRY WITH QUALITATIVE ANALYSIS I  
4 Credits  
Prerequisites: CHM 1025C or one year of high school chemistry completed with grade of C or better and MAT 1033 or two years of high school algebra. Study of basic principles of chemistry, emphasizing formation of unifying model from collection of observations and measurements. Laboratory illustrates principles discussed in classroom. Six hours lecture/laboratory instruction. (Special Fee)

CHM 1045CH  
GENERAL CHEMISTRY WITH QUALITATIVE ANALYSIS I - HONORS  
4 Credits  
Same as CHM 1045C with honors content. Honors program permission required.

CHM 1046C  
GENERAL CHEMISTRY WITH QUALITATIVE ANALYSIS II  
4 Credits  
Prerequisite: Completion of CHM 1045C with grade of C or better. Continuation of CHM 1045C dealing mainly with equilibrium theory, thermodynamics, chemical kinetics and electrochemistry. Laboratory illustrates principles of ionic equilibria within framework of qualitative analysis. Six hours lecture/laboratory instruction. (Special Fee)

CHM 1046CH  
GENERAL CHEMISTRY WITH QUALITATIVE ANALYSIS II - HONORS  
4 Credits  
Same as CHM 1046C with honors content. Honors program permission required.

CHM 1205C  
INTRODUCTORY ORGANIC AND BIOCHEMISTRY  
4 Credits  
Prerequisites: CHM 1025C (or one year of high school chemistry completed with grade of C or better) and MAT 0024 (or one year of high school algebra). Introduces students planning career in health-related fields or in life sciences to organic and biochemistry. Study of structures and typical reactions of functional groups.
structure and functions of classes of biomolecules and energy flow of biological systems. Laboratory portion of course provides students with exercises which illustrate principles of organic and biochemistry. Six hours lecture/laboratory instruction. (Special Fee)

CHM 2120C QUANTITATIVE ANALYSIS
Prerequisite: CHM 1046C. Introduction to theoretical principles and laboratory practice of modern analytical chemistry including separations and gravimetric, titrimetric, electrometric, absorption spectrometric and chromatographic techniques. Eight hours lecture/laboratory instruction. (Special Fee)

CHM 2210C ORGANIC CHEMISTRY I
Prerequisite: CHM 1046C or comparable College-level general chemistry course. Basic course dealing with aliphatic and aromatic compounds, their properties, reactions and synthesis, emphasizing dependence of properties and reaction mechanisms upon structure. Laboratory illustrates techniques of separation, identification and purification. Seven hours lecture/laboratory instruction. (Special Fee)

CHM 2221C ORGANIC CHEMISTRY II
Prerequisite: Satisfactory completion of CHM 2210C. Continuation of CHM 2210C with laboratory devoted to multistep synthesis. Six hours lecture/laboratory instruction. (Special Fee)

CHM 2933 SPECIAL TOPICS IN CHEMISTRY
Prerequisites: CHM 1045C and permission of department. For honor students in chemistry who wish to pursue certain topics in detail in chemistry as chosen by class; to research topics; to present information and lead discussion with other students and faculty members. May be repeated for maximum of three semester hours of credit. Lecture/laboratory instruction.

COMPUTER SCIENCE/DATA PROCESSING

CET 2485 3 Credits
LOCAL AREA NETWORKS
Prerequisite: CGS 1000 or equivalent. Introduction to Local Area Networks as used in business and manufacturing environments. Topics covered include LAN topologies, network interfaces, file servers, network operating software, and LAN installation and management. (Special Fee)

CGS 1000 INTRODUCTION TO DATA PROCESSING
Overview of field of data processing. Covers such topics as manual and automatic record keeping, types of computers, brief history of computer devices, data representation, computer components and stored program concepts.

CGS 1061 INTRODUCTION TO MICROCOMPUTERS
Prerequisite: OST 141 or OST 1100 or departmental approval. Introduction to major uses of microcomputer for business application. Topics covered include computer literacy, electronic filing, word processing, investment decisions and introduction to BASIC programming. Includes analysis of how to select microcomputer and how to evaluate systems. (Special Fee)

CGS 1570 MICROCOMPUTER BUSINESS APPLICATIONS
Applications using LOTUS and DBase III. Designed for people who want to learn more about microcomputers and their applications. Students work on IBM/PCs using some of the more popular commercially available software packages. Includes introduction to DOS. Practical exercises using the LOTUS spreadsheet creating databases, and generating reports.

CGS 2060 COMPUTERS FOR EVERYONE
General education course designed to provide broad overview and understanding of computers. Investigates many aspects about computers, such as principles, methods and applications along with impact and role of computers in society.

CIS 2300 CICS COMMAND-LEVEL PROGRAMMING
Prerequisite: COP 2126 or equivalent experience. Covers features and use of CICS, IBM’s teleprocessing monitor. Students write CICS command-level programs. (Special Fee)

CIS 2321 DATA SYSTEMS ANALYSIS AND DESIGN
Prerequisite: COP 2126. Covers analysis of data systems. Methods in information storage and retrieval, magnetic tape and disk file organization stressed.

CIS 2410 DATA PROCESSING MANAGEMENT
Suggested prerequisite: CIS 2321 or departmental approval. Study of critically important management principles concerned with administration and control of data processing function. Emphasis on manager role planning, evaluating, organizing and decision-making functions.

CIS 2930 SELECTED TOPICS IN DATA PROCESSING
Suggested prerequisite: Departmental approval. Seminar for students interested in discussion, exploration and observation of select topics in data processing.

CIS 2949 2-4 Credits
COOPERATIVE EDUCATION: DATA PROCESSING FIELD EXPERIENCE
Prerequisite: Departmental approval. Student earns credit by working in supervised training assignment directly related to College major. May be repeated for credit.

CNM 1005 3 Credits
INTRODUCTION TO PROGRAMMING CONCEPTS
Suggested prerequisite: CGS 1000. Survey of preprogramming steps required in data processing environment. Emphasis on processes of practical business applications. Includes math and logic for computers, flowcharting and manipulation of files and records.
COP 1000
PROGRAMMING I
Prerequisites: MAC 1104 and MAC 114 or equivalent. Algorithm development; structured programming techniques with computer experience using procedure-oriented language; algorithms for search and sorting. (Special Fee)

COP 2220
3 Credits
C PROGRAMMING
Prerequisite: CGS 1000 or departmental approval. Hands-on study of C Programming languages as applied to business and scientific applications. Includes arrays, pointers, functions, I/O operations and operating system interaction. (Special Fee)

COP 1001
PROGRAMMING II
Prerequisite: Continuation of COP 1000. More complex data structures including records and files; recursion; more experience with procedure-oriented language. (Special Fee)

COP 1160
3 Credits
RPG III PROGRAMMING
Suggested prerequisite: CGS 1000 or departmental approval. RPG III (Report Program Generator) programming language providing student with opportunity to write, test, and debug programs. Include arithmetic operations, comparing, control breaks, multiple record types, exception output, table and array hook-up, read-demand files and indexed sequential files.

COP 1170
3 Credits
BASIC PROGRAMMING
Suggested prerequisites: MTB 1103 or equivalent or departmental approval. Hands-on study of BASIC programming language as it applies to business problem solving on microcomputers. Students produce variety of business reports and build and maintain files using both sequential and random techniques. (Special Fee)

COP 1200
3 Credits
FORTRAN PROGRAMMING
Suggested prerequisite: CGS 1000. Extensive study of FORTRAN statements and their use in solving appropriate problems. Emphasis on problem organization, data manipulation and input/output operations. (Special Fee)

COP 2121
3 Credits
ADVANCED PROGRAMMING
Prerequisites: CGS 1000, COP 2126, and COP 2120 or departmental approval. Survey of other programming languages available and continuation of COP 2120, providing for wider and more extensive application of COBOL to business data processing applications and problems. Major emphasis on program writing, testing, debugging and complete documentation. (Special Fee)

COP 2126
3 Credits
COBOL PROGRAMMING I
Suggested prerequisite: CGS 1000 or departmental approval. Study of high level business oriented programming language (COBOL) in sufficient detail to enable students to solve effectively problems normally encountered in business. (Special Fee)

COP 2120
3 Credits
COBOL PROGRAMMING II
Prerequisite: COP 2126. Continuation of study of COBOL programming with advanced applications. (Special Fee)

PCOP 2161
3 Credits
ADVANCED RPG/400
Prerequisite: COP 1160 or equivalent experience. A continuation of RPG programming focusing on the AS/400 implementation. Topics include full procedural file processing, structured programming, data structures, workstation programming, and subroutines. DDS coding for physical, logical and display files covered, as are SDA and SEU utilities. (Special Fee)

COP 2230
3 Credits
ADA PROGRAMMING
Prerequisite: COP 1000 or departmental approval. Introductory course in ADA programming language focusing on program design principles as well as ADA syntax. Students develop programs using principles of modularity, cohesion, coupling and concurrency. Object-oriented programming covered. (Special Fee)

COP 2341
3 Credits
UNIX
Prerequisite: CGS 1000 or departmental approval. Study of UNIX operating system providing introduction to basic time-shared operating system concepts. Introduction to application programming using UNIX interprocess communication facility and services. UNIX shells, UNIX file system, and software tools and utilities covered. (Special Fee)

COP 2351
3 Credits
COMPUTER OPERATING SYSTEM (AS/400)
Student learns fundamentals of minicomputer operations, using College's IBM AS/400 system. Hands-on learning stressed, giving student experience in hardware operations, operating system installation and use, and use of utility programs. (Special Fee)

COP 2400
3 Credits
ASSEMBLY LANGUAGE PROGRAMMING
Prerequisite: COP 1170 or equivalent programming experience. Computer structure, number systems, data representation, arithmetic and logic instructions, addressing modes, looping techniques, sequential input/output, subroutines, macros and other topics. Five hours lecture/laboratory instruction. (Special Fee)

COP 2700
3 Credits
DATA BASE MANAGEMENT SYSTEMS
Suggested Prerequisite: Knowledge of one programming language or department approval. Compares various file processing methods relating to data bases and record concepts in relation to trees, lists and networks. Includes review of data base management systems and use of one such system in business application environment.

COT 2000
3 Credits
INTRODUCTION TO DISCRETE STRUCTURES
Prerequisite: COP 1000 and MAC 231. Include logic, sets, functions, relations, combinatorics, graphs, Boolean algebra, finite-state machines, Turing machines, unsolvability, computational complexity.
CONSTRUCTION TECHNOLOGY

BCN 1200C  
BUILDING MATERIALS AND CONSTRUCTION METHODS  
4 Credits  
Survey of materials and methods used in construction. Covers broad areas of wood, concrete, masonry, metal and other building materials. Students select various topics for class presentation. Variety of audiovisual material enhances student understanding of topics.

BCN 1220  
HEAVY CONSTRUCTION METHODS AND EQUIPMENT  
3 Credits  
Introductory study of methods to determine quantities of materials, equipment, labor and money required for construction projects. Covers characteristics and capabilities of work equipment, methods of obtaining unit costs of inplace construction, field reporting practices and responsibilities of field inspection.

BCN 1705  
CONSTRUCTION BLUEPRINT READING  
3 Credits  
Study of various types of drawings and documents used in construction industry. Includes such topics as terminology, abbreviations, symbols, notations, scales and dimensions, meaning of lines, drawing history, technical and orthographic projection, types of construction and trade information.

BCN 1721  
CONSTRUCTION PLANNING AND CONTROL  
3 Credits  
Survey of important points to be considered in construction projects. Covers development of CPM (Critical Path Method) plan with emphasis on construction activities, time durations, scheduling, sequence of operations, follow-up methods, project control and integration of calendar dates to the plan.

ETC 2200C  
SOILS AND FOUNDATIONS  
4 Credits  
Analysis of subsoil conditions, bearing capacity and settlement analysis, character of natural soil deposits, earth pressure and retaining wall theory and stability of slopes and sub-grades. Also covers foundation design, behavioral characteristics and pile driving. (Special Fee)

ETC 2521  
HYDROLOGY AND DRAINAGE  
3 Credits  
Prerequisite: ETC 2013. Emphasis on theory of hydrology as it relates to drainage areas, storm water runoff and streamflow analysis. Design concepts and techniques cover subsurface drainage and storm drainage structures such as ditch checks, conduit systems, bridges and culverts.

BCN 2021  
ADVANCED CONSTRUCTION METHODS AND APPLICATIONS  
3 Credits  
Exposes student to various technological breakthroughs as they develop within building construction industry. Emphasis on future construction, trends, industry demands, regulations and advancements in state of the art.

BCN 2405C  
STATICS AND STRENGTH OF MATERIALS  
4 Credits  
Prerequisite: PHY 1053C. Covers principles of statics, structural mechanics and effects of loads and loading on building elements and frames. Some major areas include materials, stress and deformation, properties of sections, gravity loads, shear and bending in beams, and stresses in columns.

BCN 2563  
BUILDING SERVICE SYSTEMS  
4 Credits  
Survey of design and installation of various mechanical and electrical systems used in buildings. Covers heat loss and heat gain, comfort control, water systems, system installation and coordination, illumination and other selected topics.

BCN 2616  
BUILDING CONSTRUCTION ESTIMATING  
3 Credits  
Basic steps of estimating from review of drawings and specifications to development of final estimate including overhead and profit factors. Prepares students to make some estimates commonly used in construction industry.

BCN 2949  
COOPERATIVE EDUCATION: BUILDING CONSTRUCTION FIELD EXPERIENCE  
3-4 Credits  
Prerequisite: Departmental approval. Student earns credit by working in supervised training assignment directly related to College major. May be repeated for credit.

ETM 2013  
HYDRAULICS AND PIPE FLOW  
3 Credits  
Study in basic theory of hydraulics of flow in pipes and in open channels (fluid mechanics). Presents illustrations and examples of piping and other equipment used in buildings and factories for water supply, sewage, transfer of liquid products and wastewater disposal.

SUR 2200C  
HIGHWAY DRAFTING AND ROUTE DESIGN  
4 Credits  
Prerequisite: SUR 1100, TAR 1120C. Highway drafting includes topographic maps, plans and profiles and cross sections. Route design covers traffic and vehicular characteristics, curvature and elevation of roadbeds, earthwork and aerial photography as they affect cost and route design. (Special Fee)

TAR 1120C  
ARCHITECTURAL DRAWING I (Wood Frame Structures)  
4 Credits  
Prerequisite: Minimum of one unit of high school drafting or equivalent work experience in drafting or ETD 1100C for students with no drafting experience. Covers residential design and wood frame construction with additional study in aspects of housing, aesthetics and working drawings. Students prepare assigned drawings. (Special Fee)
TAR 203C  
ARCHITECTURAL DESIGN  
4 Credits  
Prerequisites: TAR 1120C and TAR 2122C or TAR 1120C and TAR 2154C. Introduction to architectural planning and design. Use of project team concept. Student projects include shopping centers, industrial complexes, production facilities, apartment complexes, high-rise building, etc. Students prepare necessary drawings to construct project, including site plan, building plans, sections, etc. Students also build model of their project. (Special Fee)

TAR 2122C  
ARCHITECTURAL DRAWING II: STEEL STRUCTURES  
4 Credits  
Prerequisite: TAR 1120C. Introduction to steel frame buildings, commercial or institutional, and problems involved in their representation. Covers steel frame terminology, fundamentals of design elements, typical details, framing plans, shop drawings, and architectural design drawings. (Special Fee)

TAR 2154  
ARCHITECTURAL DRAWING III: CONCRETE STRUCTURES  
4 Credits  
Prerequisite: TAR 1120C. Provides experiences in preparing working drawings of commercial structures with specific application to reinforced concrete. Includes symbols, conventions, standards of reinforced concrete drawings, typical details, precast and prestressed concrete and preparation of working drawings. (Special Fee)

CRIMINAL JUSTICE

CCJ 1010  
CRIMINOLOGY  
3 Credits  
Study of nature and extent of crime and delinquency, causes and explanations of criminal behavior and rationale of crime control and treatment in United States.

CCJ 1020  
INTRODUCTION TO CRIMINAL JUSTICE  
3 Credits  
Introduction to and overview of history, philosophy and operations of criminal justice system.

CCJ 2022  
CONTEMPORARY ISSUES IN CRIMINAL JUSTICE  
3 Credits  
Discussion and examination of current issues and problems of interest and concern to criminal justice system.

CCJ 2130  
CRIMINAL JUSTICE AND COMMUNITY RELATIONS  
3 Credits  
Examination of dynamics of public expectations of criminal justice system. Various community relations programs explored.

CCJ 2230  
CRIMINAL LAW AND LEGAL PROCEDURE I  
3 Credits  
Overview of nature and origins of criminal law, role of courts, and U.S. Constitution.

CCJ 2330  
COMMUNITY CORRECTIONS: AN ALTERNATIVE TO INCARCERATION  
3 Credits  
Overview of probation and its process, parole and community-based corrections programs which are alternatives to corrections.

CCJ 2331  
CRIMINAL LAW AND LEGAL PROCEDURES II  
3 Credits  
Review of courtroom procedures, Florida criminal statutes and their relevance to specific crimes, juvenile laws, rules of evidence, rules of arrest and civil liability issues.

CCJ 2400  
LAW ENFORCEMENT ADMINISTRATION  
3 Credits  
Examination of elements, processes, and functions of management essential to effectiveness of law enforcement agencies.

CCJ 2440  
CORRECTIONS ADMINISTRATION  
3 Credits  
Examination of methods, practices and procedures involved in operation of institutional and non-institutional corrections.

CCJ 2930  
SELECTED TOPICS IN CRIMINAL JUSTICE  
1-3 Credits  
For students interested in exploring further special criminal justice topics through research, discussions and observations. Topics may be selected from areas of law enforcement, corrections, courts and loss prevention. Students may earn from one to three hours of credit each time course is offered. May be repeated for credit providing different topic is explored each time.

CCJ 2934  
CRIMINAL JUSTICE SEMINAR  
1-3 Credits  
Research and discussions of selected issues regarding roles and functions of criminal justice agencies.

CJT 2110  
CRIMINAL INVESTIGATION I  
3 Credits  
Recording crime scene, collecting and preserving evidence. Familiarizes students with police crime laboratory and interview and interrogation theories.

CJT 2100  
CRIMINAL INVESTIGATION II  
3 Credits  
Tactics of investigation applied to specific types of crimes. Analysis of modus operandi, modus and corpus delicti of various crimes. Explores evidence gathering and criminalistic procedures.

CJT 2810  
CRIME CONTROL AND PREVENTION  
3 Credits  
Study of security controls to minimize business and industrial losses. Classroom and field exercises used to study physical and procedural loss control systems.

CJT 2812  
COMMERCIAL AND RETAIL LOSS PREVENTION  
3 Credits  
Examination of loss problems encountered in retail sales establishments. Emphasis on prevention of shoplifting, employee theft, credit card fraud, inventory shrinkage, fraudulent checks, and related problems.

DEH 1001  
INTRODUCTION TO CLINICAL PROCEDURES  
1 Credit  
Corequisite: DEH 1001L. DEH 1003, DEH 1003L. Provides student with fundamental information necessary for clinical performance in DEH 1001L and subsequent clinical courses. One Hour Lecture.
DEH 1001L
INTRODUCTION TO CLINICAL PROCEDURES LAB
Corequisite: DEH 1001. DEH 1003. DEH 1003L. Clinical application of material covered in DEH 1001. Students perform clinical assessment procedures on student partners to develop clinical skills and perform acceptable infection control skills. Three Hours Clinical. (Special Fee)

DEH 1003
FUNDAMENTALS OF DENTAL HYGIENE
Corequisite: DEH 1003L, DEH 1001, DEH 1001L. Provides student with knowledge of basic principles of instrumentation, instrument design and instrumentation skills necessary to perform in subsequent clinical dental hygiene courses. Also introduces concept of oral health and disease with emphasis on preventive dentistry through use of plaque control methods and carries preventive agents. Two Hours Lecture.

DEH 1003L
DENTAL HYGIENE INSTRUMENTATION
Corequisite: DEH 1003, DEH 1001, DEH 1001L. Designed for student to apply basic principles of instrumentation, instrument design, and fundamental dental hygiene skills in clinical setting. Students perform clinical procedures on student partners and manikins to develop instrumentation and other clinical skills. Six Hours Clinical. (Special Fee, Insurance Fee)

DEH 1800
DENTAL HYGIENE I
Prerequisite: DEH 1001, DEH 1001L, DEH 1003, DEH 1003L, DES 1020, DES 1020L, DES 1200, DES 1200L Corequisites: DEH 1800L. Continuation of DEH 1003 with more advanced topics including ultrasonic instrumentation, root planing, treatment planning, recall, instrument sharpening, and desensitization of root surfaces. Time allotted for clinical seminar.

DEH 1800L
CLINICAL DENTAL HYGIENE I
Prerequisite: DEH 1001, DEH 1003, DEH 1003L, DEH 1001L and current AHA course CPR card. Corequisite: DEH 1800. Students begin patient care in dental hygiene clinic with emphasis on medical histories, oral examination procedures, instrumentation, radiographs, and topical fluoride application. 12 Hours Clinical. (Special Fee)

DEH 1802
DENTAL HYGIENE II
Prerequisite: DEH 1800 and 1800L, DES 1100 and 1100L, HUN 1001. Corequisite: DEH 1802L. Students introduced to alterations in treatment for special patients such as geriatric patient and physically and mentally handicapped patients. Wheelchair transfers covered. Dietary analysis reviewed and students complete food diary and analysis of own diet. Time allotted for clinical seminar. Two Hours Lecture.

DEH 1802L
CLINICAL DENTAL HYGIENE II
Corequisite: DEH 1802, DEH 2530L. Emphasizes increasing skill in patient care, instrumentation, and radiographs. Students perform additional clinical services such as amalgam polishing, pit and fissure sealants, and alginate impressions. Selected off-campus clinical sites enhance clinical experience with special patients. Nine Hours Clinical. (Special Fee)

DEH 1820
DENTAL OFFICE EMERGENCIES
Prerequisite: APB 2821C. Corequisite: DEH 1800, DEH 1800L, APB 2822C. Basic skills necessary to function effectively as dental team member in medical emergencies in dental office. Emphasis on prevention and management of emergency situations. One Hour Lecture. (CPR certification not included in course.)

DEH 2504
ADVANCED PRINCIPLES OF DENTAL HYGIENE AND DENTAL SPECIALTIES
Prerequisite: DEH 2804 and DEH 2804L. Furthers students' knowledge of recent advances in dentistry and dental hygiene. Selected topics include recent research in periodontology, computers in dentistry, and dental specialties. Two Hours Lecture.

DEH 2530L
EXPANDED FUNCTIONS LABORATORY
Prerequisite: DES 1100 and 1100L Corequisite: DEH 1802 and 1802L. Provides student didactic information and laboratory experience to perform selected expanded functions permitted by state dental practice act. Three Hours Lab. (Special Fee)

DEH 2602
PERIODONTOICS
Prerequisite: DEH 1030C and MCB 2010C. Presents classification of periodontal disease, clinical picture, causative factors, treatment planning, therapy and dental hygienist's role in working with periodontal disease. Includes lecture in root planing and gingival curettage.

DEH 2700
COMMUNITY DENTAL HEALTH I
Prerequisite: SPC 1600; Corequisites: DEH 2804L. Introduces student dental hygienists to study of various aspects of community dentistry/public health and basic concepts of surveying, analysis, planning, finance, implementation, and evaluation in public health. Study of statistical analysis, recent concepts of preventive dentistry research methodology, and dental health education skills, methods and materials. Three Hours Lecture.

DEH 2701
COMMUNITY DENTAL HEALTH II
Prerequisite: DEH 2700. Gives student dental hygienists opportunity to apply concepts and methods learned in DEH 2700 at community level. Class project designed and implemented. One Hour Lecture.

DEH 2804
CLINICAL DENTAL HYGIENE IV
DEH 2804L
CLINICAL DENTAL HYGIENE IV
4 Credits
Prerequisite: DEH 1802 and 1802L, DEH 2602. Corequisite: DEH 2804, DES 2044. Emphasizes proficiency in oral prophylaxis, radiographic techniques, soft tissue curetage, root planning, dietary analysis, treatment planning, and diagnostic models. Students prepare case documents on selected clinical patients and participate in patient care at off-campus clinical sites. 12 Clinical Hours. (Special Fee and Insurance Fee).

DEH 2806
DENTAL HYGIENE IV
2 Credits
Prerequisites: DEH 2804, DEH 2804L, DES 2044. Corequisite: DEH 2806L. Includes study of ethics, jurisprudence and practice management, resume writing and employment opportunities. Time allotted for clinical seminar. Two Hours Lecture.

DEH 2806L
CLINICAL DENTAL HYGIENE IV
5 Credits
Prerequisite: DEH 2804 and DEH 2804L, DES 2044. Corequisite: DEH 2806. Emphasizes incorporation of all treatment modalities presented in series of clinical dental hygiene courses. Nitrous oxide sedation introduced. Students continue to participate in patient care at off-campus clinical sites. 15 Hours Clinical. (Special Fee)

DEH 2930
SELECTED TOPICS IN DENTAL HYGIENE
1-5 Credits
Prerequisite: Departmental approval. Designed for students interested in obtaining additional dental hygiene skills.

DES 1020
DENTAL ANATOMY
2 Credits
Corequisite: DES 1020L. Study of skeletal, muscular circulatory, nervous and glandular systems of head and neck. Emphasizes tooth morphology and function. Two Hours Lecture.

DES 1020L
DENTAL ANATOMY LAB
1 Credit
Corequisite: DES 1020. Includes identification of permanent and primary dentition, identification of skeletal portions of human skull, blood and nerve supply, and muscles and glands associated with head, neck and oral cavity. Three Hours Laboratory.

DES 1030C
GENERAL ORAL HISTOLOGY
2 Credits
Prerequisites: APB 2203C, DEH 1003, DEH 1003L, DES 1020, DEH 1800 and DEH 1800L. Detailed study of minute structures of tissues. Lecture material includes morphology of different tissues, early embryonic development and histologic features of structures of oral cavity of particular interest to dental hygienist. (Special Fee)

DES 1100
DENTAL MATERIALS
2 Credits
Prerequisite: DEH 1003 and DEH 1003L. Corequisite: DEH 1100L. Includes study of characteristics, properties, and application of materials used in dentistry. Two Hours Lecture.

DES 1100L
DENTAL MATERIALS LAB
1 Credit
Corequisite: DES 1100L. Includes properties, manipulation and application of dental materials. Students practice manipulating and using materials commonly used in dental and dental hygiene practice. Three Hours Laboratory. (Special Fee)

DES 1200
DENTAL RADIOGRAPHY
2 Credits
Corequisite: DES 1200L. Provides student with background on nature, physical behavior and biological effect of radiation as well as radiation hygiene. Two Hour Lecture.

DES 1200L
DENTAL RADIOGRAPHY LABORATORY
1 Credit
Corequisite: DES 1200. Develops student proficiency in exposing and processing diagnostically acceptable radiographs. Lab sessions provide experience in x-ray safety procedures, exposure, processing, mounting and interpreting radiographs. Three Laboratory Hours. (Special Fee)

DES 2044
GENERAL AND ORAL PATHOLOGY
3 Credits
Prerequisite: MCB 2010C, DES 1030C and APB 2204C. Introduction to general pathology with consideration of more common diseases affecting human body. Particular emphasis on study of pathological conditions of mouth, teeth and their supporting structures and relationships to systemic disturbances.

DES 2050
PHARMACOLOGY
2 Credits
Prerequisite: APB 2821C-2822C, MCB 2010C. Corequisites: DEH 1804L and DEH 2700. Presentation of basic aspects relating to the physical and chemical properties, dosage, methods of administration and therapeutic use of pharmaceutical preparation used in dentistry.

DIAGNOSTIC MEDICAL SONOGRAPHY

SON 1000
INTRODUCTION TO SONOGRAPHY
1 Credit
Introduces student to radiology department and interaction of diagnostic ultrasound section with other imaging areas. Includes study of darkroom procedure and film processing.

SON 1001C
FUNDAMENTALS OF SONOGRAPHY
3 Credits
Prerequisite: HSC 1650, SON 1000. Continuation of SON 1000. Includes ultrasound terminology, basic operation of ultrasound scanners, routine scan planes, and review of cross sectional anatomy of abdomen and pelvis.

SON 2112C
ABDOMINAL SONOGRAPHY
4 Credits
Prerequisite: SON 1000C. In-depth study of sonographic imaging of abdominal viscera, and pathological processes that affect this area of body. Also includes correlation of ultrasound findings with clinical laboratory tests.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SON 2123C</td>
<td>OB/GYN SONOGRAPHY I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: SON 2122C. In-depth study of female pelvis with emphasis on sonographic appearance of these structures, and numerous pathological processes that may affect them. Continues with early pregnancy and its complications.</td>
<td></td>
</tr>
<tr>
<td>SON 2133</td>
<td>OB/GYN SONOGRAPHY II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: SON 2123C. Continuation of SON 2123C in sonographic evaluation of pregnancy and related complications. Stresses detection of fetal anomalies, pathology, and scan planes necessary for appropriate imaging.</td>
<td></td>
</tr>
<tr>
<td>SON 2150C</td>
<td>NEUROSONOLOGY &amp; SUPERFICIAL STRUCTURES</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: SON 2133. Study of sonographic imaging of premature infant brain and pathological processes that affect it. Includes sonographic evaluation of prostate, scrotum, thyroid gland, and breast.</td>
<td></td>
</tr>
<tr>
<td>SON 2416</td>
<td>SONOGRAPHIC FILM CRITIQUE I</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Review of discussion of selected case studies with careful attention to technical factors, normal anatomy, and pathological processes.</td>
<td></td>
</tr>
<tr>
<td>SON 2417</td>
<td>SONOGRAPHIC FILM CRITIQUE II</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: SON 2416. Continuation of review and discussion of selected case studies with careful attention to technical factors, normal anatomy, and pathological processes.</td>
<td></td>
</tr>
<tr>
<td>SON 2418</td>
<td>SONOGRAPHIC FILM CRITIQUE III</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: SON 2417. Continuation of review and discussion of selected case studies with careful attention to technical factors, normal anatomy, and pathological processes.</td>
<td></td>
</tr>
<tr>
<td>SON 2614</td>
<td>ACOUSTICAL PHYSICS &amp; INSTRUMENTATION I</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: PHY 1002. Study of properties of diagnostic ultrasound and effective utilization of them to produce quality scans. Also covers biologic effects of ultrasound on body tissue, and routine maintenance of sonographic equipment.</td>
<td></td>
</tr>
<tr>
<td>SON 2618</td>
<td>ACOUSTICAL PHYSICS &amp; INSTRUMENTATION II</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: SON 2614. Continuation in study of properties of diagnostic ultrasound and their role in production of quality ultrasonic images of patient organs.</td>
<td></td>
</tr>
<tr>
<td>SON 2840</td>
<td>CLINICAL SONOGRAPHY I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: SON 2112C. Supervised clinical experience and competency evaluation in performing sonographic procedures with emphasis on patient care, equipment orientation, cross sectional imaging planes, and performance of quality exams.</td>
<td></td>
</tr>
<tr>
<td>SON 2850</td>
<td>CLINICAL SONOGRAPHY II</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: SON 2840. Continuation of supervised clinical experience and competency evaluation in performing routine sonographic procedures with emphasis on patient care, equipment orientation, cross sectional imaging planes, and performance of quality exams.</td>
<td></td>
</tr>
<tr>
<td>SON 2860</td>
<td>CLINICAL SONOGRAPHY III</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: SON 2850. Continuation of supervised clinical experience and competency evaluation in performing routine sonographic procedures with emphasis on patient care, equipment orientation, cross sectional imaging planes, and performance of quality exams.</td>
<td></td>
</tr>
<tr>
<td>SON 2867</td>
<td>CLINICAL SONOGRAPHY IV</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: SON 2860. Continuation of supervised clinical experience and competency evaluation in performing routine sonographic procedures with emphasis on patient care, equipment orientation, cross sectional imaging planes, and performance of quality exams.</td>
<td></td>
</tr>
</tbody>
</table>

### DIETETIC TECHNOLOGY

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIE 1001</td>
<td>HEALTH FIELD I</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Explores current trends in health field and food service industry. Overview of appropriate professional associations: membership requirements, code of ethics, standards of practice and service components. Reviews role delineation and career ladder options. Current legislation influencing health field and particularly field of dietetics examination. Identifies and reviews regulatory bodies and laws governing delivery of health care in institutions.</td>
<td></td>
</tr>
<tr>
<td>DIE 1006</td>
<td>HEALTH FIELD II</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Planning, organizing and enhancing personal and career development skills. Improving job search and work effectiveness skills utilizing assets to promote personal satisfaction. Identify and explore values inherent in professional dietetics.</td>
<td></td>
</tr>
<tr>
<td>DIE 1270L</td>
<td>NUTRITIONAL CLINICAL PRACTICE I</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Prerequisite or Corequisite: HUN 1201. Application of theory, principles and techniques studied in HUN 1201. On-site visits and guests allow students to observe, compare and contrast various health care agencies and institutions. Activities focus on identifying facilities, philosophy, goals, objectives, policies, procedures, organizational structure and services. Student takes closer look at dietary departments' roles and functions.</td>
<td></td>
</tr>
<tr>
<td>DIE 1271L</td>
<td>NUTRITIONAL CLINICAL PRACTICE II</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite or Corequisite: HUN 1290 and FSS 1202C. Application of theory, principles and techniques studied in HUN 1290. Supervised field experience in nutrition care designed to develop, test and evaluate competencies in application of nutrition knowledge and principles of individual patient care. Emphasis on becoming familiar with dietary operations to include planning regular and modified diets, assisting patients in meal selection,</td>
<td></td>
</tr>
</tbody>
</table>
DIE 1412 NUTRITION III, NUTRITION AND NUTRITION COUNSELING
Prerequisite: DIE 1271L. Student acquires working knowledge of interviewing techniques, nutritional assessments and counseling. Emphasis on methods and techniques of nutrition education for all age groups and educational levels. Main focus on ambulatory nutritional care, i.e. public health, out-patient clinics, HMOs, etc.

DIE 2100 HEALTH CARE DELIVERY SYSTEMS
Overview of various types of health care facilities and health delivery systems operating in the U.S.: their purpose, organization, need in society, general function and staffing. Facilities such as hospitals, long-term care facilities, rehabilitation centers. HMOs, private and public out-patient clinics, health departments along with social services, welfare agencies, non-profit organizations compared and contrasted. Student becomes familiar with various agencies and organizations that provide valid nutrition education materials.

FSS 1001 INTRODUCTION TO FOOD SERVICE MANAGEMENT
Study of organization and management of food service in health care facilities. Examines role of dietary department in relation to other departments in institution. Study of trends in methods of food service in hospitals and extended care facilities. Emphasis and techniques of supervision and personnel management to include techniques of employment, training, promotion, job specifications, discipline and morale. Includes methods of purchasing, receiving, usage, storage and inventory control.

FSS 1202C PRINCIPLES OF FOOD PREPARATION
Laboratory experience helps student develop knowledge and skill in preparation of food, including principles and techniques of food preparation, management of resources, use and care of equipment and evaluation of food products. Emphasis on safety, sanitation, work habits and proper storage practices. Tests modifications of recipes for therapeutic diets.

FSS 2221 QUANTITY FOOD PRODUCTION AND FOOD MANAGEMENT
Prerequisite: FSS 1202C. Advanced course expanding skills learned in FSS 1202C. Emphasis on application of skills in realistic management operating situations. Includes analysis of factors involved in selection, purchasing and use of equipment as well as functional layout and design of institutional kitchens, dietary office and service areas. Emphasis on marketing menus in health care systems. Student plans, coordinates, executes and evaluates meal to serve fifty people.

HUN 1201 NUTRITION I: BASIC NUTRITION
Study of food nutrients, their digestion, absorption and metabolism. Student acquires understanding of relationship of food to human development and maintenance of health for all age groups. Various food habits and current issues in nutrition studied and compared. Current literature examined.

HUN 1290 NUTRITION II: DIET THERAPY
Prerequisite: DIE 1270L. Introduction to basic physiological changes in given disease states and study of general principles of dietary management. Development of diets for hospitals, nursing homes and special health problems with regard to age, activity and condition of individual or patient. Special emphasis on development of attractive menus for people under medical care.

HUN 1401 NUTRITION IV: APPLICATION OF DIET IN DISEASE
Prerequisite: DIE 2272L. Focus on specific procedures involved with implementation of nutrition care for patient in health care institutions. Emphasis on interdisciplinary team approach to patient care. Study of charting technique, record keeping, auditing, quality assurance and evaluation of services. Medical terminology and food and drug interactions mastered.
DRAFTING AND DESIGN TECHNOLOGY

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
</table>
| CAP 2201 | 3       | 3-D CADD  
Prerequisite: ETD 1350 or departmental approval. Provides experienced CADD student with advanced three dimensional concepts needed for drawing and editing 3-D wireframe or surface model. Creating and orienting 3-D faces taught, along with geometric considerations. Hands-on experience provided with CADD software to produce advanced drawings. |
| CAP 2202 | 3       | CUSTOMIZING AND DIRECTORIES - CADD  
Prerequisite: ETC 1320 and ETD 1350. Provides hands-on experience in writing of macros and development of menus, followed by instruction in enhancing autocad system environment. Autolisp programming presented to develop more efficient macros, and add drafting and calculation functions to commands. |
| EGS 2131C | 4       | GEOMETRIC DIMENSIONING & TOLERANCING  
Covers instructions on precision machinist's drawings and enables student to interpret such drawings according to ANSI (American National Standards Institute) standard. Fundamental concepts, symbols, definitions, and applications of geometric tolerancing are covered for use on engineering drawings. |
| EGS 2132C | 3       | CATIA BASIC  
3-D CAD/CAM system with many different modules integrated into one system. Modules include 3-D Design, Drafting, Solids, Image Design and Numerical Control to name a few. CATIA Certification at Martin Marietta, Orlando, requires successful completion of three courses: BASIC CATIA, ADVANCED CATIA with SOLIDS and CATIA DRAFTING. Certification allows student access to MCAE CATIA system. |
| ETD 1320 | 3       | INTRODUCTION TO CADD  
Prerequisite: ETC 1100C or departmental approval. Introduction to computer-aided drafting/design. Emphasizes skills and competencies necessary to function in systems drafting environment. Includes keyboard commands, menu printer/plotter, input devices, computer terminology and systems operation. Provides hands-on experience to create, save and retrieve drawings having various shapes, lines, types, dimensions and layers. (Special Fee) |
| ETD 1350 | 3       | ADVANCED CADD  
Prerequisite: ETC 1320C or departmental approval. Provides experienced CADD student opportunity to approach detailed and intricate drafting and design problems from computer perspective. Provides hands-on experience in creating custom menus, slides, text fonts, attributes, extractions, 3-D drawings and rotations. (Special Fee) |
| ETD 1701 | 3       | MECHANICAL DRAFTING I  
Prerequisite: ETC 1100C. Drawing basic machine elements and subassemblies including screw threads, linkage, gears and cams with consideration to precision and limit dimensioning, tolerance allowances and limits. Study of working assembly and outline drawings with attention to drawing of assembly and details from pictorial drawings and sectional views of assemblies. Includes two-hour laboratory. (Special Fee) |
| ETD 2641 | 4       | ELECTROMECHANICAL DRAFTING  
Prerequisite: ETC 1100C or departmental approval. Study in fundamentals of electromechanical drafting designed to provide student with basic concepts and principles needed to prepare electromechanical working drawings. Student introduced in laboratory to various circuit elements and devices used in preparation of writing diagrams, schematics, block diagrams, layout of electronic chassis and wire harnesses. Emphasis on printed circuit board layout, as well as advanced microcircuit and integrated circuit drafting techniques. Includes a two-hour laboratory. (Special Fee) |
| ETD 2702 | 3       | MECHANICAL DRAFTING II  
Prerequisite: ETD 1701C. Continuation of ETD 1701C. Includes basic instruction in piping and structural drawing as related to mechanical drafting; integrates knowledge previously acquired in mechanical mechanisms and introduces charts, graphs, diagrams and various pictorial presentations of engineering information. Includes two-hour laboratory. (Special Fee) |
| ETD 2855 | 3       | ELEMENTS OF TOOL DESIGN  
Prerequisite: ETC 1701C and ETM 1828 or departmental approval. Study in fundamentals of tool design with emphasis on basic principles of tool development, jigs, fixtures and devices for efficient and economical product manufacturing. Includes, in addition to planning and design of tools, preparation of working drawings from which tools are made. Includes laboratory. (Special Fee) |
| ETD 2949 | 2-4     | COOPERATIVE EDUCATION: DRAFTING AND DESIGN FIELD EXPERIENCE  
Prerequisite: Departmental approval. Student earns credit by working in supervised training assignment directly related to College major. May be repeated for credit. |

ECONOMICS

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
</table>
| ECO 1000 | 3       | BASIC ECONOMICS  
General survey of basic economic concepts and institutions to prepare student for intelligent citizenship. Emphasis on principles of production, determination of prices, distribution of income and economic problems of everyday life. Not intended for majors in economics or certain business curricula requiring six semester hours in ECO 1023 and ECO 2013. No credit granted if ECO 2013 has been satisfactorily completed. |
ECO 1023  
PRINCIPLES OF ECONOMICS-MICRO  
Introduction to economic theory and fundamentals of economic analysis. Emphasis on study of microeconomics: market structure, price determination, factors of production, distribution of income and effects of monopoly and oligopoly on markets. Half of two-semester sequence; should normally be taken before ECO 2013, which completes sequence.

EDG 2949  
COOPERATIVE EDUCATION: EDUCATION FIELD EXPERIENCE  
Prerequisite: Departmental Approval. Student earns credit by working in supervised training assignment directly related to College major. May be repeated for credit.

EEX 2010  
ORIENTATION TO EXCEPTIONAL EDUCATION  
Covers definition, characteristics, theories, current trends and controversies in various categories of exceptional education.

SPA 2380  
AMERICAN SIGN LANGUAGE I  
Introduction to American Sign Language with emphasis on vocabulary as used by deaf adults. Includes introduction to history and culture of deafness in America and linguistic structure and conceptual vocabulary of conversational (expressive and receptive) sign language skills. Describes various manual communication systems and philosophies.

SPA 2381  
AMERICAN SIGN LANGUAGE II  
Prerequisite: SPA 2380 or departmental approval. Continuation of SPA 2380 emphasizing intermediate level sign vocabulary and use of signing space. Provides greater opportunity for skill development in ASL structure and introduces ASL idioms.

ELECTRONICS  
ENGINEERING/LASER OPTICS/COMPUTER INTEGRATED MANUFACTURING

CAP 1600  
INTRODUCTION TO COMPUTERS IN MANUFACTURING  
Designed to enhance student’s knowledge of computers in manufacturing. Covers fundamentals of microcomputers, industrial terminals, data entry, peripheral devices, introduction to DOS, networking, file management, and I/O communication.

CET 2112C  
DIGITAL TECHNIQUES  
Corequisite: EET 1141C or departmental approval. Introductory lecture/laboratory course in computer technology. Student introduced to principles and techniques required for development of analysis skills in digital circuitry. Topics include computer number systems; digital codes and parity error detection methods; Boolean algebra; Karnaugh mapping; logic gate minimization techniques; arithmetic operations via combination logic gate minimization techniques; arithmetic operations via combination logic; flip-flop timing and synchronization circuits; and pulse waveform generation. Laboratory projects provide hands-on experience in use of laboratory instruments and in techniques for measurement and interpretation of digital data. (Special Fee)

CET 2113C  
COMPUTER SYSTEMS FUNDAMENTALS  
Prerequisite: CET 2112C or departmental approval. Intermediate lecture/laboratory course in computer technology. Student
introduced to various digital subsystems (logic assemblies) and their use in digital computing and control systems and provided with analytical tools necessary to perform analyses and problem diagnoses. Topics include counters/shift register systems and applications; digital subsystems using integrated circuit logic chips encoding/decoding techniques; data interfacing and busing; multiplex/demultiplex systems; analog/digital conversion techniques; static/dynamic memory systems; and computer system organization. Laboratory projects and demonstrations provide student practical insight into capabilities and limitations of alternative methods of data transfer, storage and interface conversion commonly utilized in digital computing or control system applications. (Special Fee)

CET 2123C 4 Credits
FUNDAMENTALS OF MICROCOMPUTERS
Prerequisite: CET 2112C or departmental approval. Systems level workshop/study course covers logic of micro-processor-based computer system. Microprocessor trainers furnished provide individual hands-on experience in developing, debugging and executing programs, interfacing to actual or simulated peripheral loads. Student's progress self-paced, with final assessment determined by both quality and quantity of work accomplished. Includes three-hour laboratory. (Special Fee)

EET 1015C 3 Credits
FUNDAMENTALS OF DC CIRCUITS
Prerequisite: MTB 1327 or departmental approval. Fundamental course in DC electric circuits. Prepares student for EET 1025C and subsequent advanced courses in electronic technology program. Classroom lectures supplemented with laboratory projects to provide student with practical hands-on experience in use of electronics test equipment and in proper techniques for data measurements/interpretation and trouble-shooting. Includes two-hour laboratory. (Special Fee)

EET 1025C 3 Credits
FUNDAMENTALS OF AC CIRCUITS
Prerequisite: EET 1015C or departmental approval. Corequisite: MTB 1328 or departmental approval. Fundamental course in AC and transient-response networks designed to prepare students for advanced courses in electronics technology program. Classroom lectures supplemented with laboratory projects to provide student with practical hands-on experience in use of electronics test equipment and in proper techniques for data measurements/interpretation, trouble-shooting and orderly documentation of test results and conclusions. Includes two-hour laboratory. (Special Fee)

EET 1141C 4 Credits
ELECTRONIC CIRCUITS I
Prerequisite: EET 1025C or equivalent training in DC and AC electric circuits fundamentals. First of two-course sequence in electronic semiconductor circuits. Provides basic understanding of electronic circuits which utilize semiconductor diode and transistor circuit elements. Introduces concept of circuit simplification via idealizations, approximations and overview of semiconductor devices and their electrical properties. Emphasis on circuit analysis and various small-signal, linear and power applications utilizing diodes and transistors. Students assigned appropriate hands-on laboratory projects to expose them to practical considerations in implementing various semiconductor circuits analyzed in classroom. Includes three-hour laboratory. (Special Fee)

EET 2142C 4 Credits
ELECTRONIC CIRCUITS II
Prerequisite: EET 1141C. Second of two-course sequence in electronic semiconductor circuits. Covers more complex applications, including field-effect transistor circuitry, amplitude/phase shift response of transistor amplifiers, integrated circuits, negative and positive feedback circuits, voltage regulators, operational amplifiers, spectrum analysis and harmonic distortion. Provides practical hands-on experience via assigned laboratory projects to supplement classroom lectures. Familiarity gained with an array of commercial test equipment frequently used in industrial development and testing facilities. Includes three-hour laboratory. (Special Fee)

EET 2155C 4 Credits
LINEAR OPERATIONAL AMPLIFIERS
Prerequisite: EET 2142C or departmental approval. Provides detailed analysis of linear operational amplifier (OP-Amp), including transfer function response characteristics. Considers performance limitations, such as noise generation and unbalanced common mode rejection phenomena. Examines a broad range of applications including instrumentation, differentiators/integrators, voltage source regulation and ripple reduction, timing circuits, function generators, active filters, digital-to-analog conversion, data sampling and hold, voltage/frequency conversion, and phase-locked loops. Laboratory projects provide students hands-on experience to supplement classroom lectures.

EET 2183C 3 Credits
ELECTRONIC TROUBLE-SHOOTING TECHNIQUES
Corequisite: EET 2142C, CET 2113C. Provides student systematic approach to fault analysis and trouble-shooting of electronic systems and circuits. Student given extensive hands-on experience in selecting and interconnecting appropriate test equipment as may be necessary to evaluate or trouble-shoot performance of electronic equipment under test. Stresses systematic approaches in diagnosing malfunctions, isolating sources of problem and repair/replacement of faulty devices. Includes two-hour lab. (Special Fee)

EET 2235C 4 Credits
ELECTRONIC COMMUNICATION SYSTEMS I
Prerequisite: EET 2142C or departmental approval. Emphasis on traditional system aspects of electronic communications utilizing basic circuits and concepts discussed in prerequisite courses. Includes information transmitting and receiving methods, noise bandwidth, amplitude modulation and demodulation, single-sideband communications, frequency modulation and demodulation and television systems. Classroom lectures supplemented with laboratory projects to provide practical hands-on experience and to reinforce understanding of concepts presented in lecture material. Includes three-hour lab. (Special Fee)

EET 2235C 4 Credits
ELECTRONIC COMMUNICATION SYSTEMS II
Prerequisite: EET 2235C or departmental approval. Emphasis on later generation system aspects of electronic communications. Includes more recently developed communication techniques, digital communication systems, transmission lines, wave propagation, antennas, waveguides and microwave hardware. May provide variations from (and additions to) schedules topics, depending on interests of students. Classroom lectures
supplemented with laboratory demonstrations and assigned projects to provide students practical insight and hands-on experience to supplement material covered in lectures. Includes three-hour lab. (Special Fee)

EET 2501  
3 Credits  
FUNDAMENTALS OF ELECTRICAL POWER DC  
Prerequisite: MTB 1327 or departmental approval. Principles of direct current power electricity presented with emphasis on power systems. Provides introductory understanding of generation, transmission, and distribution of power. Cable and wire selection for industrial and commercial application. Classroom lectures supplemented by field visits.

EET 2502  
3 Credits  
FUNDAMENTALS OF ELECTRICAL POWER AC  
Prerequisite: MTB 1328 and EET 2501 or departmental approval. Fundamental course in alternating electrical power. Explains concepts of power flow and control. Prepares student for advanced level courses. Classroom lectures supplemented by substation, generating plant, distribution and transmission systems visits.

EET 2521C  
4 Credits  
MOTORS AND CONTROLS  
Prerequisite: MTB 1328 or departmental approval. Covers design, construction, installation and maintenance of equipment to control motors. Studies speed, control, reversal, acceleration, deceleration, starting and stopping functions.

EET 2541C  
4 Credits  
POWER SYSTEMS I  
Prerequisite: EET 1025C and EET 2502 or departmental approval. Details of specific issues of electrical power system. Includes power factor, three-phase circuits, magnetic circuits and transformers. One of two courses covering components of power delivery system. Includes one-hour lab.

EET 2542C  
4 Credits  
POWER SYSTEMS II  
Prerequisite: EET 2541C or departmental approval. Provides understanding of behavior of power systems under normal and abnormal conditions. Explains techniques required to analyze fault currents and load flow studies. Hands-on experience with transmission, distribution, and generation. Includes one-hour lab.

EET 2549  
2-4 Credits  
COOPERATIVE EDUCATION: ELECTRONICS FIELD EXPERIENCE  
Prerequisite: Departmental approval. Student earns credit by working in supervised training assignment directly related to College major.

EET 2201C  
4 Credits  
FUNDAMENTALS OF LASER SYSTEMS  
Prerequisite: PHY 1402C and Corequisite: EET 1025C or departmental approval. Covers basic operational theory of lasers and unique designs of different types of lasers. Emphasis on systems approach, where laser is introduced as one of many components within system containing electrical, mechanical, computer, and optical devices working together to accomplish specific application. Stresses importance of laser safety. Student becomes familiar with major laser manufacturers and employment opportunities in industry. Includes three-hour lab. (Special Fee)
EST 2221C
OPTICAL COMPONENTS AND INSTRUMENTS
4 Credits
Prerequisite: PHY 1402C, or departmental approval. Discusses wave and geometric characteristics of light, as applied to specific optical components and instruments used in laser industry. Studies properties of optical materials and coatings for ultraviolet, infrared, and visible light. Stresses properties and application of various optical elements used in laser systems, as well as operation of telescopes, collimators, spectrometers, monochrometers, and interferometers. Demonstrates function of optical instruments related to laser beam control and optical testing through hands-on projects. Includes three-hour lab. (Special Fee)

EST 2231C
GAS LASERS
4 Credits
Prerequisite: EST 2201C and Corequisite: EET 2142C, or departmental approval. Emphasis on operating theory and procedures for safe use of medium- and high-power lasers. Students gain experience with power supplies, active medium, excitation mechanisms, cooling systems and output characteristics for HeNe, CO2, TEA, and gas dynamic lasers. Provides hands-on experience in use of power-meters, Q-switches, modecontrollers, and other measuring instrumentation/accessories for evaluation/testing of gas laser systems via assigned laboratory projects. Stresses, relentlessly and continually, the importance of rigid adherence to safety procedures. Includes four-hour lab.

EST 2222C
SOLID STATE LASERS
4 Credits
Prerequisite: EST 2201C, EST 2221C and EET 2142C. Presents operating theory and procedures for safe use of CW and pulsed solid state lasers. YAG used as primary example of this type of laser in laboratory exercises, although other types of active medium discussed as lecture topics. Presents design considerations relative to size and shape of laser rods, pumping cavities, flashlamps, resonator cavities, power supplies, cooling systems and output characteristics. Investigates Q-switches and other intercavity components as part of overall laser system. Teaches measuring devices and techniques necessary to obtain accurate beam diagnostics through both lectures and laboratory activities. Includes four-hour lab. (Special Fee)

EST 2251C
SELECTED LASER TOPICS
2-4 Credits
Prerequisite: EST 2201C and EST 2221C or departmental approval. Familiarizes student with specific laser-generation laser application not covered elsewhere in this curriculum. Such topics will include, with relative emphasis dependent on interests of students, as optical communications, fiber optics, holography, and laser safety standards. Laboratory projects may include data transmission over fiber optics lines and holographic recording of images. Study of laser safety standards centers on FDA standards and recommendations of ANSI Z136.1 standards. Includes two-hour lab. (Special Fee)

EST 2252C
LASER APPLICATION DESIGNS
3 Credits
Prerequisite: EST 2231C or departmental approval. Overview of generic systems analysis of commercially built laser systems for medical, industrial, and military applications. Provides examples of laser system implementation in actual applications (i.e., medical, industrial, and military) via laboratory projects (actual or simulation), video presentations, or pre-arranged visitations to operational laser systems at local medical, industrial, or military installations (subject to accessibility). Includes two-hour lab. (Special Fee)

EST 2261
LASERS IN MEDICINE
3 Credits
Describes types of lasers used in medicine today and illustrates with field trips their actual application in hospital demonstrations and surgical procedures. In addition, development systems are observed in university and industry labs. Term paper project is required.

EST 2527C
ELECTROMECHANICAL COMPONENTS AND MECHANISMS
4 Credits
Combined lecture/laboratory course stressing functions, specifications, and operating characteristics of integrated electromechanical systems. Includes (but not limited to) such components/mechanisms as mechanical linkages (gears, pulleys, limited switches, etc.), electromechanical devices (motors, servos, relays, stepping switches, timing devices, etc.), sensing elements, optical scanning and encoding devices, error-sensing/feedback and control mechanisms, etc.

EST 2538
CONTROL SYSTEMS INSTRUMENTATION
3 Credits
Prerequisite: Departmental approval. Supervised laboratory course in which student learns to use, specify and interconnect instrumentation and test equipment for maintaining and troubleshooting various control systems normally found in industrial environment.

EST 2620C
COMPUTER NUMERICAL CONTROL PROCESSES
4 Credits
Introduction to computer numerically controlled production machinery. Presents machine types, numerical control programs, codes and functions, tooling and conversational machine theory. Includes two-hour lab.

EST 2622C
COMPUTER NUMERICAL CONTROL PROGRAMMING
4 Credits
Prerequisite: EST 2620C. Presentation of computer numerical control tape format and code, conversational programming, code compensation techniques, tool cycles and programming, Laboratory experience with major machine types. Includes two-hour lab.

EST 2624C
COMPUTER ASSISTED MACHINE PROGRAMMING
4 Credits
Prerequisite: EST 2620C. Presents direct numerical control theory, intermediate milling and lathe applications, intermediate graphics programming and computer-assisted part programming. Includes two-hour lab.

EST 2635
COMPUTER INTEGRATED MANUFACTURING
4 Credits
Prerequisite: EST 2676C or departmental approval. Presents design and development concept for computer integrated manufacturing, flexible manufacturing systems, interfacing of CAD to production components, communication and protocol systems, operations and maintenance laboratory exercises with CIM software area networks and work cell controllers. Includes two-hour lab.
EST 2661
MANUFACTURING RESOURCES PLANNING
4 Credits
Presents component relationships of MRP, role of master production schedule, stock replenishment, bill of materials, standard routing, and time phase concepts. MRP simulations presented using computer software to illustrate advantages and requirements for implementation of various software packages to include IBM MAPICS II, "Fourth Shift" and "Job Boss."

EST 2673C
PROGRAMMABLE CONTROLLERS I
4 Credits
Prerequisite: ETE 1143C or departmental approval. Introduction to theory of operation of analog and digital controllers and software techniques, including math tables, logic charts, and Boolean algebra. Particular emphasis on ladder logic diagrams, timing functions, counters, and master control relays. Laboratory projects provide practical insights into capabilities and limitations of programmable controllers in industrial applications. Includes three-hour lab.

EST 2674C
PROGRAMMABLE CONTROLLERS II
4 Credits
Prerequisite: EST 2673C or departmental approval. Review of EST 2673C. Analog and digital controllers, including P, PI, and PID algorithms, with emphasis on advanced digital controllers. Laboratory projects provide hands-on experience in developing, debugging, and executing programs and in trouble-shooting hardware problems. Includes three-hour lab.

EST 2675C
AUTOMATION SYSTEMS I
3 Credits
Introduction to history of automation, master-slave manipulators, teleoperators, industrial robots, basic terms used in field, workplace design, engineering economy and robot classifications. Laboratory projects demonstrate robotics concepts. Includes two-hour lab.

EST 2676C
AUTOMATION SYSTEMS II
3 Credits
Prerequisite: EST 2675C or departmental approval. Emphasizes automation system components. Covers robot arms, kinematics, power sources, motors, gears, pulleys, mobility, controllers, and computers. Introduces basic sensors such as light, sound, laser, color, motion, and heat. Incorporation of components into operational systems. Laboratory projects provide hands-on experience and reinforce understanding of concepts presented in lecture. Includes two-hour lab.

ETE 2770C
QUALITY ASSURANCE AND RELIABILITY TESTING
3 Credits
Prerequisite: EST 2332C. Course covers application of probability statistics and sampling for microelectronic process control and failure analysis. Military standards and reliability documents used to evaluate product performance and identify cause of failure. Includes two-hour lab. (Special Fee)

ETE 2930
SELECTED TOPICS IN ELECTRONICS TECHNOLOGY
2-6 Credits
Prerequisite: EET 1141C or departmental approval. Provides exposure to various technical and nontechnical disciplines in which student is likely to become involved upon entry into industrial working environment.

ETM 2315C
HYDRAULICS AND FLUID POWER
4 Credits
Prerequisite: MTB 1327. Designed for persons practicing or intending to practice as fluid power technician. Covers hydraulics and pneumatics concepts, components and practical applications in fluid power systems for transportation, manufacturing, processing and automation industries. Students should have successfully completed high school elementary physics and algebra. Includes classroom lectures with audio-visual presentations and laboratory exercises with student participation.

MTB 1327
MATHEMATICS FOR ELECTRONICS I
3 Credits
Prerequisite: One year high school algebra and one year high school geometry or MAT 1033 or departmental approval. Emphasizes electronics applications. Students solve problems in arithmetic, unit conversion, algebraic solutions or electric circuits, network theorems and analysis-simplification methods.

MTB 1328
MATHEMATICS FOR ELECTRONICS II
3 Credits
Prerequisite: MTB 1327 or equivalent. Continuation of MTB 1327. Students solve problems of trigonometry of AC units, network frequency response, transient analysis, computer number systems and Boolean algebra of circuits. Prerequisite for all courses in the electronic tech program.

EMERGENCY MEDICAL SERVICES
EMT/PARAMEDIC

EMS 1119
FUNDAMENTALS OF EMERGENCY MEDICAL TECHNOLOGY
4 Credits
Corequisite: EMS 1119L and EMS 1431. Designed to develop health professional capable of providing basic life support in all aspects of emergency medical care. Student learns assessment in medical and trauma emergencies, stabilization of illness/injury and patient transport.

EMS 1119L
FUNDAMENTALS OF EMT PRACTICE
3 Credits
Corequisite: EMS 1119 and EMS 1431. Laboratory exercises emphasize patient assessment, radio communications, airway management, bandaging, splinting, CPR, methodologies of shock treatment, obstetrical assistance, extrication, MAST applications, working with heart monitors, setting up IVs and others. (Lab fee)

EMS 1320
EMT FIELD EXPERIENCE
2 Credits
Designed for EMT with little field experience. Primary focus on extensive practice with basic life support skills and equipment including KED, MAST, vital sign and patient assessment. Clinical hours include field time on rescue/ambulance. Florida EMT certification and liability insurance required.

EMS 1321
ADVANCED LIFE SUPPORT FOR EMT
1 Credit
For EMT who plans to work with paramedic in advanced life support ambulance system. Topics and skills discussed and/or practiced include: EOA, IVs, endotracheal intubation, emergency drugs, ECG monitoring, MAST and ACLS protocols. (Lab fee)
EMS 1332 3 Credits
BIOETHICAL AND LEGAL ISSUES IN HEALTH CARE
Presents models of ethical decision making, risk management, consequences of decisions and liability for these decisions. Includes legal parameters of negligence, assault and battery, implied consent and medical malpractice. Also includes analytical framework for decision-making applicable to all health care workers.

EMS 1431 3 Credits
EMERGENCY MEDICAL TECHNICIAN CLINICAL PRACTICUM
Corequisite: EMS 1119 and EMS 1119L. Allows student to apply in clinical setting skills learned in lab portion of course. Professional liability insurance required. Six contact hours.

EMS 2254 5 Credits
PARAMEDIC I
Prerequisites: EMS 1119, EMS 1119L, EMS 1431 and must hold state EMT certification. Corequisites: EMS 2254L and EMS 2461. Stresses theory and procedures used by comprehensive emergency medical system in advanced care of emergency patient. Covers divisions 1, 2, 3, 5, and 6 of the DOT paramedic curriculum. Ten contact hours.

EMS 2254L 1 Credit
PARAMEDIC I LAB
Corequisites: EMS 2254 and EMS 2461. Open lab available during which students may practice skills, demonstrate skill competency to lab faculty, obtain individual skill tutoring, watch various skill related videos, slides, filmstrips. Three contact hours. (Lab fee.)

EMS 2255 5 Credits
PARAMEDIC II
Prerequisites: EMS 2254, EMS 2254L, EMS 2461 with C or better grade in each. Continuation of learning theory and procedures used by comprehensive emergency medical system in advanced care of emergency patient. Covers division 4 from the DOT paramedic curriculum. Ten contact hours.

EMS 2255L 1 Credit
PARAMEDIC II LAB
Corequisites: EMS 2255 and EMS 2462. Lab is continuation of lab made available for EMS 2254L. Skills and various videos relate to information taught in EMS 2255. Three contact hours. (Lab fee.)

EMS 2331 5 Credits
AIR TRANSPORT OF ACUTE EMERGENCIES
Students learn effects of altitudinal change on human body in health, illness and injury and use of normal and emergency equipment during air transport in care of patient. Students acquainted with types of air transport used for ambulance purposes and laws governing them.

EMS 2461 4 Credits
PARAMEDIC I CLINICAL
Corequisite: EMS 2254 and EMS 2254L. Practicum stressing clinical application of advanced procedures and theories learned in Paramedic I. Directed experience in emergency departments, operating rooms, burn units, labor and delivery and respiratory therapy in local hospitals. Professional liability insurance required. Ten contact hours.

EMS 2462 4 Credits
PARAMEDIC II CLINICAL
Corequisites: EMS 2255 and EMS 2255L. Practicum provides opportunity for each student to develop competency in clinical skills within hospital and field necessary to serve as member of advanced life support team. Stresses integration of EMT and paramedic responsibilities so student gains confidence in clinical problem solving. Directed experience in field units, ICU, CCU, pediatrics, emergency department. Professional liability insurance required. Ten contact hours.

EMS 2463 5 Credits
PROVISIONAL FIELD INTERNSHIP
Under auspices of medical director, provides extensive clinical experience exposing student to scene management, medical decision making and development of professional and interpersonal skills. Offered at completion of all didactic and skill instruction so student may develop final competency in application of basic and advanced life support skills in prehospital emergency medicine. Professional liability insurance required. Ten contact hours.

EMS 2512 3 Credits
ENDOTRACHEAL INTUBATION
Prerequisite: Must be paramedic or RN with current ACLS certification. Provides opportunity for student to receive physician supervised instruction and clinical experience in endotracheal intubation. Professional liability insurance required.

EMS 2525 3 Credits
ELECTROCARDIOGRAPHY
Systematic approach to interpretation of electrocardiograms. Describes basic components of cardiac cycle and their relationship to electrocardiogram. Basic skills in dysrhythmia interpretation stressed as well as advanced skills such as 12-lead interpretation, infarct location determination, axis deviation, and conduction defects.

EMS 2531 2 Credits
PARAMEDIC COMMUNICATIONS
Discusses use of various emergency communications equipment, radio report techniques and delivery, proper completion of written run report and legal consideration in proper documentation.

EMS 2555 2 Credits
BASIC TRAUMA LIFE SUPPORT
Knowledge and skills leading to certification in Basic Trauma Life Support (BTLS). Includes trauma scenarios, demonstrations, lectures and practical application of skills.

EMS 2930 1-5 Credits
SELECTED TOPICS IN EMS
Designed for students interested in obtaining additional skills as EMT or paramedic. Provides clinical experience and/or didactic activities. May require student to provide professional liability insurance. (Special fee may be required.)
ENGINEERING

EGS 1130C
DESCRiptive GEOMETRY
3 Credits
Prerequisite: ETD 1100C. Includes theory and practice in solving graphic problems involving point, line and space relationships. Includes two-hour lab. (Special Fee)

ETD 1100C
ENGINEERING DRAWING
3 Credits
Survey of principles and practices involved in making and reading engineering drawings. Emphasis placed on lettering, industrial symbolism, visualization, orthographic projection and line techniques. Includes two-hour lab. (Special Fee)

ETM 1822
ENGINEERING MATERIALS AND PROCESSES
3 Credits
Survey of basic materials used in industry, metallic and nonmetallic, and processes used to form, fabricate and finish these materials.

ENGLISH

AML 2010
SURVEY IN AMERICAN LITERATURE: COLONIAL PERIOD TO CIVIL WAR
3 Credits
Prerequisite: ENC 1101 or 1101H. Representative authors and selections. Each student writes 6,000 words. Grade of C to satisfy Gordon Rule and general education requirements.

AML 2010H
SURVEY IN AMERICAN LITERATURE: COLONIAL PERIOD TO CIVIL WAR - HONORS
3 Credits
Same as AML 2010 with honors content. Honors program permission required.

AML 2022
SURVEY IN AMERICAN LITERATURE: CIVIL WAR TO PRESENT
3 Credits
Prerequisite: ENC 1101 or 1101H. Representative authors and selections. Each student writes 6,000 words. Grade of C to satisfy Gordon Rule and general education requirements.

AML 2022H
SURVEY IN AMERICAN LITERATURE: CIVIL WAR TO PRESENT - HONORS
3 Credits
Same as AML 2022 with honors content. Honors program permission required.

CRW 2000
CREATIVE WRITING AND ADVANCED COMPOSITION
3 Credits
Prerequisite: ENC 1101 or ENC 1101H. Writing short stories, poems, plays, novels, personal essays, and magazine articles with students developing writing skills in chosen literary type. Includes short, documented research paper. Each student writes 6,000 words. Grade of C to satisfy Gordon Rule and general education requirements.

ENC 0010
COLLEGE-PREP ENGLISH I
3 Credits
For students scoring 32 or below on ASSET or making equivalent score on other state-approved entry test. Referral also on basis of diagnostic writing samples. Emphasis on standard American usage and grammatically correct sentences in unified paragraph. Three classroom hours of instruction; two hours of support in lab. Upon successful completion, student must take ENC 0012. Credit does not apply toward associate degree. (Special Fee)

ENC 0012
COLLEGE-PREP ENGLISH II
3 Credits
Prerequisite: Satisfactory completion of ENC 0010 or score of 33-36 on ASSET or equivalent score on other state-approved entry test. Referral also on basis of diagnostic writing samples. Prepares students to plan and write grammatically correct paragraphs. Three hours of classroom instruction; two hours of support in lab. Upon completion with C, students may take ENC 1101. Credit does not apply toward the associate degree. (Special Fee)

ENC 1101
FRESHMAN COMPOSITION I
3 Credits
Prerequisites: ENC 0012 with grade of C and passing grade in REA 0002 or scores of 37 on both English and reading components of ASSET or equivalent scores on other state-approved entry test. Introduction of essay form; instruction and practice in expository writing. Emphasis on clarity of central and supporting ideas, adequate development, logical organization, coherence, and grammatical and mechanical accuracy. Each student writes 6,000 words. Grade of C to satisfy Gordon Rule and general education requirements.

ENC 1101H
FRESHMAN COMPOSITION I - HONORS
3 Credits
Same as ENC 1101 with honors content. Honors program permission required.

ENC 1102
FRESHMAN COMPOSITION II
3 Credits
Prerequisite: ENC 1101 or 1101H with grade of C. Application of skills learned in ENC 1101. Emphasis on style, use of library, reading and evaluating available sources; planning, writing, and documenting short research paper. Each student writes 6,000 words. Grade of C to satisfy Gordon Rule and general education requirements.

ENC 1102H
FRESHMAN COMPOSITION II - HONORS
3 Credits
Same as ENC 1102 with honors content. Honors program permission required.

ENC 1210
TECHNICAL COMMUNICATION
3 Credits
Prerequisite: ENC 1101 or 1101H. Emphasis on clear, simple and precise English. Writing of business letters, office memos, technical reports, proposals and recommendations. Practice in collecting and organizing data and preparing report formats. Includes oral reports and interview techniques.

ENC 2302
ADVANCED CREATIVE WRITING - LITERARY MAGAZINE
3 Credits
Prerequisite: CRW 2000 or departmental approval. Writing in genre of student's choice. Literary criticism and production of College literary magazine.
ENG 2100
INTRODUCTION TO FILM
3 Credits

ENG 2930
SELECTED TOPICS IN ENGLISH
1-3 Credits
Special topics in writing and/or literature.

ENL 2013
SURVEY IN ENGLISH LITERATURE: 1300-1800
3 Credits
Prerequisite: ENC 1101 or 1101H. British literature through 18th century. Each student writes 6,000 words. Grade of C to satisfy Gordon Rule and general education requirements.

ENL 2023
SURVEY IN ENGLISH LITERATURE: 1800 TO PRESENT
3 Credits
Prerequisite: ENC 1101 or 1101H. British literature of the 19th and 20th centuries. Each student writes 6,000 words. Grade of C to satisfy Gordon Rule and general education requirements.

LIT 2090
CONTEMPORARY LITERATURE
3 Credits
Prerequisite: ENC 1101 or 1101H. Representative works of contemporary poets, novelists, short story writers, dramatists, and non-fiction writers especially significant since World War II. Emphasis on issues and ideas related to present and future. Each student writes 6,000 words. Grade of C to satisfy Gordon Rule and general education requirements.

LIT 2090H
CONTEMPORARY LITERATURE - HONORS
3 Credits
Same as LIT 2090 with honors content. Honors program permission required.

LIT 2110
SURVEY IN WORLD LITERATURE: BEGINNING THROUGH RENAISSANCE
3 Credits
Prerequisite: ENC 1101 or 1101H. Major poetry, fiction, drama, and essays. Each student writes 6,000 words. Grade of C to satisfy Gordon Rule and general education requirements.

LIT 2120
SURVEY IN WORLD LITERATURE: ENLIGHTENMENT TO PRESENT
3 Credits
Prerequisite: ENC 1101 or 1101H. Major poetry, fiction, drama, and essays. Each student writes 6,000 words. Grade of C to satisfy Gordon Rule and general education requirements.

ENGLISH AS A SECOND LANGUAGE

ENS 1221
INTERMEDIATE ENGLISH READING I
3 Credits
Prerequisite: Demonstration of required level of English proficiency. Designed for non-native speakers of English primarily interested in reading for academic purposes. Students read textbooks and other academic books which use English to communicate information: instructions, descriptions, explanations, comparisons, contrasts, analyses, arguments.

ENS 1241
INTERMEDIATE ENGLISH WRITING I
3 Credits
Prerequisite: Demonstration of performance at required level of English language proficiency and ENS 1261 as pre- or co-requisite. Intended for English as a second language and students who plan to use English for academic purposes. Students define, classify, analyze, and generalize and illustrate prose content. Writing of original paragraphs using chronological order, spatial order, order of importance, cause and effect relationships, and comparison and contrast.

ENS 1261
INTERMEDIATE ENGLISH STRUCTURE PATTERNS I
3 Credits
Prerequisite: Demonstration of required level of English proficiency. Designed for non-native speakers of English. Reviews basic sentence patterns and introduces more complex grammatical relationships. Requires written and oral transformations of sentence patterns. Emphasis on function words, verbs and verb phrases.

ENS 1301
INTERMEDIATE SPEECH FOR NON-NATIVE SPEAKERS II
3 Credits
Prerequisite: Demonstration of required level of English proficiency. Continuation of ENS 1201. Further skill development in listening comprehension, academic note-taking, extemporaneous speech preparation and delivery, and overall communicative competence.

ENS 1321
INTERMEDIATE ENGLISH READING II
3 Credits
Prerequisite: Demonstration of required level of English proficiency. Continuation of ENS 1221. Develops reading strategies that enable students to extract information from academic sources. Library exercises introduce students to campus library and teach them how to use its resources to research material for papers and oral presentations.

ENS 1341
INTERMEDIATE ENGLISH WRITING II
3 Credits
Prerequisite: Demonstration of performance at required level of English language proficiency and ENS 1361 as pre- or co-requisite. Continuation of ENS 1241. Students perfect paragraph writing skills and expand writing skills to include development of multi-paragraph essay.

ENS 1361
INTERMEDIATE ENGLISH STRUCTURE PATTERNS II
3 Credits
COMBINED SKILLS-ENGLISH AS A SECOND LANGUAGE
Prerequisite: Demonstration of performance at required level of English language proficiency and department approval. Designed for limited English proficient (LEP) speakers who require postsecondary preparation in English before admission to Valencia’s ENS program. This combined skills course addresses all areas of skill development (grammar, reading, writing, speaking, and listening). Includes one hour of language lab per week. Credit does not apply to associate degree.

ENVIRONMENTAL SCIENCE TECHNOLOGY

EVS 1133 3 Credits
WATER TREATMENT I
Designed to provide students with theoretical, technical and practical knowledge necessary for Florida C level certification for water treatment. Designed to offer survey of all plant processes, specific knowledge needed to safely operate processing units and applied training in operation and maintenance of solution feed gas chlorination systems. Eight contact hours.

EVS 1143 3 Credits
WATER TREATMENT II
Prerequisite: EVS 1133 and/or Florida certificate level C in water treatment or equivalent. Provides in-depth look at water treatment process begun in basic treatment plant operations. Covers treatment systems typical of larger operations and, because of their more complex nature, places greater concentration on chemical and biological aspects of treatment. Stresses study of issues and techniques that small-plant managers and first line supervisory personnel need to become familiar with. Provides instruction necessary for Florida B level certification in water treatment. Eight contact hours.

EVS 1333 3 Credits
WASTEWATER TREATMENT I
Provides theoretical and practical knowledge necessary for Florida C level certification in wastewater treatment. Includes material relating to areas of microbiology, mathematics, problem solving, mechanical maintenance and repair, record keeping and operational safety relevant to operations. Eight contact hours.

EVS 1343 3 Credits
WASTEWATER TREATMENT II
Prerequisite: EVS 1333 and/or Florida certification level C in wastewater or equivalent. In-depth look at wastewater process begun in EVS 1343. Covers treatment systems typical of larger operations and, because of their more complex nature, places greater concentration on biological aspects of treatment. Also stresses study of issues and techniques that small-plant managers and first-line supervisors need to become familiar with. Provides instruction necessary for Florida B level certification in wastewater treatment. Eight contact hours.

EVS 1401 3 Credits
BASIC ELECTRICITY, BLUEPRINTS, AND ENERGY CONSERVATION
Prerequisite: Two years of high school algebra or equivalent. Basic principles of electricity, electric motors and pumps, efficiency, and controls. Students learn fundamentals of blueprint interpretation and energy conservation as related to plant design and operation. Includes lecture, lab, and field trip experiences.

EVS 1861 3 Credits
ENVIRONMENTAL REGULATIONS
Includes fundamentals of environmental regulations and functions of regulatory agencies at federal, state, and local levels. Includes study of environmental impact statements and principles of environmental law.

EVS 2153 3 Credits
WATER TREATMENT III
Prerequisite: EVS 1143 and/or Florida certificate level B in water treatment or equivalent. Provides theoretical and technical knowledge necessary for Florida A level certification in water treatment. Directed towards individual who has achieved C or B levels of certification in two main areas: managing treatment plant operations and advanced and innovative treatment techniques. Material offered using problem-solving approach, in which students find their own solutions to problems and critique them as to practicality in costs, labor, materials, and safety considerations. Eight contact hours.

EVS 2191 3 Credits
ENVIRONMENTAL SAMPLING AND ANALYSIS
Prerequisite: CHM 1205C, EVS 1861, and EVS 2812. Lecture/lab/field course includes proper methods of collecting, transporting and analyzing samples of water, wastewater, air, and soil. Stresses techniques for data analysis and presentation.

EVS 2353 3 Credits
WASTEWATER TREATMENT III
Prerequisite: EVS 1343 and/or Florida certification level B in wastewater or equivalent. Provides information in advanced wastewater treatment. Covers treatment of larger operations along with advanced effluent disposal and sludge treatment handling. Stresses importance of proper supervisory techniques in personnel, budget preparation, and setting and conducting training programs. Designed to provide instruction necessary for Florida A level certification in wastewater treatment. Eight contact hours.

EVS 2501 3 Credits
SOLID WASTE MANAGEMENT
Includes lecture and field experiences. Students learn methods of collection and transportation of solid wastes. Study of principles of landfill operation and management as well as alternative forms of disposal, including resource recovery, co-generation, and composting.

EVS 2601 3 Credits
HAZARDOUS MATERIALS
Prerequisite: CHM 1025. Lecture/field course includes principles of safe handling, classification and management of hazardous materials. Students learn basic provisions of important regulation programs such as RCRA, SARA and OSHA.

EVS 2792 3 Credits
AIR QUALITY
Lecture/field course includes discussion of types, sources, causes, and remedies of air pollution. Students learn relationship between air pollution and meteorological processes. Discusses effects of air pollution on humans and natural and built world.
ENVIRONMENTAL MICROBIOLOGY 3 Credits
Prerequisite: BCS 1010 or APB 1150. Methods of identification, culture and analysis of micro-organisms. Special emphasis on pathological micro-organisms common to water/wastewater systems and methods of disinfection and sterilization. Lecture/lab course includes two hours of lecture and three hours of lab each week.

FILM PRODUCTION 3 Credits

FIL 1270
INTRODUCTION TO THE FILM PROCESS
Study of filmmaking process from concept to completion with special emphasis on relationship between various job categories and specific role of "below the line" production technician.

FIL 2200
FILM PRODUCTION
Participation by student as technician in College-sponsored film production. Must be repeated for up to 12 hours credit. (Special Fee)

FIL 2271
FILM CAMERATechniques
Prepares student to function in all capacities as member of motion picture camera department. Focuses on care and handling of equipment, documentation and solving film shooting problems.

FIL 2272
FILM LIGHTING
Study of film lighting techniques, practices and equipment. Includes lighting theory, power distribution systems and color theory. Special emphasis on working as part of film production team.

FIL 2273
FILM GRIPPING
Study of use of gripping skills and equipment as related to feature film production. Emphasis on learning strategies necessary to anticipate shooting needs and problem-solving.

FIL 2274
FILM EDITING
Acquaints students with techniques and aesthetics of film editing. Emphasis on visual and audio post-production.

FIL 2275
FILM SOUND
Focuses on theory and practice of production and post-production film sound. Special emphasis on techniques of sound imaging in filmmaking process.

FIL 2930
SELECTED TOPICS IN FILMS.
Seminar for students interested in research, discussion and observation of special topics in film and film production.

FIRE SCIENCE 3 Credits

FFP 1000
INTRODUCTION TO FIRE SCIENCE TECHNOLOGY
Study of chemistry and physics of fire; detailed study of effects of fire on national economy, as well as review of fire experience of United States; detailed examination of basic fire classifications, fire causes and leading fire problems; survey of agencies involved in fire safety, fire protection and materials handling; familiarization with federal, state and local fire protection ordinances.

FFP 1130
COMPANY OFFICER LEADERSHIP
Includes basic aspects of leadership: leadership style, communications, group dynamics, individual behavior, motivation and various types of management currently used.

FFP 1410
FIRE FIGHTING STRATEGY AND TACTICS
Basic concepts of fire fighting, size-up, fire attack principles, use of manpower and equipment at company level. Emphasis on developing thinking skills in working with common fires and operations to ensure success at more serious ones.

FFP 2150
METHODS AND TECHNIQUES OF INSTRUCTION FOR FIRE SCIENCE
Principles, procedures and techniques of teaching with emphasis on methods of instruction, developing training outlines, use of visual aids and testing procedures for fire technology instructors.

FFP 2180
FIRE DEPARTMENT MANAGEMENT
Principles and functions of fire department management. Chief officer's role as manager, including objectives of fire department, planning, budgeting, water supplies, relationship of insurance to fire protection, communications and fire alarms, organization and legal aspects of prevention, fire investigation and changing concepts in management.

FFP 2200
INTRODUCTION TO FIRE INSPECTION
Structure and organization of fire prevention organizations; conducting inspections, interpreting and applying code regulations; study of procedures and techniques of fire prevention, including surveying and mapping, recognition and elimination of fire hazards; fire risk analysis as applied to municipal and industrial occupancies; problems of public relations, including coordination with other agencies, public education, inspection practices.

FFP 2210
FIRE INVESTIGATION
Study of cause and origin of fires with emphasis on fire inspector's or fire officer's role in investigative process. Deals with determination of fire cause and origin, collection of evidence and investigator's preparation for trial.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFP 2300</td>
<td>BUILDING CONSTRUCTION AND FUNDAMENTALS</td>
<td>3</td>
</tr>
<tr>
<td>FFP 2315</td>
<td>FIRE PROTECTION CODES AND STANDARDS</td>
<td>3</td>
</tr>
<tr>
<td>FFP 2326</td>
<td>BUILDING PLANS REVIEW FOR FIRE SERVICE</td>
<td>3</td>
</tr>
<tr>
<td>FFP 2500</td>
<td>HAZARDOUS MATERIALS I</td>
<td>3</td>
</tr>
<tr>
<td>FFP 2501</td>
<td>HAZARDOUS MATERIALS II</td>
<td>3</td>
</tr>
<tr>
<td>FFP 2520</td>
<td>FIRE PROTECTION SYSTEMS AND EXTINGUISHING AGENTS</td>
<td>3</td>
</tr>
<tr>
<td>FFP 2930</td>
<td>SELECTED TOPICS IN FIRE SCIENCE</td>
<td>3</td>
</tr>
<tr>
<td>FFP 2949</td>
<td>COOPERATIVE EDUCATION: FIRE SCIENCE FIELD</td>
<td>2-4</td>
</tr>
</tbody>
</table>

**FRENCH**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE 1000</td>
<td>BASIC FRENCH</td>
<td>3</td>
</tr>
<tr>
<td>FRE 1100</td>
<td>ELEMENTARY FRENCH I</td>
<td>3</td>
</tr>
<tr>
<td>FRE 1101</td>
<td>ELEMENTARY FRENCH II</td>
<td>3</td>
</tr>
<tr>
<td>FRE 2200</td>
<td>INTERMEDIATE FRENCH I</td>
<td>3</td>
</tr>
<tr>
<td>FRE 2201</td>
<td>INTERMEDIATE FRENCH II</td>
<td>3</td>
</tr>
</tbody>
</table>

**GEOGRAPHY**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEA 1000</td>
<td>WORLD GEOGRAPHY</td>
<td>3</td>
</tr>
</tbody>
</table>

**GERMAN**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GER 1000</td>
<td>BASIC GERMAN</td>
<td>3</td>
</tr>
<tr>
<td>GER 1100</td>
<td>ELEMENTARY GERMAN I</td>
<td>3</td>
</tr>
</tbody>
</table>
GER 1101
ELEMENTARY GERMAN II
Prerequisite: GER 1100 or departmental approval. Continuation of GER 1100.

GER 2200
INTERMEDIATE GERMAN I
Prerequisite: GER 1101 or departmental approval. Conversational approach based on material which also develops reading and writing skills.

GER 2201
INTERMEDIATE GERMAN II
Prerequisite: GER 2200 or departmental approval. Conversational approach based on material which also develops reading and writing skills.

GRAPHICS TECHNOLOGY

GRA 1500
INTRODUCTION TO GRAPHIC COMMUNICATIONS
3 Credits
Broad look at graphics surrounding us. Explores printing process; typesetting methods, including copyfitting; recognition and identification of papers; layout and color, plus introduction to press camera.

GRA 1530C
FUNDAMENTALS OF TYPOGRAPHY
3 Credits
Covers printer's measurements, copyfitting, history of typography and recognition of popular type faces, specification of types, proofreading and marking of proofs, use of type face specimen books. Students prepare layouts with specific emphasis on type selection. (Special Fee)

GRA 1540C
LAYOUT, DESIGN AND COPY PREPARATION
3 Credits
Prerequisite: GRA 1500 or departmental approval. Planning and visualization of advertising and industrial copy. Student converts rough ideas and designs into comprehensive layouts and prepares camera-ready copy. Experiments conducted with various media involving design balance and color psychology. Appropriate mix of typography, illustration and photography. Also covers type specification, paste-up and keylining for posters, displays, reports, magazines, packaging, labels and letterheads. Includes two-hour lab. (Special Fee)

GRA 1951
PORTFOLIO REVIEW
1 Credit
Prerequisite: ART 1201C, ART 1301C, GRA 1500 or departmental approval. Student develops portfolio to be presented for employment in graphic design. Course may be taken for two terms at one credit each.

GRA 2545C
ADVANCED GRAPHIC DESIGN I
3 Credits
Prerequisite: GRA 1540C or departmental approval. Addresses practical problems relevant to contemporary industry standards in graphic communications. Emphasis on producing layouts and comprehensive in black and white and color. Various up-to-date methods of camera-ready production utilized.

GRA 2546C
ADVANCED GRAPHIC DESIGN II
3 Credits
Prerequisite: GRA 2545C or departmental approval. Comprehensive course involving in-depth study of advanced design problem solving. Includes marketing strategies, exploring design solutions, dealing with clients, costs estimating, presentation and production techniques.

GRA 2571C
PHOTOLITHOGRAPHY
3 Credits
Prerequisite: GRA 1500 or departmental approval. Fundamental photographic principles, theory of photographic materials and application of photographic techniques in production of negatives for printing process. Includes camera operation, developing, enlarging, printing, opaquing, sealing, dark room operation and reproduction of line and halftone copy (both single and two-color). Includes two-hour lab. Taught at Mid-Florida Technical Institute.

GRA 2601C
COLOR STRIPPING
3 Credits
Prerequisite: GRA 1500 and GRA 2571C, or departmental approval. Production procedures for color stripping and hands-on experience in stripping two-color negatives for reproduction.

GRA 2635C
GRAPHIC REPRODUCTION PROCESSES
3 Credits
Prerequisite: GRA 1500 or departmental approval. Fundamentals of single color layout imposition, stripping and opaquing of negatives onto goldenrod. Student introduced to theory of direct image, electrostatic, photo direct, presensitized and plastic plates. Hands-on projects provided in stripping for single color plate selection and burning. Provides theory and hands-on practice of principles and methods of prepress, press operation and cleanup.

GRA 2661C
BINDING OPERATIONS
3 Credits
Prerequisite: GRA 1500 or departmental approval. Student becomes familiar with all aspects of machines used in binding operation. Hands-on experience provided in operation of cutters, folders, joggers, collators, padding equipment, numbering and stitching machines.

GRA 2692
PRINTING PROBLEMS
3 Credits
Prerequisite: GRA 1500 and GRA 2635C, or departmental approval. Presents student with given set of circumstances which include one or more problem areas in production process. Through analyzing several possible solutions, student learns to solve given problem.

GRA 2702
GRAPHICS PRODUCTION MANAGEMENT
3 Credits
Prerequisite: GRA 1500 or departmental approval. Provides graphic student opportunities to organize, develop and manage graphics arts operation from mid- to top-level manager's position. Marketing concepts explored as well as theory of business principles. Students form and manage graphics business, addressing management role in sales, public relations, personnel, production planning, budget and finance, as well as full cycle of business management. Deals with work simplification theories and practices as well as current tools available to approach decision-making situation in business world.

138
GRA 2704C
PRODUCTION SCHEDULING
3 Credits
Prerequisite: GRA 1500, GRA 2571C, and GRA 2635C, or departmental approval. Student learns production scheduling and control techniques, using Job Ticket to determine how best (most economical and most timely) to get job through printing department.

GRA 2706
GRAPHICS ARTS ESTIMATING
3 Credits
Prerequisite: GRA 1500 or departmental approval. Analysis of economic principles and procedures involved in estimating printing production, both letterpress and offset. Investigates various kinds, uses, sizes, weights and finishes of paper stock; establishing hourly cost rates by construction and use of scales, charts and budget forecasts/analysis of specifications, costs of materials and outside services profit margins and pricing from time/cost data.

GRA 2708
GRAPHIC PRESENTATIONS
3 Credits
Prerequisite: GRA 2800 or departmental approval. Study of graphic applications of presenting business and technical information to specific audience. Personal computer and other modern graphic techniques utilized to create business graphic to be displayed in presentation form. Various output methods explored making use of modern graphic mediums, such as flip charts, overhead transparencies, slides and computer animation, to complete multimedia presentation. Emphasizes good design and presentation techniques to produce quality presentations. (Special Fee)

GRA 2740C
GRAPHIC PRESENTATIONS
3 Credits
Prerequisite: GRA 2800 or departmental approval. Study of graphic applications of presenting business and technical information to specific audience. Personal computer and other modern graphic techniques utilized to create business graphic to be displayed in presentation form. Explores various output methods making use of modern graphic mediums such as flip charts, overhead transparencies, slides and computer animation, to complete a multimedia presentation. Emphasis on good design and presentation techniques to produce quality presentations. (Special Fee)

GRA 2743C
ILLUSTRATING
3 Credits
Prerequisite: GRA 1500. Application of freehand sketching and mechanical projection to industrial/commercial problems. Explores portfolio, resume and preparation for job seeking. Employs various mediums such as ink, airbrush, watercolor, acrylics, pastels and colored pencils. Includes studies in planning, production and completion of finished artwork for brochures, reports, manuals and other industrial/commercial publications. (Special Fee)

GRA 2745C
PICTORIAL RENDERING
3 Credits
Basic grounding in construction and drawing methods necessary to produce accurate pictorial and architectural renderings. Explores various mediums including airbrush and wash drawings, caseins, acrylics and ink techniques required to produce drawings suitable for reproduction in advertisements and catalogs or production planning and/or production planning and design analysis. (Special Fee)

GRA 2800
COMPUTER GRAPHICS
3 Credits
Prerequisite: GRA 1500 or departmental approval. Instruction and practical exercises in use of graphics software currently used to create and generate color graphics to accomplish illustration and animation by computer. Student learns necessary computer commands to use software and to produce assigned graphics/commercial art layouts using printers and plotters. Methods of performing pagination and merging text with graphics as well as design concepts that feature capabilities of computer graphics.

GRA 2803
COMPUTER ANIMATION I
3 Credits
Prerequisite: GRA 2800 or departmental approval. Provides instruction in usage of personal computer to generate 2-D images and incorporate those into animated sequences. Principles of traditional drawing and painting, storyboarding and animation effects explored and applied to computer imagery. Students become familiar with necessary hardware and software to create and output animated images.

GRA 2804
COMPUTER ANIMATION II
3 Credits
Prerequisite: GRA 2803 or departmental approval. Provides instruction in usage of personal computer to generate 3-D images and incorporate those into animated sequences. Continuation of studies begun in GRA 2803. Explores applications and uses of 3-D imagery. Students become familiar with necessary hardware, software and peripherals for production.

GRA 2810
GRAPHIC DESIGN FOR DESKTOP PUBLISHING
3 Credits
Prerequisite: GRA 2800 or departmental approval. Provides hands-on usage of high-end desktop publishing software and hardware for production of quality publication. Focus on good graphic design skills: composition, layout, typography, pagination, style, balance, format and project planning. Serves as foundation for application to computer-aided publishing. Encompasses use of text as well as graphics for integration into publications. Explores history, operation, networking, output methods, present and future capabilities of computer-aided publishing.
GRA 2930  
SELECTED TOPICS IN GRAPHIC ARTS  
3 Credits  
Prerequisite: GRA 1500 or departmental approval. In-depth study of various advanced concepts, methods and techniques currently employed in graphic arts field. Explores state-of-the-art applications through research, experimentation, discussion and demonstration.

GRA 2949  
COOPERATIVE EDUCATION: GRAPHIC ARTS FIELD EXPERIENCE  
2-4 Credits  
Prerequisite: Departmental approval. Student earns credit by working in supervised training assignment directly related to College major. May be repeated for credit.

HEALTH

HSC 1000  
PERSONAL HEALTH  
3 Credits  
Acquaints individual with sound principles of healthful living. Emphasis on helping student meet physical, mental and social stresses of daily life. Topics include nutrition, physical conditioning, mental health, reproduction, diseases pertinent to today's lifestyle and alcohol and drug education.

HSC 1400  
FIRST AID/CPR  
3 Credits  
Acquaints individual with principles of first aid/CPR in daily living. Standard first aid and cardiopulmonary resuscitation (CPR) certification may be earned during class. Student learns emergency procedures for cases of unexpected illness or injury.

HEALTH RELATED

APB 1292  
PATHOPHYSIOLOGY  
3 Credits  
Concepts of disease and related pathology. Manifestations and etiology of pathological conditions, their relevance to diagnosis, treatment of disease, trauma, systemic classifications, tissue disruption and healing process.

APB 1390  
MEDICAL TERMINOLOGY  
3 Credits  
Deals with structure, functions and diseases of human body including skeletal, muscular, circulatory and respiratory systems. Lab emphasis on medical work construction, definitions and application of terms as applied to language of medicine. Four hours lecture/lab periods.

APB 1391  
MEDICAL TERMINOLOGY II  
3 Credits  
Continuation of APB 1390 including nervous, sensory, endocrine, digestive, excretory and reproductive systems. Four hours lecture/lab periods.

APB 2562  
PHARMACOLOGY FOR HEALTH RELATED MAJORS  
2 Credits  
Includes study of drugs used in treatment of diseases of human body.

HSC 1230C  
METHODS OF PATIENT CARE  
2 Credits  
Introduction to basic theories, skills, and techniques necessary to carry out quality patient care. Foundation includes communication, assessment skills, aseptic technique, venous access and drug administration, emergency situations and AIDS education. Theoretical and practical knowledge needed to make sound clinical judgments and carry out patient care activities will be presented.

HSC 1531  
MEDICAL TERMINOLOGY  
2 Credits  
Deals specifically with medical terminology. Emphasis on anatomic names of bones and organs of the body, anatomic descriptive terms, radiographic laboratory terms and their common abbreviations and commonly used medical terms and proper usage.

HSC 1650  
PRINCIPLES OF ALLIED HEALTH  
2 Credits  
Overview of selected allied professions with regard to duties, responsibilities, education and training, ethics, law, and relationships with other professionals.

PHY 1002  
APPLIED PHYSICS  
3 Credits  
General principles of physics applied in three-hour lecture course. Study of atomic theory and structure, electrostatics, electrodynamics, magnetism, electromagnetism, electric generators and motors, production and control of high voltage, rectification, circuitry, electromagnetic radiation, and interaction of radiation with matter.

RTE 1703  
ANATOMY AND PHYSIOLOGY  
3 Credits  
Prerequisite: APB 1150. Provides student with knowledge of structure and function of human body systems. Physiology in health and disease emphasized.

HISTORY

AFA 2150  
AFRICAN-AMERICAN HISTORY AND CULTURE  
3 Credits  
Acquaints students with and stimulates interest in life and history of African-Americans with emphasis on origins, enslavement, subculture and struggle for civil rights and human dignity.

AMH 1095  
AMERICAN INDIAN HISTORY  
3 Credits  
Survey of American Indian history from era of European contact to present. Topics include initial contacts with Europeans, Indian resistance, aspects of major Indian cultures, U.S. Government policies, and present status of native Americans.

AMH 2010  
UNITED STATES HISTORY TO 1865  
3 Credits  
Survey of early United States history, emphasizing political, social, and economic developments. Examines such topics as colonization, slavery, American Revolution, U.S. Constitution, War of 1812 and emancipation movement.
AMH 2010H
UNITED STATES HISTORY TO 1865—HONORS
3 Credits
Same as AMH 2010 with honors content. Honors program permission required.

AMH 2020
UNITED STATES HISTORY 1865 - 1945
3 Credits
Survey of United States history between Civil War and World War II. Emphasizes political, social, economic and diplomatic developments, examining such issues as Reconstruction, Spanish-American War, Populist and Progressive movements, Great Depression, and World Wars I and II.

AMH 2020H
UNITED STATES HISTORY 1865-1945 — HONORS
3 Credits
Same as AMH 2020 with honors content. Honors program permission required.

AMH 2070
HISTORY OF FLORIDA
3 Credits
Creates an understanding of and appreciation for historical evolution of Florida. Emphasizes direct student involvement in compiling and collecting documents, artifacts, photographs, slides, tapes, papers, etc.

EUH 1000
WESTERN CIVILIZATION TO 1750
3 Credits
Survey of ancient, medieval and early modern Western civilization, with emphasis on political, social and economic developments. Examines early societies of Mesopotamia and Egypt, Greece, Roman Republic and Empire, early Christianity, barbarian invasions, medieval government and commerce, Renaissance and Reformation, origins of modern state and other topics.

EUH 1001
WESTERN CIVILIZATION 1750 to PRESENT
3 Credits
Survey of modern Western society, with emphasis on industrialization, social developments, rise of modern state and international relations. Examines French and Russian revolutions, Fascist Italy, Nazi Germany, World Wars I and II and other topics.

EUH 2050
HISTORY OF SPAIN I
3 Credits
Creates understanding of history of Spain as embodied in its literature, artistic and social traditions from prehistoric through 17th century. Offered in Spain as part of semester in Spain program.

EUH 2051
HISTORY OF SPAIN II
3 Credits
Creates understanding of history of Spain as embodied in its literature, artistic and social traditions from 18th century to present. Offered in Spain as part of semester in Spain program.

HIS 2206
RECENT AND CONTEMPORARY HISTORY
3 Credits
Creates understanding of political, social, economic, intellectual and ideological forces prevalent in postwar world through study and analysis of recent and contemporary national and international problems.

HIS 2935
SELECTED TOPICS IN HISTORY
1-3 Credits
For students interested in special topics and who wish to explore further the field of history through research, discussion and observation.

HORTICULTURE.

AEB 2020
SOCIOLOGICAL PROBLEMS AND PROGRAMS IN THE AGRICULTURAL COMMUNITY
3 Credits
Study of people problems and institutional programs designed to deal with sociological problems and programs in agricultural communities. Emphasis on development of sub-cultures and their way of life, emergence of middle class in underdeveloped nations, basic concepts of agriculturally oriented society, problems of sociological structures (stratification structures and institutional structures), impact of technological development on varying societies, and population pressures. Includes effect of environmental stress on social policy.

AEB 2662
INTERNATIONAL AGRICULTURAL ECONOMICS HORTICULTURE
3 Credits
Study of important microeconomics principles used in solving horticultural business management problems. Emphasis on world agricultural, specifically horticulture production, and the product system (food, medicinals, fiber, etc.) in the context of both national and international markets. Emphasis on insights into current and persisting policy issues faced by managers and private citizens wanting to participate more fully in local, state, national, and international resource-use initiatives. Laboratory experiences involve management students in horticultural enterprises.

AGE 2230
IRRIGATION DESIGN, CONSTRUCTION AND MAINTENANCE
4 Credits
Prerequisite: HOS 1010 or departmental approval.
Comprehensive study of methods and practices used in design, construction, and maintenance. Topics include selection of sprinkler equipment, piping, hydraulics, water hammer causes, cross-connection control, pumps, maintenance of clean water supplies, sprinkler performance, plot plans, head layout, rotary systems, quick-coupling systems, golf course systems, and electrical equipment used in irrigation systems.

AGG 2433
GEOGRAPHY AND AGRICULTURAL APPLICATIONS
3 Credits
Study of nature of geography as it relates to methodology and human demographics utilized in developing and exploiting the agricultural environments of our planet. Deals with development of related natural resources and populations. Special emphasis on adaptation, preservation, and environmental impact of agricultural factors and populations. Areas of concentration include long-term development versus short-term gains. Methodology includes case studies as well as field trips to areas where environmental impact has had major effect on people and land.
AOM 2012 3 Credits
TYPES AND SYSTEMS OF AGRICULTURAL OPERATIONS
Study of operational and management styles utilized in agricultural (Horticultural) situations. Emphasis on process of systems development, administrative definition, product research and development, service and maintenance, machinery and equipment needs and application, operational analysis for purchasing, communications, transportation, production, and marketing. Laboratory experiences include field trips to horticulture concerns for systems analysis.

BOT 2501 4 Credits
PLANT PHYSIOLOGY
Study of vital phenomena in plants. Concerns processes and functions, responses of plants to changes in environment, and growth and development that result from responses. Laboratory experiences make applications to biological concepts and to practical aspects of all phases and areas of horticulture.

ENY 1002 3 Credits
BASIC ENTOMOLOGY
Introduction to morphology, development, natural history, behavior and importance of insects commonly encountered in horticultural and structural pest control industry.

ENY 1007C 3 Credits
PRINCIPLES OF ENTOMOLOGY
Prerequisite: HOS 1010 or department approval. Discussion of major plant insect pests, their characteristics, identification, life cycles and type of injury inflicted and analysis of various control measures including cultural, biological and chemical methods. Includes pesticides, methods of application and precautions in handling. (Special Fee)

ENY 1102 3 Credits
INSECT IDENTIFICATION
Introduction to classification of insects and related groups commonly encountered in horticultural and structural pest control industries.

ENY 2224 4 Credits
HOUSEHOLD PESTS AND THEIR CONTROL
Prerequisite: ENY 1002, ENY 1102, IPM 1301. Practical approach to identification, biology, life histories, detection and inspection procedures and controls involving general household pests.

FRC 2001L 3 Credits
FRUIT PRODUCTION (POMOLOGY)
Prerequisite: HOS 1010. Areas of study include cultural practices, identification, handling, physiology, storage, breeding of fruiting type plants both for home and commercial use. Includes one-hour lab. (Special Fee)

FRC 2211L 3 Credits
CITRUS CULTURE
Prerequisite: HOS 1010. Deals with citrus production and marketing. Includes study of such practices as propagation, planting, pruning, cultivating, fertilizing, spraying, irrigating, harvesting, grading, storing and marketing. Includes one-hour lab. (Special Fee)

HOS 1010 3 Credits
INTRODUCTION TO HORTICULTURAL SCIENCE
Study of scientific concepts on which horticulture is based. For beginning horticulture students, Part I introduces biology of horticulture; Part II deals with techniques of horticulture; and Part III surveys industry, emphasizing distinguishing characteristics and special problems. Includes aesthetic aspects of horticulture. Laboratory periods cover such practices as pruning, propagation, plant classification. Includes a lab. (Special Fee)

HOS 2030 2 Credits
HORTICULTURAL EQUIPMENT
Operation, safety and maintenance of hydraulic tools for tree and shrub pruning; welding equipment for facility and equipment repair; irrigation equipment for home and commercial use; lawn and turf equipment for construction and maintenance.

HOS 2932 1-4 Credits
SELECTED TOPICS IN HORTICULTURE
Prerequisite: HOS 1010. Encompasses topics of interest or research in horticulture. Subject matter may include topics not offered specifically in other courses in program. (Special Fee)

IPM 1301 3 Credits
PESTICIDES
Involves classification, mode of action, toxicity, mixing, registration and safe application techniques of pesticides used in pest control industry. Includes lab experience

IPM 2622 4 Credits
WOOD DESTROYING PESTS AND THEIR CONTROL
Prerequisite: ENY 1002, ENY 1102, IPM 1301. Practical approach to identification, biology, life histories, detection and control of termites, beetles and fungi which destroy wood in structures. Operation and selection of tools and equipment demonstrated and discussed.

IPM 2631 2 Credits
LAWN AND ORNAMENTAL PESTS AND THEIR CONTROL
Prerequisite: ENY 1002, ENY 1102, and IPM 1301. Practical approach to biology, life histories, identification and control of lawn and ornamental pests.

IPM 2811 3 Credits
SEMINAR: PEST CONTROL BUSINESS ADMINISTRATION
Prerequisite: GEB 1011. Studies in basic nature of pest control services: site selection, business and labor management, production, cost analysis, insurance, laws, taxation and other business methods as related to pest control business.

IPM 2940 2 Credits
FIELD SERVICE
Prerequisite: Departmental approval. One term of part-time experience with pest control firms. Student must observe at least four jobs in each of four major categories of pest control. Requires written and/or oral reports of each job required. Work experience must be approved by professor.
ORH 1234 4 Credits
ORNAMENTAL PLANT MAINTENANCE
Prerequisite: HOS 1010 or departmental approval. Analysis of basic principles and practices used in plant maintenance of designed areas. Considers both preventive and normal maintenance measures. Provides comprehensive survey of design and maintenance problems with emphasis on institutional and public areas. (Special Fee)

ORH 1510 3 Credits
ORNAMENTAL PLANT MATERIALS I
Prerequisite: HOS 1010 or departmental approval. Detailed study of temperate zone plants used in Florida landscaping. Includes identification, growth characteristics, propagation, culture and uses of plants. Labs taught off campus at Harry P. Leu Gardens. (Special Fee)

ORH 1511 3 Credits
ORNAMENTAL PLANT MATERIALS II
Prerequisite: HOS 1010 or departmental approval. Identification, growth characteristics, propagation, culture and use of tropical and sub-tropical plants in Florida plant landscapes. Labs taught off campus at Harry P. Leu Gardens. (Special Fee)

ORH 1831 3 Credits
LANDSCAPING DESIGN AND IMPLEMENTATION
Prerequisite: ORH 1510 or departmental approval. Comprehensive study of design elements, design principles, culture and technique. Includes plan preparation, evaluation, presentation and implementation of functionally designed areas. Includes lab. (Special Fee)

ORH 1873 3 Credits
INTERIORSCAPING, DESIGN AND MAINTENANCE
Prerequisite: ORH 1511 or departmental approval. Comprehensive study of design elements and principles as applied to interior situations and conditions. Emphasis on preparation, evaluation and implementation of functionally designed areas. Maintenance procedures and practices discussed in detail. Includes lab. (Special Fee)

ORH 2261 3 Credits
FLORI-CROP PRODUCTION AND USE
Prerequisite: HOS 1010 or departmental approval. Basic concepts of commercial greenhouse construction, maintenance and environmental control techniques. Major emphasis on production, management and marketing of major floral crops. (Special Fee)

ORH 2274 4 Credits
COMMERCIAL FOLIAGE PLANT PRODUCTION
Prerequisite: HOS 1010 or departmental approval. Comprehensive study of commercial foliage production. Major topics of discussion: identification, classification, growing structures, culture, production, pest control and marketing. Includes lab. (Special Fee)

ORH 2281 3 Credits
INTRODUCTION TO ORCHIDOLOGY
Prerequisite: HOS 1010 or departmental approval. Survey of taxonomy, morphology, ecology and culture of orchid family. Emphasis upon cultural aspects for Central Florida. Includes two-hour lab. (Special Fee)

ORH 2842 4 Credits
LANDSCAPE CONSTRUCTION - OPERATIONS, MANAGEMENT, METHODS AND MATERIALS
Prerequisite: HOS 1010 or departmental approval. Comprehensive study of methods and practices in landscape construction industry today. Topics include mechanics of landscaping construction, materials selection and preparation, personnel hiring, training, and retraining, work schedules, planning, labor analysis, pricing, bidding, and estimating.

ORH 2930 1-3 Credits
HORTICULTURE RESEARCH AND SEMINAR
Prerequisite: Departmental approval. For students wishing to become involved in primary research. Research-seminar project conducted under strict supervision by qualified professors. Research done under accepted procedural format, representative of agricultural research community. Research performed given to Horticulture classes involved in subject matter areas being researched.

ORH 2942 1-3 Credits
HORTICULTURE WORK EXPERIENCE
Prerequisite: Departmental approval. Student works in selected horticulture position (non-paid) of their choice for 14 weeks at any commercial, governmental, or institutional site. Work-experience course taken for credit only and without pay for time and work spent on obtaining experience and carrying out activities relating to job assignments.

ORH 2949 2-4 Credits
COOPERATIVE EDUCATION: HORTICULTURE FIELD EXPERIENCE
Prerequisite: Departmental approval. Student earns credit by working in supervised training assignment directly related to College major. May be repeated for credit.
PLP 2001C
PLANT PATHOLOGY
Prerequisite: HOS 1010 or departmental approval. Deals with more common and important diseases of horticultural plants. Discusses symptoms, life history of casual organisms and treatments of diseases. Analysis of biological, physical and chemical approaches. (Special Fee)

PLS 2220
PLANT PROPAGATION
Prerequisite: HOS 1010 or departmental approval. Comprehensive study of methods and practices used for propagating plant materials in industry today. Includes study and practice in seedage, layerage, cuttage, graftage, budding and micro-propagation. Includes lab. (Special Fee)

PMA 2502
DIAGNOSTIC TECHNIQUES FOR PLANT PROBLEMS
Study of procedures and methodologies utilized by horticultural industry, both research as well as commercial, to accurately identify plant cultural problems. Full range of potential problems such as pathogenic, non-pathogenic, entomological, and environmental discussed and analyzed. Laboratory experience includes field trips to private industry labs, collecting samples and analyzing problems, and introduction to state-of-the-art equipment used by industry and research facilities.

SOS 2102
SOILS AND FERTILIZERS
Prerequisite: HOS 1010 or departmental approval. Study of soil-water-plant relationships. Emphasis on soil properties (soil science), soil management and soil use (economical as well as social). Includes nursery and greenhouse soils for Florida, elemental nutrient studies and selected research topics. (Special Fee)

VEC 1201
INTRODUCTION TO VEGETABLE GARDENING
Prerequisite: HOS 1010. Study of fundamental principles underlying commercial production of vegetables: seeding, fertilization, harvesting and storage. Includes one-hour lab. (Special Fee)

HOSPITALITY

FSS 2222C
QUANTITY FOOD PRODUCTION AND FOOD MANAGEMENT
Basic cooking skills along with understanding of food management that can be applied to any food service organization. Under guidance and supervision of experienced chef and within commercial kitchen, students concentrate on understanding foods and interplay among ingredients, recipes, kitchen equipment, kitchen procedures and techniques and managing costs while learning how to prepare various dishes found in typical food service operation. (Special Fee $20.00)

FSS 2251
FOOD AND BEVERAGE MANAGEMENT
Application of principles in menu planning, kitchen layout and equipment section. Also trains student to design restaurants for ease in operation as well as promotion of principles in menu planning, kitchen layout and safety and health standards.

FSS 2500
FOOD AND BEVERAGE CONTROL
Emphasis on methods of menu pricing, systems of controlling and accounting for food and beverage costs and methods of controlling sales income.

HFT 1000
INTRODUCTION TO HOSPITALITY INDUSTRY
Introduction to many facets of hotel-motel and food services industries. Includes study of history, scope and innovations in industry as well as orientation visits to local establishments.

HFT 1410
FRONT OFFICE MANAGEMENT
Acquaints student with front desk procedures including use of accounting machines for processing guest accounts through hotel night audit.

HFT 1700
INTRODUCTION TO TOURISM
Emphasis on international, national and state aspects of tourism. Comprehensive study of businesses involved in promotion of travel: transportation, accommodations, feeding and entertainment of travelers. Analysis of economic, cultural and sociological effects of tourism on communities and states.

HFT 2200
HOSPITALITY MANAGEMENT
Relates managerial functions to hospitality industry and trains student to become more effective manager by applying management theories. Much emphasis on human relations and how to work efficiently with peers, superiors and subordinates.

HFT 2500
MARKETING AND SALES IN THE HOSPITALITY INDUSTRY
Students develop actual marketing campaign for business within hospitality industry. Emphasis on (a) analysis of market, competition and product, (b) planning financial budget and (c) developing short-term and long-range strategies to achieve desired profit through effective advertising, sales and public relations plan.

HFT 2600
HOSPITALITY LAW
Provides awareness of rights and responsibilities that law grants to or imposes upon hotelkeeper; and illustrates possible consequences of failure to satisfy legal obligations. Specific attention to innkeeper-guest relationship, contracts, torts, civil and property rights and insurable risks.
HFT 2930
SELECTED TOPICS IN HOTEL-MOTEL-LODGING-RESTAURANTS-TOURISM-ATTRACTIONS AND FOOD MANAGEMENT
Prerequisite: Departmental approval. For students interested in discussion, exploration and observation of special topics in lodging, restaurant, tourism, attractions and food management.

HFT 2941
HOSPITALITY SEMINAR AND WORK EXPERIENCE
Prerequisite: Departmental approval. Provides 240 hours of practical experience under supervision of industry manager and professor.

HUMANITIES

HUM 1020
INTRODUCTION TO HUMANITIES
3 Credits
Basic introduction to humanities. Focuses on central concepts, historical development and fundamental nature of philosophy, architecture, music, religion and art. Concepts from these disciplines integrated with contemporary American culture.

HUM 1701
HUMANITIES IN MEXICO
3 Credits
Prerequisite: Departmental approval plus cost of trip and registration fees. Includes 11 days travel to Mexico City, Cuernavaca and Taxco during break between Sessions 2 and 3. Ten hours of class work during last three weeks of Session 2. Acquaints students with history, culture, art and architecture they encounter in Mexico at sites such as Teotihuacan, Xochicalco and Mallinalco. Focuses on pre-Colombian cultures, colonial Mexico under Spanish influence and problems of modern Mexico.

HUM 1702
HUMANITIES IN MEXICO
3 Credits
Prerequisite: Departmental approval plus cost of trip and registration fees. Includes 11 days travel to Yucatan Peninsula visiting Merida, Campeche, Cancun, and Mayan archeological sites of Dzibilchaltun, Chichen Itza, Edzna, Coba, Uxmal, and others. Ten hours of class work during last three weeks of Session 2. Acquaints students with history, culture, art, and architecture of Mayan people of Yucatan. Special emphasis on contemporary social and economic issues of this part of Mexico. Offered every other year during Session 2.

HUM 2220
HUMANITIES - GREEK AND ROMAN
3 Credits
Prerequisite: ENC 1101 or ENC 1101H. Integrated examination of dominant ideas in Western culture as expressed in art, literature, music, philosophy and religion. Covers period from Trojan War through Roman era, emphasizing development and influence of classical ideas. Requires each student to write 6000 words.

HUM 2220H
HUMANITIES - GREEK AND ROMAN - HONORS
Same as HUM 2220 with honors content. Honors program permission required.

HUM 2223
HUMANITIES - LATE ROMAN AND MEDIEVAL
3 Credits
Prerequisite: ENC 1101 or 1101H. Integrated examination of dominant ideas in Western culture as expressed in art, literature, music, philosophy and religion. Covers period from late Roman Empire through Middle Ages, emphasizing development and historical influence of Christianity. Requires each student to write 6000 words.

HUM 2223H
HUMANITIES - LATE ROMAN AND MEDIEVAL - HONORS
Same as HUM 2223 with honors content. Honors program permission required.

HUM 2232
HUMANITIES - RENAISSANCE AND BAROQUE
3 Credits
Prerequisite: ENC 1101 or 1101H. Integrated examination of dominant ideas in Western culture as expressed in art, literature, music, philosophy and religion. Covers period from Renaissance through Baroque era, emphasizing synthesis of classical and Christian elements. Requires each student to write 6000 words.

HUM 2232H
HUMANITIES - RENAISSANCE AND BAROQUE - HONORS
Same as HUM 2232 with honors content. Honors program permission required.

HUM 2234
HUMANITIES - ENLIGHTENMENT AND ROMANTICISM
3 Credits
Prerequisite: ENC 1101 or 1101H. Integrated examination of dominant ideas in Western culture as expressed in art, literature, music, philosophy and religion. Covers period from Enlightenment through 19th century, emphasizing emergence of rationalism and modern science and Romantic rebellion. Requires each student to write 6000 words.

HUM 2234H
HUMANITIES - ENLIGHTENMENT AND ROMANTICISM - HONORS
Same as HUM 2234 with honors content. Honors program permission required.

HUM 2250
HUMANITIES - TWENTIETH CENTURY
3 Credits
Prerequisite: ENC 1101 or 1101H. Integrated examination of dominant ideas in Western culture as expressed in art, literature, music, philosophy and religion. Covers period from turn of century to present. Focuses on creative forces which have shaped contemporary consciousness from pioneering work of Einstein, Picasso, Stravinsky and Wright through dominance of objective consciousness to newly emerging guiding myths of today. Requires each student to write 6000 words.

HUM 2250H
HUMANITIES - TWENTIETH CENTURY - HONORS
Same as HUM 2250 with honors content. Honors program permission required.
HUM 2310
MYTHOLOGY IN ART AND LITERATURE
3 Credits
Prerequisite: ENC 1101 or 1101H. Examines myths of various cultures, both ancient and modern, as expressed in art and literature. Uses variety of analytical methods such as psychological, anthropological, literary symbolism, myths to determine universality of various symbols and concepts. Requires each student to write 6000 words.

HUM 2310H
MYTHOLOGY IN ART AND LITERATURE - HONORS
3 Credits
Same as HUM 2310 with honors content. Honors program permission required.

HUM 2410
ASIAN HUMANITIES
3 Credits
Examination of dominant ideas and arts in South and East Asian cultures as expressed in philosophy, literature, art, architecture, and music. Focus on India, China, and Japan; covers period from earliest civilization to present.

HUM 2740
HUMANITIES IN THE BRITISH ISLES
3 Credits
Prerequisite: Departmental approval plus cost of trip and registration fees; participants must be 18 years of age or older. Seminars and travel in England, Scotland, and Ireland. Pre-travel seminars focus on art, architecture, literature, and drama of England from prehistoric times to present. Travel to London, Greenwich, Stonehenge, Bath, Stratford-on-Avon, Canterbury, Edinburg, Dublin, and other places. Offered every other year in Session 3 only.

HUM 2742
HUMANITIES IN ITALY
3 Credits
Prerequisite: Departmental approval plus cost of trip and registration fees; participants must be 18 years of age or older. Seminars and travel in Italy. Pre-travel seminars establish foundation for critically examining art, architecture, literature, and music in relation to significant historical, philosophical, and religious currents in Italian culture. Travel to cities such as Sorrento, Naples, Paestum, Pompeii, Rome, Florence, Ravenna, Assisi, Siena, Venice, and Milan reinforces seminars through direct experience of art, architecture, and culture of Italy from prehistoric times to present.

HUM 2930
SELECTED TOPICS IN HUMANITIES
1-3 Credits
Seminars offered for students interested in special topics in humanities. Topics selected from special areas of art, architecture, literature, religion, music and philosophy or may include combination of these areas.

REL 2000
UNDERSTANDING RELIGIOUS TRADITIONS
3 Credits
Designed for student interested in exploring various ways people have expressed religious views. Discusses both questions which people ask which lead them to formulate religious answers and various religious doctrines which formalize human concerns. Balances different opinions from major religious traditions such as Christianity, Judaism, Hinduism and Buddhism, among others, and helps students broaden perspective on religion.

INTERDISCIPLINARY STUDIES IN GENERAL EDUCATION

IDS 1101
6 Credits
INTERDISCIPLINARY STUDIES IN GENERAL EDUCATION I
Introduction to process of rational thought and how people have organized process to define human values and physical universe. Focuses on Greeks, contributions to process, compares them to modern culture and integrates disciplines of physics, mathematics, language, rhetoric, psychology and humanities. Requires each student to write 6000 words. Honors program permission required. (Equivalent to: humanities, non-writing elective, three hours; and ENC 1101, Freshman Composition I, three hours)

IDS 1102
6 Credits
INTERDISCIPLINARY STUDIES IN GENERAL EDUCATION II
Examination of change in thinking process that occurred as result of scientific revolution of 17th, 18th and 19th centuries. Focuses on process itself and impact this process has on modern culture. Integrates information from astronomy, physics, mathematics, biology, psychology, economics, communications and humanities. Requires each student to write 6000 words. Honors program permission required. (Equivalent to: humanities writing elective, three hours; and natural science, non-laboratory elective, three hours)

IDS 2103
6 Credits
INTERDISCIPLINARY STUDIES IN GENERAL EDUCATION III
Examination of new cosmology which emerged in early 20th century as result of relativity and quantum theory. Focuses on changing attitudes toward physical world and its impact on contemporary human values. Integrates physics, politics, mathematics, psychology, sociology, communications and humanities. Requires each student to write 6000 words. Honors program permission required. (Equivalent to: humanities writing elective, three hours; and social science elective, three hours)

IDS 2104
6 Credits
INTERDISCIPLINARY STUDIES IN GENERAL EDUCATION IV
Examination of new awareness of universe which resulted from new astronomical discoveries about “time” and “space” in past 15 years. Focuses on how discoveries are forcing re-examination of values in light of present day knowledge. Integrates astronomy, mathematics, biology, sociology, psychology, politics, communications and humanities. Requires each student to write 6000 words. Honors program permission required. (Equivalent to: ENC 1102, Freshman Composition II, three hours; and natural science, non-laboratory elective, three hours)
JOURNALISM

JOU 1100 NEWS REPORTING 3 Credits
In-depth reporting with emphasis on modern news and feature stories. Stresses elements of news: sources, structure, style, and mechanics of production. Recommend students also enroll in College Newspaper.

JOU 1401 ADVANCED REPORTING 3 Credits
Prerequisite: JOU 1100. Develops student as specialized newsgatherer and reporter. Sharpens in-depth reportorial skills; emphasis on investigative reporting. Students submit material to student newspaper and other publications.

JOU 1420L, 1421L, 2422L, 2423L 1 Credit
COLLEGE NEWSPAPER each
Laboratory course for production of College newspaper. Includes reporting, editing, business, makeup, and other phases of newspaper production. Meets three hours per week.

JOU 1440L, 1441L, 2442L, 2443L 1 Credit
COLLEGE MAGAZINE each
Laboratory course for production of College magazine. Staff meets three hours per week. Writing, editing, layout and other phases of magazine entail activity outside regular class. Three hours per week.

JOU 2220 EDITING AND MAKEUP 3 Credits
Study and application of copydesk techniques: evaluation and copy editing, correction of faulty news stories, headline writing, page layout design and work with wire copy. Recommend students also enroll in College Newspaper.

JOU 2303 FEATURE ARTICLE WRITING 3 Credits
Training in techniques of gathering and presenting facts in article form. Articles developed from idea to print and aimed to appeal to readers of specific magazines, either on or off campus.

JOU 2930 SELECTED TOPICS IN JOURNALISM 1-3 Credits
For students interested in research, discussion, and observation of special topics in journalism.

JOU 2946 JOURNALISM INTERNSHIP 1 Credit
Prerequisite: JOU 1100 or departmental approval. Qualified students receive practical experience working with local or College communications media under supervision of professional media specialists and journalism faculty. May be repeated for credit. Meets three hours per week.

JOU 2949 2-4 Credits
COOPERATIVE EDUCATION: JOURNALISM FIELD EXPERIENCE
Prerequisite: Departmental approval. Student earns credit by working in supervised training assignment directly related to College major. May be repeated for credit.

MMC 1000 SURVEY OF MASS COMMUNICATIONS 3 Credits
Introduction to history, development and current practices of media of mass communication. Presents functions of newspapers, magazines, radio, television, and advertising in light of responsibilities to public.

MMC 2100 WRITING FOR MASS COMMUNICATIONS 3 Credits
Fundamental instruction and practice in writing for journalism, advertising, broadcasting and public relations. Pre-professional course for students majoring in journalism and communications.

LEGAL ASSISTING

PLA 1105 LEGAL RESEARCH AND THEORY I 3 Credits
Study of law library system and its functions. Student develops research skills through use of digests, encyclopedias, report systems and practice manuals.

PLA 1115 LEGAL RESEARCH AND THEORY II 3 Credits
Prerequisite: PLA 1105. Discusses and applies various writing techniques and strategies for presenting results of legal research skills acquired during PLA 1105. Emphasis on presenting information in legally sound and acceptable fashion, with special emphasis on developing document, legal argument and use of legal citations.

PLA 1506 REAL PROPERTY I 3 Credits
Survey of Florida real property law including classification of interests in real property; concurrent ownership; landlord and tenant relationship; easements, licenses and profits; covenants and equitable servitudes; adverse possession; recording; real estate contract, conveyancing; rights of possessor of real property; cooperatives, condominiums and zoning; and fixtures.

PLA 2226 CIVIL LITIGATION I 3 Credits
Focuses on litigation process as it relates to court system of Florida. Attention to function of law, role of attorney, basic substantive law, pleadings, discovery, trial, settlement and appeal.

PLA 2226 CIVIL LITIGATION II 3 Credits

PLA 2556 REAL PROPERTY III 3 Credits
Prerequisite: PLA 2516. Study of various aspects of real property litigation in Florida with emphasis on practical skills which enable student to assist lawyers in real property litigation including mortgage foreclosure, partition, quiet title actions, mechanics' liens, condemnation and zoning.
PLA 2516  3 Credits
REAL PROPERTY II
Prerequisite: PLA 1506. Study of procedures and instruments in basic real estate transactions. Specific attention to contract, loan commitment, legal descriptions and surveys, abstract and title work including opinions and insurance, business items including termite bonds and zoning evidence, closing instruments and laws applicable thereto.

PLA 2606  3 Credits
WILLS, TRUSTS AND ESTATE ADMINISTRATION I
In-depth analysis of Florida Probate Code as basic substantive law which governs wills, trusts and estate administration in Florida.

PLA 2626  3 Credits
WILLS, TRUSTS AND ESTATE ADMINISTRATION II
Prerequisite: PLA 2606. Stresses application of Florida Probate Code to process will preparation and probate; trust preparation and administration; and administration of estates with emphasis on teaching practical skills which enable student to assist lawyers in wills, trusts and estate administration work.

PLA 2803  3 Credits
FAMILY LAW
Study of elements of valid marriage, grounds for divorce, dissolution and annulment, property rights and tax consequences; Florida law concerning children, parental support, adoption and guardianship.

PLA 2940  3 Credits
INTERNSHIP AS A LEGAL ASSISTANT
Prerequisites: BUL 2112, PLA 1105, and one of following: PLA 2206 or PLA 2626, PLA 2516 or MAN 2702. Students earn credit by working In supervised training assignment directly related to their interest. Maximum of six internship credits may apply toward elective credit in degree program.

LOGIC

PHI 1100  3 Credits
PRACTICAL LOGIC
Study of effective thinking based on procedures of logic. Appraisal of evaluation of evidence, practice in detection of fallacies and irrelevancies and testing of arguments for validity and reliability.

PHI 2101  3 Credits
FORMAL LOGIC
Formal, rigorous approach to symbolic logic. Emphasizes techniques of sound, deductive reasoning through use of rules of inference and truth tables. Provides practice with translation of ordinary language into symbolic form. May be used for math credit.

MATHEMATICS

MAC 1104  3 Credits
COLLEGE ALGEBRA
Prerequisite: Satisfactory score on entry level assessment. Two years of high school algebra and one year of high school geometry with grade of C or better; MAT 1033 with grade of C or better or equivalent. Function approach to algebra. Topics include relations; polynomial, exponential and logarithmic functions and their graphs; systems of equations. (Credit not given for both this course and MAC 1132.)

MAC 1134  3 Credits
COLLEGE TRIGONOMETRY
Prerequisite: MAC 1104 with grade of C or better or two years of high school algebra and one year of high school geometry with grade of C or better. Study of angles and their measures, trigonometric functions of angles and of real numbers, solutions of plane triangles, trigonometric equations and inverse functions. (Credit not given for both MAC 1144 and MAC 1132.)

MAC 1132  4 Credits
COLLEGE ALGEBRA AND TRIGONOMETRY
Prerequisite: Two years of high school algebra, one year of geometry, one-half year of trigonometry with grade of C or better or departmental approval. Integrated study of College algebra and trigonometry. Intended for above-average student planning to study analytic geometry and calculus. (Credit not given for both MAC 1132 and MAC 1104 nor for both MAC 1132 and MAC 1114.)

MAC 2233  3 Credits
CALCULUS FOR BUSINESS AND SOCIAL SCIENCE
Prerequisite: MAC 1104 with grade of C or better. Introduction to calculus with applications to business and social science. Topics include differentiation and Integration of algebraic, exponential and logarithmic functions, rates of change, curve sketching, optimization problems, partial derivatives.

MAC 2311  5 Credits
CALCULUS WITH ANALYTIC GEOMETRY I
Prerequisite: Equivalent of MAC 1104 and MAC 1114, or MAC 1132 with grade of C or better. Topics include circle and parabola, limits and continuity, derivatives of algebraic and trigonometric forms, applications of derivative, definite and indefinite integral.

MAC 2312  5 Credits
CALCULUS WITH ANALYTIC GEOMETRY II
Prerequisite: MAC 2311 with grade of C or better. Topics include differentiation and Integration of exponential and logarithmic transcendental functions, techniques of integration, and indeterminate forms, conic sections, infinite series.

MAC 2313  4 Credits
CALCULUS WITH ANALYTIC GEOMETRY III
Prerequisite: MAC 2312 with grade of C or better. Topics include polar coordinates, vectors, three dimensional analytic geometry, parametric equations, partial derivatives, multiple integration.
MAE 2911 3 Credits
MATHEMATICS FOR ELEMENTARY EDUCATION MAJORS
Prerequisite: MGF 2202. New approaches to arithmetic and mathematics appropriate for elementary school curricula. Topics selected from sets, systems of numeration, development of computational techniques, informal logic, development of ideas in geometry and algebra from teaching perspective.

MAP 2302 3 Credits
DIFFERENTIAL EQUATIONS
Prerequisite: MAC 2313 with grade of C or better or departmental approval. Introduction to methods and applications of ordinary differential equations. Topics include first order equations and applications; higher order linear equations with applications; Laplace transforms; introduction to numerical methods.

MAS 2103 3 Credits
INTRODUCTION TO MATRICES
Prerequisite: MAC 2311 with grade of C or better. Designed to prepare students majoring in engineering, mathematics, natural sciences or behavioral sciences which require matrix techniques. Includes matrix algebra, determinants, systems of linear equations, eigenvectors, special matrices.

MAT 0003C 1-3 Credits
INTRODUCTORY MATHEMATICS
Prerequisite: Satisfactory score on entry assessment test. Designed to improve student's background in general arithmetic and develop arithmetic of integers. Specific course content selected for each student on basis of background. Required for students not meeting admissions standards for other mathematics courses. Not applicable toward mathematics requirement in general education or toward any associate degree at Valencia. (Special fee in self-paced lab sections.)

MAT 0024C 3 Credits
ELEMENTARY ALGEBRA
Prerequisite: MAT 0003 with grade of C or better or satisfactory score on entry assessment test. A five contact-hour course designed for students with little or no algebra background. Topics include sets, fundamental operations with polynomials, linear equations and inequalities with applications, graphing of linear equations and inequalities, introduction to radicals, introduction to rational expressions, and use of calculators. Does not apply toward mathematics requirements in general education or toward any associate degree. (Special Fee)

MAT 1033 3 Credits
INTERMEDIATE ALGEBRA
Prerequisite: MAT 0024 with grade of C or better (or equivalent) or satisfactory score on entry assessment test. Continuation of MAT 0024 to provide background for general education mathematics courses. Topics include quadratic equations, complex numbers, radicals, rational expressions, linear equations and inequalities in two or more variables with applications, logarithmic and exponential equations, absolute value equations and inequalities, introduction to functions and calculator use. Does not apply toward mathematics requirements in general education.

MAT 1905 1-4 Credits
DIRECTED INDIVIDUAL STUDIES
Provides opportunity to develop specific individual program-related mathematical skills and/or concepts in individualized setting. May not be used in lieu of any mathematics course listed in catalog. Application must be made to department office.

MAT 2930 1-3 Credits
SELECTED TOPICS IN MATHEMATICS
Prerequisite: MAC 1104 and departmental approval. Examines selected topics in mathematics based on historical, theoretical, application or research approach.

MAT 2949 2-4 Credits
COOPERATIVE EDUCATION: MATHEMATICS FIELD EXPERIENCE
Prerequisite: Departmental approval. Student earns credit by working in supervised training assignment directly related to College major. May be repeated for credit.

MGF 1118 1 Credit
MATHEMATICS CLAST REVIEW
Designed to give students planning to take computational portion of CLAST exam opportunity to review necessary mathematical skills. Includes review of topics of arithmetic, algebra, logical reasoning, geometry, probability and statistics as well as test-taking strategies and familiarization with requirements and format of CLAST.

MGF 2202 3 Credits
COLLEGE MATHEMATICS
Prerequisite: MAT 1033 with grade of C or better or satisfactory score on entry assessment inventory. Topics include sets, numerations, systems, logic, geometry, probability, and statistics.

MHF 2300 3 Credits
LOGIC AND PROOF IN MATHEMATICS
Prerequisite: MAC 104. Topics: basic mathematical logic, methods of proof in mathematics, application of proof to elementary mathematical structures. For prospective major in mathematics or mathematics education.

MTB 1103 3 Credits
BUSINESS MATHEMATICS
Practical application of mathematics to computational problems of business and consumerism. Business applications including decimals, fractions, percentages, interest rates, bank records, payroll and merchandising.

MTB 1304 2 Credits
MODERN COMPUTATIONAL METHODS
Open to students desiring to learn to use a microcomputer or programmable calculator as aid in solving mathematical problems. Student gains experience solving problems using programming techniques. Each student completes individual project using modern computational methods to solve problem in selected field. Recommended for pre-business, pre-science and pre-engineering majors.
MTB 1364  1 Credit
THE METRIC SYSTEM
Designed to familiarize student with metric system. Includes study of history of metric system and classroom applications of metric mensuration, advantages and disadvantages of metric system and conversion between customary and metric systems and conversion of units within metric system.

STA 2014  3 Credits
ELEMENTARY STATISTICS
Prerequisite: Satisfactory score on entry assessment test, two years of high school algebra with grade of C or better, or MAT 1033 or MAC 1104 with grade of C or better. Collection, organization, analysis and interpretation of numerical data. Probability, basic patterns of statistical inference, confidence estimation and significance testing regarding measures of location, variation, correlation and selected non-parametric statistics.

STA 2014H  3 Credits
ELEMENTARY STATISTICS - HONORS
Same as STA 2014 with honors content. Honors program permission required.

STA 2014L  1 Credit
INTRODUCTORY STATISTICS LAB
Corequisite: STA 2014. Designed to supplement STA 2014. Various software packages used to show how computer can be used to perform tedious calculations necessary in statistics and for further investigations into some concepts of statistics. Topics include: organization, analysis, and interpretation of numerical data, probability, statistical inference, confidence estimation, significance testing, and selected non-parametric statistics. Previous knowledge of computers not necessary.

MEDICAL LABORATORY TECHNOLOGY

MLT 1400C  5 Credits
MEDICAL MICROBIOLOGY
Prerequisite: MCB 2010C. Bacteriology, parasitology, virology and mycology with emphasis on pathogenic organisms culture, isolation and identification. Includes three-hour lab.

MLT 2210C  2 Credits
URINALYSIS
Prerequisite: CHM 1045C. Principles of renal function and analysis of urine. Specific laboratory techniques applied.

MLT 2300C  5 Credits
HEMATOLOGY/COAGULATION
Prerequisite: CHM 1045C. Students study formed elements of blood and perform laboratory procedures for identification of blood components. Emphasis on complete blood counts, coagulation mechanisms and instrumentation. Includes three-hour lab.

MLT 2500C  3 Credits
SEROLOGY/IMMUNOLOGY
Prerequisite: CHM 1045C. Principles of antigen-antibody reactions and related procedures. Includes three-hour lab.

MLT 2526C  3 Credits
IMMUNOHEMATOLOGY
Prerequisite: MLT 2500C. Emphasizes ABO-Rh typing, crossmatching and antibody screening principles. Covers donor processing. Includes three-hour lab.

MLT 2620C  5 Credits
CLINICAL CHEMISTRY
Prerequisite: CHM 1045C. Clinical Chemistry with emphasis on quality control, instrumentation, and performance of all routine chemical and analytical procedures. Includes three-hour lab.

MLT 2762  1 Credit
INSTRUMENTATION
Prerequisite: Departmental approval. Principles of operation of current laboratory instruments. Practical experience and observation applied and related to clinical laboratory test procedures.

MLT 2807L  2 Credits
MLT PRACTICUM-BLOOD BANK
Prerequisite: MLT 2526C and departmental approval. Student performs, under supervision, clinical test procedures in blood bank department of approved clinical laboratory.

MLT 2808L  1 Credit
MLT PRACTICUM SEROLOGY/IMMUNOLOGY
Prerequisite: MLT 2500C and departmental approval. Student performs, under supervision, clinical test procedures in serology/immunology department of approved clinical laboratory.

MLT 2809L  5 Credits
MLT PRACTICUM HEMATOLOGY/COAGULATION/URINALYSIS
Prerequisites: MLT 2210C, MLT 2300C and departmental approval. Student performs, under supervision, clinical test procedures in hematology, coagulation and urinalysis department of approved clinical laboratory.

MLT 2810L  4 Credits
MLT PRACTICUM-CHEMISTRY
Prerequisite: MLT 2620C and departmental approval. Student performs, under supervision, clinical test procedures in chemistry department of approved clinical laboratory.

MLT 2811L  4 Credits
MLT PRACTICUM-MICROBIOLOGY
Prerequisite: MLT 1400C and departmental approval. Student performs under supervision, clinical test procedures in microbiology and serology department of approved clinical laboratory.

MLT 2930  1-5 Credits
SELECTED TOPICS IN MEDICAL LABORATORY TECHNOLOGY
Designed for students interested in obtaining additional or selected medical laboratory technical skills and clinical experience. Provides seminar-type discussion and classroom activities for students who wish to pursue selected topics in MLT. May require student to provide professional liability insurance. (Lab fee may be required.)
MILITARY SCIENCE

MIS 1031 2 Credits
INTRODUCTION TO MILITARY SCIENCE
Organization of Army and ROTC program. Discussion includes career opportunities, significance of military courtesy and basic principles of land navigation.

MIS 1460 2 Credits
FUNDAMENTALS OF LEADERSHIP DEVELOPMENT
Development of leadership abilities through practical exercises and field training exercises. Analysis of weapons, basic first aid principles, customs and traditions and roles of army, national guard and reserves.

MIS 2120 2 Credits
THE THREAT
Comparison of United States Army with foreign armies. Includes current threat and potential use of nuclear, biological and chemical warfare. Introduction to communications.

MIS 2300 2 Credits
SMALL UNIT TACTICS
Small unit tactics with emphasis on patrolling. Advanced map reading, including military geography, land navigation, use of compass, and military symbols.

MUSIC

MUE 1490 1 Credit
INSTRUMENTAL TECHNIQUES
Introduction to instruments of orchestra, involving fundamentals of performance, acoustical principles, teaching methods and materials. Students assigned to sections in either woodwinds, brass, strings or percussion. May be repeated for credit. (Laboratory Fee)

MUL 1010 3 Credits
MUSIC APPRECIATION
General survey of music and composers, with extensive listening to develop intelligent understanding and appreciation of the world's great music. Open to all students.

MUL 1110 3 Credits
MUSIC LITERATURE
Prerequisite: ENC 1101 or ENC 1101H. Survey of compositional and performance styles of significant composers from Middle Ages to present. Extensive live and recorded listening experiences. Required of all music majors. Requires each student to write 6000 words.

MUN 1120 1 Credit
SYMPHONIC BAND
Prerequisite: Previous band experience and departmental approval. Required of all music majors who play appropriate instruments. Laboratory training session for fundamentals of rehearsal techniques and performance of standard concert band literature. Open to all students who play appropriate instruments. May be repeated for credit. Three hours weekly.

MUN 1310 1 Credit
CONCERT CHOIR
Established for people who love to sing and perform. Does not require auditions or music reading. Large mixed choral group performs variety of music throughout area. Solos, duets and small ensemble experiences provided for more advanced students. Students may register without prior departmental approval. Three hours weekly. May be repeated for credit.

MUN 1340 1 Credit
CONTEMPORARY ENSEMBLE
Choral ensemble performing choreographed selections from popular Broadway musical and vocal jazz repertoire. Also performs for annual Christmas madrigal dinner. Open to all students through auditions held prior to and during registration. May be repeated for credit. Three hours weekly.

MUN 1420 1 Credit
WOODEWARD CHOIR
Selected performing ensemble open by audition to any woodwind player. Representative woodwind choir literature from all styles and periods. May be repeated for credit. Three hours weekly.

MUN 1430 1 Credit
BRASS CHOIR
Selected performing small ensemble open to any brass player. Representative brass choir literature from all styles and periods. May be repeated for credit. Three hours weekly.

MUN 1440 1 Credit
PERCUSSION ENSEMBLE
Performing ensemble open by audition to any percussionist. Representative literature from all styles and periods. May be repeated for credit. Three hours weekly.

MUN 2310 1 Credit
VALENCIA SINGERS
Open through audition before and during registration to all students. Select performing group established for music majors and/or students with experience in choral singing and music-reading ability. Literature and public performance stressed. May be repeated for credit. Three hours weekly.

MUN 2770 1 Credit
JAZZ LAB BAND
Open by audition during drop/add period to all students who play appropriate instruments. Performance of varied literature in jazz, swing and rock. May be repeated for credit. Three hours weekly.

MUS 2930 1-3 Credits
SELECTED TOPICS IN MUSIC
Prerequisite: Departmental approval. For students who desire in-depth study of special topics in music through research, discussion, performance and observation.

MUT 1121 4 Credits
MUSICIANSHIP I
Study of fundamentals of music through analysis and composition of Baroque and Classical music. Development of basic skills in dictation and sight-singing. Includes three one-hour labs.
NUCLEAR MEDICINE TECHNOLOGY

NMT 1002C  2 Credits
INTRODUCTION TO NUCLEAR MEDICINE TECHNOLOGY
First professional course in NMT program providing overview of
field of nuclear medicine technology. Following series of lectures
and laboratory experiences, students participate in scheduled
clinical observation.

NMT 1714C  3 Credits
NUCLEAR MEDICINE TECHNOLOGY METHODOLOGY I
Co-requisite: APB 1150 and APB 1810. First of four-session
sequence introducing theory and methods of nuclear medicine
technology. Laboratory exercises and classroom lectures
presenting basic diagnostic procedures including correlative
anatomy and physiology, radiopharmaceutical administration,
instrumentation and imaging protocols.

NMT 1808C  3 Credits
NUCLEAR MEDICINE TECHNOLOGY CLINICAL EDUCATION I
Prerequisite: HSC1230 and NHT 1082C. First in five-session
sequence providing students with supervised clinical experience
in nuclear medicine technology and techniques. Competency
evaluation in performing basic patient care, administration of
radiopharmaceutical, basic imaging equipment operation.
Includes lecture series in conjunction with clinical experiences.

NMT 1818C  3 Credits
NUCLEAR MEDICINE TECHNOLOGY CLINICAL EDUCATION II
Prerequisite: NMT 1808C. Second in five-semester sequence
providing students supervised clinical experience in nuclear
medicine technology and techniques. Competency evaluation in
intermediate level diagnostic procedures including computer
studies and quality control evaluation. Includes lecture series in
conjunction with clinical experiences.

NMT 2534C  2 Credits
NUCLEAR MEDICINE TECHNOLOGY INSTRUMENTATION I
Prerequisite: PHY 1002, NMT 1818C, NHT 2723C. First of two-
semester course introducing theory and operational characteristics
of nuclear medicine instrumentation. Laboratory exercises and
classroom lectures presenting non-imaging radiation detection
equipment, gamma cameras and computers.

NMT 2535C  4 Credits
NUCLEAR MEDICINE TECHNOLOGY INSTRUMENTATION II
Prerequisite: NMT 2534C. Second course continuing theory and
operational characteristics of advanced instrumentation.
Laboratory exercises and classroom lectures presenting advanced
imaging systems including SPECT and evaluating instrument
quality control assessment in nuclear medicine.

NMT 2723C  3 Credits
NUCLEAR MEDICINE TECHNOLOGY METHODOLOGY II
Prerequisite: NMT 1714C. Second course continuing theory and
methods of nuclear medicine technology. Laboratory exercises and
classroom lectures presenting intermediate level diagnostic
procedures including computer acquisition and processing.
NURSING

MTB 1371  3 Credits
MATHEMATICS FOR HEALTH PROFESSIONALS
Prerequisite: MAT 122. Emphasizes student's knowledge or skill in basic mathematics relevant to health care. Review of arithmetic of whole numbers, fractions, decimals, and percent. Presents metric, apothecary and household systems including conversions between systems. Specialized computation skills specific to health professions comprise latter half of course. Builds solid foundation of understanding that enables student to calculate and administer medications competently.

NSP 2345  12 Credits
LABOR AND DELIVERY SPECIALTY COURSE
Prerequisite: NSP 2345. Provides graduate and registered nurses with little or no obstetrical experience opportunity to develop advanced knowledge in labor and delivery nursing. Includes fetal and hemodynamic monitoring, labor assessment, neonatal assessment, anesthesia/analgies and complications of labor/delivery. Liability insurance (Special Fee)

NSP 2345L  4 Credits
LABOR AND DELIVERY SPECIALTY COURSE - CLINICAL PRACTICUM
Prerequisite: NSP 2345. Provides graduate and registered nurses with little or no obstetrical experience opportunity to develop advanced knowledge in labor and delivery nursing. Includes clinical component with observations specifically related to labor and delivery nursing care.

NSP 2366  12 Credits
NEONATAL CRITICAL CARE NURSING
Prerequisite: NSP 2366. Focus on assessment skills, use of ventilators, maintenance of central lines, care of chest tubes, hemodynamic monitoring, administration of vasopressor medication, and neonatal resuscitation. Professional liability insurance required. (Special Fee)

NSP 2366L  4 Credits
NEONATAL CRITICAL CARE CLINICAL PRACTICUM
Prerequisite: NSP 2366. Focus on assessment skills, use of ventilators, maintenance of central lines, care of chest tubes, hemodynamic monitoring, administration of vasopressor medication, and neonatal resuscitation. Professional liability insurance required. (Special Fee)

NSP 2405  8 Credits
PEDIATRIC SPECIALTY
Prerequisite: NSP 2405. Comprehensive study of pediatric patient and family. Focuses on physiological, developmental, and psychological responses of ill child. Provides graduate or registered nurse without pediatric experience knowledge necessary for child health nursing.

NSP 2405L  2 Credits
PEDIATRIC SPECIALTY COURSE CLINICAL PRACTICUM
Prerequisite: NSP 2405. Includes lab, clinical experiences and planned observations related to infant or child care. Professional liability insurance required. (Special Fee)
NSP 2475  12 Credits

PEDIATRIC CRITICAL CARE
Assists graduate nurses or nurses without PICU experience in attaining knowledge and skills necessary for pediatric intensive care nursing. Emphasis on anatomy, physiology, assessment, and new technology needed in PICU.

NSP 2475L  4 Credits

PEDIATRIC CRITICAL CARE CLINICAL PRACTICUM
Corequisite: NSP 2475. Includes learning lab, clinical experiences and planned observations especially related to caring for critically ill infants and children in PICU. Professional liability insurance required. (Special Fee)

NSP 2704  5 Credits

BASIC CRITICAL CARE NURSING - THEORY
Prerequisite: RN Licensure. Provides RN advanced learning and knowledge to care for critically ill patients in hospital’s intensive care unit (ICU). Theory related to critical care nursing presented according to body systems; respiratory, cardiovascular, gastrointestinal and neurologic.

NSP 2704L  5 Credits

BASIC CRITICAL CARE NURSING - CLINICAL
Corequisite: NSP 2704. Provides RN opportunity to apply concepts and knowledge learned in critical care nursing theory. Clinical experience ICUs intended to augment concepts and principles of critical care nursing. Assessment procedures, and equipment indispensable to management of student’s particular problem. Liability insurance needed. (Special Fee)

NSP 2770  3 Credits

FUNDAMENTALS OF OPERATING ROOM NURSING
Prerequisite: Current Florida RN licensure. Introduces learner to fundamental principles and technical aspects of patient care during each phase of surgical experience. Focuses on professional, theoretical and technical aspects of perioperative nursing.

NSP 2770L  5 Credits

FUNDAMENTALS OF OPERATING ROOM NURSING CLINICAL PRACTICUM
Prerequisite: Current Florida RN licensure. Corequisite: NSP 2770. Stresses clinical application of fundamental technical skills and theories learned in NSP 2770. Directed experiences around and within surgical. Professional liability insurance required. Insurance Fee. (Special Fee)

NSP 2773  2 Credits

SURGICAL INTERVENTIONS
Prerequisite: NSP 2770. Builds on theory and skills of NSP 2770. Provides pertinent and current information on general and specialty surgical procedures. Indications for operative procedure, preparation of patient, instruments and equipment required for most common operations in each specialty area. Student continues to develop professional, theoretical and technical aspects of perioperative nursing.

NSP 2773L  2 Credits

SURGICAL INTERVENTIONS CLINICAL PRACTICUM
Clinical laboratory component for NSP 2773. Practicum focuses on application of theory and technical aspects of perioperative nursing for patient experiencing general or specialty surgical procedure. Professional liability insurance required. (Special Fee)

NUR 1001C  10 Credits

TRANSITION
Prerequisite: APB 2821C, APB 2822C, MCB 2010C, PSY 1012, DEP 2004, MTB 1371. Corequisite: NUR 1141. Specially designed for LPN student as introductory nursing course in LPN/RN transition program. Builds on foundation of nursing knowledge acquired during practical nursing education. Emphasis on total assessment, analysis, planning, intervention, and evaluation of individual health needs. LPN student guided in use of nursing process to aid in understanding pathophysiological changes that occur throughout life cycle. Emphasis placed on motivation and responsibility for role change as well as clinical skills testing and evaluation. (Special Fee)

NUR 1023C  10 Credits

FUNDAMENTALS OF NURSING
Corequisites: APB 2821C, MTB 1371, NUR 1141. Introduces basic concepts of health and general effects of stress on individuals throughout life cycle. Presents nursing process as approach to patient care. Emphasizes human needs relating to hygiene, comfort, safety, activity, elimination, rest, sleep and effective communication. Focuses on understanding physiological and psychological functions of adult patient. Covers selected principles from physical, biological and social sciences. Principles apply to assessing, analyzing, planning, implementing and evaluating patient care. (Special Fee, insurance fee.)

NUR 1141  1 Credit

PHARMACOLOGY FOR HEALTH PROFESSIONALS
Corequisite: NUR 1023C, or NUR 1001C & NUR 1410C. Presents specific knowledge of sources of drugs, physical and chemical properties, physiologic actions in the body, and rate of metabolism in the body, therapeutic uses and care considerations.

NUR 1191  2 Credits

DEATH, DYING, LOSS AND GRIEF
Designed to remove social taboo of using such words as dead, death, dying, etc., so student can fully explore topics of death, loss and grief with decreased anxiety. Discussions focus on historical perspectives of death; changing attitudes of today, developing a personal philosophy about death, many types of loss and feelings which arise during stages of dying and grief/loss reactions.
NUR 1212C
COMMON RESPONSES TO ILLNESS
Prerequisite: NUR 1023C, APB 2821C, MTB 1371. Corequisite: APB 2822C. Focus on medical surgical nursing and related pathophysiology. Introduces medical surgical nursing using basic conceptual and developmental approach to understanding effect of common stressors on basic needs of adult patient. Focus on physiological and psychological reactions of adult individuals to commonly occurring stressors: (1) situation stressors from surgical intervention; (2) imbalances in cellular maturation; (3) disturbances in fluid and electrolyte balance; and (4) interference with mobility and neural regulation, oxygenation, nutrition and elimination. Student develops increased technical skill and ability to use nursing process while caring for selected patients manifesting interference with basic needs. (Special Fee)

NUR 1410C
TRANSITION MATERIAL CHILD HEALTH
Prerequisite: MTB 1371, NUR 1001C. Corequisite: NUR 1141. Specifically designed for LPN student. Builds on concepts presented in NUR 1001C. Focus on care of childbearing and childrearing family. Obstetrical concepts the LPN learned in basic educational program reviewed; these concepts are used as basis for understanding childbearing cycle in greater depth. Focuses on developmental theories used in assessing, planning, implementing and evaluating nursing care for childbearing and childrearing family. Emphasis on family as unit. Effect of stress and adaptation on family unit viewed from physiological, psychological and developmental perspective. (Special Fee)

NUR 1943
CLINICAL ELECTIVE
Increases nursing competencies, judgements and self-confidence in care of hospitalized patients. Offers student opportunity to increase clinical experience and refine clinical skills. Criterion-referenced grading used. Course objectives formulated on individual basis to allow student to meet personal goals. Formative evaluation implemented during teacher-learning process to monitor progress of student and to provide feedback to students. (Special Fee)

NUR 2460C
MATERNAL CHILD HEALTH NURSING
Prerequisite: NUR 1212C, APB 2822C, PSY 1012, NUR 1141. Corequisite: DEP 2004, MCB 2010C. Designed to adapt theory and skills attained in previous nursing courses to care of childbearing and childrearing family. Introduces student to basic theoretical concepts and skills used during childbearing cycle. Focuses on developmental theories used in assessing, analyzing, planning, implementing and evaluating care for childbearing and childrearing family as unit. Effect of stress and adaptation on family unit viewed from physiological, psychological and developmental perspective. (Special Fee)

NUR 2520C
PSYCHIATRIC NURSING
Prerequisite: NUR 2730C, NUR 2460C, NUR 2700C, DEP 2004. Focuses on pathophysiological processes in adult patients with complex illnesses. Emphasizes advanced medical surgical nursing practice and application of nursing process in care of selected patients. Includes theoretical content complex disturbances of oxygen transport, fluid and electrolyte balance, and motor and sensory deprivation. Facilitates advanced technical skills for LPN used in caring for patients with complex problems. Includes clinical experiences that stress independent use of nursing process in care of patients with rapidly changing needs. Stresses short- and long-term goals for planning care of patient in acute and long-term setting. (Special Fee)

NUR 2790C
TRANSITION MEDICAL SURGICAL NURSING
Prerequisite: NUR 1141, NUR 1410C. Designed for LPN student as advanced course in medical surgical nursing. Builds on foundation acquired during practical nursing education, clinical practice, and NUR 1001C. Focuses on pathophysiological processes in adult patients with complex illnesses. Emphasizes advanced medical surgical nursing theory and application of nursing process in care of selected patients. Focuses on understanding emotional reactions of patients and families during critical illnesses. Includes theoretical content complex disturbances of oxygen transport, fluid and electrolyte balance, and motor and sensory deprivation. Facilitates advanced technical skills for LPN used in caring for patients with complex problems. Includes clinical experiences that stress independent use of nursing process in care of patients with rapidly changing needs. Stresses short- and long-term goals for planning care of patient in acute and long-term setting. (Special Fee)

NUR 2730C
COMPLEX RESPONSES TO ILLNESS
Prerequisite: MCB 2010C, NUR 1212C. Focuses on medical surgical nursing theory and skills learned in previous nursing courses. Focuses on pathophysiological processes in adult patients with complex illnesses. Emphasizes advanced medical surgical nursing theory and application of nursing process in care of selected patients. Focuses on understanding emotional reactions of patients and families during critical illnesses. Includes theoretical content complex disturbances of oxygen transport, fluid and electrolyte balance, and sensory deprivation. Facilitates advanced clinical skills used in caring for patients with complex problems. Includes clinical experiences that stress independent use of nursing process in care of patients with rapidly changing needs. Stresses short- and long-term goals in planning care for selected patients and groups of patients in acute and long-term setting. (Special Fee)

NUR 2810C
CLINICAL PRACTICUM IN PATIENT CARE MANAGEMENT
Prerequisite: NUR 2520C. Focuses on medical surgical nursing theory and skills learned in previous nursing courses. Focuses on pathophysiological processes in adult patients with complex illnesses. Emphasizes advanced medical surgical nursing theory and application of nursing process in care of selected patients. Focuses on understanding emotional reactions of patients and families during critical illnesses. Includes theoretical content complex disturbances of oxygen transport, fluid and electrolyte balance, and sensory deprivation. Facilitates advanced clinical skills used in caring for patients with complex problems. Includes clinical experiences that stress independent use of nursing process in care of patients with rapidly changing needs. Stresses short- and long-term goals in planning care for selected patients and groups of patients in acute and long-term setting. (Special Fee)
NUR 2892
EFFECTIVE MANAGEMENT IN HEALTH CARE SYSTEMS
3 Credits
Prerequisite: Graduate of nursing program or RN in Florida.
Provides opportunity for GNs and RNs to obtain theoretical and
practical knowledge of management and nursing supervision.
Theory operationalized through group process studies.

NUR 2930
SELECTED TOPICS IN NURSING
1-5 Credits
For students interested in obtaining additional nursing skills.
Clinical experience and seminar type discussion activities
provided for student who wishes to pursue selected topics in
nursing.

NUTRITION

HUN 1001
FUNDAMENTALS OF NUTRITION
3 Credits
Basic fundamentals of nutrition including human nutritional
requirements and role of nutrition in maintenance of good health.

PHILOSOHY

PHI 2010
PHILOSOPHY
3 Credits
Contemporary problems introduce major areas of philosophy:
metaphysics, ethics, aesthetics, theories of knowledge and
philosophy of religion. Students explore writings of notable
philosophers, past and present, and examine how their ideas have
shed light on problems and their relevance to modern life.

PHI 2600
ETHICS
3 Credits
Study of major theoretical principles on which claims to good life
and moral action have been based, such as hedonism,
utilitarianism and rationalism. Each theory illustrated by reading
representative selections from works of great philosophers from
classical period to 20th century.

PHYSICAL AND EARTH SCIENCES

AST 1002
ASTRONOMY
3 Credits
Introductory non-mathematical qualitative survey of astronomical
universe. Includes study of earth as astronomical body, solar
systems, stars, galaxies and cosmological theories of universe in
general. Much emphasis on unprecedented growth of knowledge
in astronomy during past decade.

AST 1002H
ASTRONOMY - HONORS
3 Credits
Same as AST 1002 with honors content. Honors program
permission required.

GLY 1001
EARTH SCIENCES
3 Credits
Study of earth sciences with emphasis on geology. Additional
topics selected from astronomy, oceanography and meteorology.
Emphasis on Florida.

GLY 2010C
PHYSICAL GEOLOGY
4 Credits
Deals with physical structure of earth. Includes effects of volcanic
activity, glaciation, diastrophism (formation of major crustal
features; continents; ocean beds, folds, faults, and mountain
building), tectonics (structural deformation and readjustment of
crust), sediments, erosional features, rock and mineral formation
along with new and current geological developments. Six hours
lecture/laboratory instruction.

GLY 2100
HISTORICAL GEOLOGY
3 Credits
Prerequisite: GLY 1001 or GLY 2010C or equivalent. Deals with
historical aspect of earth from Archeozoic to present, relating and
describing patterns, changes and trends of geological features and
flora and fauna of fossil forms.

MET 1010
INTRODUCTION TO METEOROLOGY
3 Credits
Introduction to study of atmospheric phenomena. Includes study
of atmospheric structure, heat budget, winds, air pollution, and
local and regional weather forecasting.

OCE 1001
INTRODUCTION TO OCEANOGRAPHY
3 Credits
Acquaints student with elementary physical, biological, chemical
and geological characteristics of world ocean system. Emphasis
on Florida's unique relationship with ocean environment.

PSC 1515
ENERGY: PAST, PRESENT AND FUTURE
3 Credits
Meets general education requirement for non-science majors.
Students study history of energy development, fundamental
physical concepts of energy and impact of energy problems on
economy. Application of principles and their relationships to
decisions on personal energy use as well as local, national and
international energy problems.

PSC 2121
SELECTED TOPICS IN PHYSICAL SCIENCE
1-3 Credits
Prerequisite: Departmental approval. Selected topics in physical
sciences based on historical, traditional or contemporary
approach, as background and interests of students and professor
dictate.

PHYSICAL EDUCATION

DAA 2160
CONTEMPORARY DANCE
2 Credits
Basic theory and practice in using body movements to express or
demonstrate ideas or thoughts. Broadens knowledge of rhythms,
music and self expression through medium of movement. Also
offered as CN 92, noncredit.
DAA 2200  BALLETT I  2 Credits
Basic techniques at the barre using basic foot, arm and body positions. Center floor work covers basic adagio movements and allegro combinations and uses classical sequences for traveling across floor. Leotards, tights and ballet shoes needed.

DAA 2201  BALLETT II  2 Credits
Prerequisite: Departmental approval. Student experiences intensification of barre and centre work. Students introduced to eight basic body directions with corresponding arms and body alignment, pirouettes and use of beats.

DAA 2560  JAZZ DANCE I  2 Credits
Student learns coordinated movements with isolated parts of body while using jazz style of dance. Basic routines choreographed to pop, jazz and rock music. Also offered as CN 138, noncredit.

DAA 2561  JAZZ DANCE II  2 Credits
Prerequisite: Departmental approval. Continuation of DAA 2560 using more complex rhythms and more intricate steps. Student works in variety of jazz styles such as lyrical and rock.

PEL 1111  BEGINNING BOWLING  2 Credits
Introduces individual to sport of bowling. Stress on correctness of performance as well as competitive nature of game. Physical demands are low; skills learned have value for use in leisure hours. Also offered as CN 86, noncredit.

PEL 1121  BEGINNING GOLF  2 Credits
Basic fundamentals pertaining to grip, stance, posture and swing. Work with woods, irons, chipping and putting. Discussions on rules of play, etiquette and purchase and care of equipment. Recreational and carry-over values of golf emphasized. Also offered as CN 103, noncredit.

PEL 1141  BEGINNING ARCHERY  2 Credits
Basic fundamentals of shooting. Emphasis on target archery. Experiences in barebow and sight shooting. Recreational and carryover values of archery stressed. Equipment furnished. Also offered as CN 105, noncredit.

PEL 1321  VOLLEYBALL  2 Credits
Designed for casual or intramural participants interested in improving skills and knowledge of volleyball. Also offered as CN 94, noncredit.

PEL 1341  TENNIS I  2 Credits
Designed specifically for beginning tennis player. Body movements, positioning, footwork and stroke techniques introduced and related to forehand drive, backhand drive, fore and backhand volley and serve. Practical playing experience used to teach rules, etiquette and some strategy. Equipment furnished.

PEL 1342  TENNIS II  2 Credits
For students wanting to develop advanced skills of good tennis player. Lob, overhead and drop shot introduced; emphasis on advanced development of fundamental strokes. Practical playing experience aids in teaching strategy. Students enrolling should have better than average tennis form for ground strokes, volley, and serve. Playing experience suggested.

PEL 1346  BADMINTON I  2 Credits
Body movement, positioning, footwork and stroke technique. Practical playing experience stresses rules, etiquette and strategy. All equipment furnished.

PEL 1347  BADMINTON II  2 Credits
Prerequisite: Departmental approval. Designed for student wanting to develop advanced skills in badminton. Advanced drills and practical playing experience aid in teaching both doubles and singles strategy.

PEL 1441  RACQUETBALL I  2 Credits
Designed to introduce student to fundamental skills needed to enjoy racquetball. Basic strokes, footwork, body movement and positioning in conjunction with court etiquette and rules.

PEL 1511  SOCCER I  2 Credits
Teaches fundamental soccer skills such as kicking, heading, dribbling, tackling, throwing and goal keeping. Covers team play, game strategy and basic rules of the game.

PEL 2122  INTERMEDIATE GOLF  2 Credits
Review of basic fundamentals. Advanced skills and emphasis on play and tournaments. Open to any student with departmental approval. Also offered as CN 85, noncredit.

PEL 2343  TENNIS III  2 Credits
Specialized instruction with emphasis on techniques and strategy used in competitive play. Open to any student with departmental approval. Also offered as CN 106, noncredit.

PEL 2442  RACQUETBALL II  2 Credits
Designed specifically for students wanting to develop advanced skills of a good racquetball player. Overhead, ceiling ball, z-shot introduced while advanced development of fundamental strokes explained. Practical playing experience aids in teaching techniques and strategy. Open to all students with departmental approval.

PEL 1012  FITNESS FOR THE DISABLED  1-2 Credits
Individualized fitness program geared to student's capabilities; strength and aerobic training in independent workouts.
PEM 1141 2 Credits
AEROBICS
Individualized, non-jarring aerobic exercise involving bicycling, rowing, cross-country skiing, treadmills and climbing. Lectures on diet, nutrition, fitness and stress.

PEM 1171 2 Credits
DANCE AEROBICS
Program of physical fitness based on popular aerobic exercises choreographed to music. Individual exercise programs designed for people of all ages.

PEM 1441 2 Credits
KARATE I
Application and understanding of learned techniques in "Empty Hand Way" (Karate Do). Emphasizes basic movement skills, safety regulations, rules and basic oriental terminology related to sport.

PEM 1954 1-4 Credits
VARSITY ATHLETICS
Student must participate as member of College varsity team for semester for each credit earned. Departmental approval required.

PEM 2101 3 Credits
FITNESS FOR LIFE
Physical fitness as lifelong process. Individualized fitness program, involving strength training, aerobics, and lectures on stress, diet and nutrition.

PEM 2131 1-2 Credits
NAUTILUS STRENGTH TRAINING
Designed to introduce individual to sound physiological principles of improving strength, flexibility and endurance through use of Nautilus training equipment. Maximum of two credits may be earned in course.

PEM 2442 2 Credits
KARATE II
Prerequisite: Departmental approval. Designed for students who wish to attain skill in various forms of kata while performing fundamentals of Karate Do in complex patterns of simulated defensive situations.

PEM 1136 2 Credits
SCUBA CERTIFICATION
Introduction to proper technique of safe scuba diving. Open water diver certification available upon completion of course. Swimming ability and proper physical condition required. (Special Fee)

PEO 2623 2 Credits
BASKETBALL OFFICIATING
Designed to improve knowledge and officiating skills of beginning as well as veteran basketball officials. Special emphasis given to areas of rules knowledge, hand and arm mechanics and proper floor coverage.

PET 2000 3 Credits
INTRODUCTION TO PHYSICAL EDUCATION
Designed primarily for students planning to major in physical education. Examination of place, function and contribution of physical education to whole educational program. Discussion of history, philosophy and problems of physical education.

PET 2930 1-3 Credits
SELECTED TOPICS IN PHYSICAL EDUCATION
Selected topics in physical education as background and interests of students dictate. May be repeated for credit providing different topic explored each time.

PHYSICS

PHY 1001C 4 Credits
PHYSICS
Prerequisite: MAT 1003 or two years of high school algebra. One-semester course for health-related majors. Survey of topics in physics related to health field. Applications of physics to principles of mechanics, heat, light, sound, electricity and magnetism, and radioactivity as they apply to health field. May not be taken for credit subsequent to receiving grade of C or better in any higher physics course. Six hours lecture/lab instruction. (Lab Fee)

PHY 1053C 4 Credits
INTRODUCTORY PHYSICS I
Prerequisite: Trigonometry. Fundamental principles of mechanics, heat and sound. For students whose requirements for baccalaureate degree include basic course in physics. Six hours lecture/lab instruction. (Special Fee)

PHY 1054C 4 Credits
INTRODUCTORY PHYSICS II
Prerequisite: PHY 1053C. Fundamental principles of electricity, magnetism, optics and elements of modern physics. For students whose requirements for baccalaureate degree include basic course in physics. Six hours lecture/lab instruction. (Special Fee)

PHY 1402C 4 Credits
OPTICAL PHYSICS
Prerequisite: PHY 1053C. Designed for laser optics technician degree. Detailed study of geometrical, physical and quantum optics. Six hours lecture/lab instruction.

PHY 2048C 4 Credits
GENERAL PHYSICS WITH CALCULUS I
Prerequisite: MAC 2311. Fundamental principles of mechanics, heat, and sound. For physics, mathematics, chemistry, and pre-engineering majors. Six hours lecture/lab instruction. (Special Fee)

PHY 2049C 4 Credits
GENERAL PHYSICS WITH CALCULUS II
Prerequisite: PHY 2048C. Fundamental principles of electricity, magnetism, and optics. For physics, mathematics, chemistry and pre-engineering majors. Six hours lecture/lab instruction. (Special Fee)
PHY 2123
MODERN PHYSICS
Prerequisite: One year each of College physics and calculus. Special relativity, optical and X-ray spectra, interaction and duality of particles and radiation, basic concepts of quantum mechanics, atomic and molecular structures, introductory solid state and elementary nuclear and particle physics.

PHY 2936
SELECTED TOPICS IN PHYSICS
Prerequisites: PHY 1053C or PHY 2048C and departmental approval. For student in science who desires in-depth study of special topics in classical and modern physics. Also, experimental topics may be included upon demand.

POLITICAL SCIENCE

CPO 2002
INTRODUCTION TO COMPARATIVE POLITICS
Prerequisite: POS 1041. Comparative study of systems in selected Western and non-Western nations, including political cultures, social change, public policy and institutions.

CPO 2140
GOVERNMENT AND POLITICS OF SPAIN
Study of development and structure of Spanish government, specifically impact of Napoleonic wars, fall of monarchy, partial industrialization, Civil War and Franco regime. Offered in Spain as part of semester in Spain program.

INR 2002
INTERNATIONAL POLITICS
Prerequisite: ENC 1101 or ENC 1101H. Topics relating to international politics discussed: nationalism, armaments, imperialism, militarism, history of international politics, foreign policies, international law and organizations, United Nations, human factor in international politics. Requires 6000 words of writing.

INR 2002H
INTERNATIONAL POLITICS - HONORS
Same as INR 2002 with honors content. Honors program permission required.

POS 1001
INTRODUCTION TO POLITICAL SCIENCE
Survey of discipline of political science. Examination of important concepts in development of Western political thought. Discussion of selected topics in various fields of inquiry within political science.

POS 1002
U. S. GOVERNMENT II
Survey course covering introduction to international politics, state and local government and fundamental economic concepts.

POS 1041
U. S. GOVERNMENT I
Theory, organization, principles and functions of national government, stressing relationships of individual to all levels of government in political system.

POS 1041H
U. S. GOVERNMENT I - HONORS
Same as POS 1041 with honors content. Honors program permission required.

POS 2112
STATE AND LOCAL GOVERNMENT
In-depth study of state, county and municipal government with emphasis on contemporary problems.

POS 2930
SELECTED TOPICS IN POLITICAL SCIENCE
Prerequisite: POS 1041 or departmental approval. For students interested in special topics that explore further political science through research, discussion and observation.

POS 2949
COOPERATIVE EDUCATION: POLITICAL SCIENCE FIELD EXPERIENCE
Prerequisite: Departmental approval. Student earns credit by working in supervised training assignment directly related to College major. May be repeated for credit.

PORTUGUESE

POR 2930
SELECTED TOPICS IN PORTUGUESE
Seminars for students interested in special topics and desire to explore further Portuguese.

PSYCHOLOGY

CLP 1002
PSYCHOLOGY OF ADJUSTMENT
Biological and learned factors involved in processes of personal and social adjustment and study of mental health principles and their application to human adjustment.

CLP 2140
ABNORMAL PSYCHOLOGY
Prerequisite: PSY 1012. Psychological abnormality discussed with reference to symptom patterns, causation and treatment approaches.

DEP 1302
PSYCHOLOGY OF ADOLESCENCE
Study of adolescent development from multi-disciplinary viewpoint. Emphasizes social, physical and emotional development; adolescent problems including delinquency and drugs; learning problems and factors affecting life and vocational/career choices.

DEP 2004
DEVELOPMENTAL PSYCHOLOGY
Prerequisite: PSY 1012. Designed to survey theory and research on development from conception through death. Emphasizes biological, and social variables which influence human behavior.
EDP 2002  3 Credits
EDUCATIONAL PSYCHOLOGY
Study of psychological principles and how they apply to educational process. Major areas: principles of learning, individual differences, motivation, mental abilities, measuring outcomes of learning and study of teaching - learning situation. Especially designed for prospective teachers.

INP 1301  3 Credits
PSYCHOLOGY IN BUSINESS AND INDUSTRY
Introduction to psychology of human behavior as applied to business and industry. Designed to study many psychological factors involved in work situation, including leadership, motivation, communications, morale, organizational structure, personnel selection, training, appraisal and consumer problems.

PSY 1012  3 Credits
GENERAL PSYCHOLOGY
Life-oriented course in psychology, designed to give student factual foundation in techniques and vocabulary of psychology and general understanding of human behavior. Surveys research and application of psychology in areas of learning, intelligence, motivation, emotion, personality, behavior disorders, mental health and therapy.

PSY 1012H  3 Credits
GENERAL PSYCHOLOGY - HONORS
Same as PSY 1012 with honors content. Honors program permission required.

PSY 2930  1-3 Credits
SELECTED TOPICS IN PSYCHOLOGY
Prerequisite: PSY 1012. For students interested in special topics that explore further psychology through research, discussion and observation.

PSY 2949  2-4 Credits
COORDINATING EDUCATION: PSYCHOLOGY FIELD EXPERIENCE
Prerequisite: Departmental approval. Students earn credit by working in supervised training assignment directly related to College major. May be repeated for credit.

SOP 2772  3 Credits
HUMAN SEXUALITY
Prerequisite: PSY 1012 or SYG 2000. Study of sexuality with emphasis on subjects such as identity and behavior, characteristics of sexual beings and meaning of sexuality. Includes study of sexual health, sexual decision-making and strategies for dealing with conception, sexually transmitted diseases and sexual coercion and exploitation.

RADIATION THERAPY TECHNOLOGY

RAT 1800C  3 Credits
RADIATION ONCOLOGY I
Provides radiation therapy student with introduction to radiation oncology with particular attention to patient care, psychosocial patient needs, and interdepartmental relationships.

RAT 1810C  3 Credits
RADIATION ONCOLOGY II
Prerequisite: RAT 1800C. Rotation through radiation oncology department observing patient work-up/treatment process. Includes physician and nursing assessments, physical examination, and nutritional counseling.

RAT 2001  3 Credits
TREATMENT PLANNING I
Prerequisite: RAT 1810C. Provides radiation oncology student with introduction to treatment planning techniques. Includes isodose distributions, basic dose calculations, and construction of beam modifying devices.

RAT 2021  3 Credits
TREATMENT PLANNING II

RAT 2022L  3 Credits
TREATMENT PLANNING LABORATORY
Prerequisite: RAT 2021. Provides students opportunity to work hands-on with block-cutting equipment. Teaches principles involved in fabricating blocking devices. Lab equally divided between block cutting area and treatment planning laboratory. In laboratory, students calculate effects of blocking devices.

RAT 2023  3 Credits
ONCOLOGIC MEDICINE I
Prerequisite: APB 1150, APB 1810, HSC 1531, APB 1292. Provides students with introduction to study of tumors. Relates anatomy and physiology to abnormal and pathologic changes. Examines factors affecting tumor sensitivity and patterns of abnormal growth.

RAT 2242  3 Credits
ONCOLOGIC MEDICINE II

RAT 2614C  3 Credits
RADIATION PHYSICS I
Prerequisite: PHY 1002. Presents fundamental principles of radiation physics. Provides theory and purpose of radiation treatment machines. Introduces student to units of radiation measurement and associated hazards.

RAT 2618C  3 Credits
RADIATION PHYSICS II
Prerequisite: RAT 2614C. Introduces student to concepts of radioactivity and radiosensitivity. Includes brachytherapy safety and protection, monitoring devices and documentation procedures.
RAT 2680 4 Credits
RADIATION ONCOLOGY V
Prerequisite: RAT 2850. Radiation oncology student will demonstrate use of ionizing radiation to treat designated treatment areas. All clinical rotations under direct supervision of registered radiation therapist.

RAT 2805 2 Credits
CLINICAL PRACTICUM
Prerequisite: RAT 2680. Radiation oncology student will demonstrate clinical competency in applying ionizing radiation to designated area on patient under direct supervision of registered radiation therapist.

RAT 2840C 3 Credits
RADIATION ONCOLOGY III
Prerequisite: RAT 1810C. Rotation through radiation oncology department allows student opportunity to work on radiation therapy equipment. Includes, but not limited to, simulator, block cutting unit, various treatment units, and treatment planning laboratory.

RAT 2850 4 Credits
RADIATION ONCOLOGY IV
Prerequisite: RAT 2840C. Provides student opportunity to experience hands-on training in supervised clinical environment. Students assigned to radiation therapy unit under direct supervision of registered radiation therapist.

RAT 2902 2 Credits
SIMULATION LABORATORY
Prerequisite: RAT 2680. Provides hands-on training on equipment used in localization and delineation of patient’s treatment volume, target volume, and tumor volume.

RTE 2385 3 Credits
RADIATION BIOLOGY AND PROTECTION
Study of effects of ionizing radiation on biologic systems. Responses at cellular and total organism level investigated. Protection measures and regulations for all types of ionizing radiation presented.

RTE 1416C 3 Credits
RADIOGRAPHIC PROCEDURES II
Prerequisite: RTE 1516C. Continuation of Radiographic Procedures I to include procedures of axial skeleton.

RTE 1804 4 Credits
RADIOGRAPHIC CLINICAL EDUCATION I
Corequisite: RTE 1516C. Supervised clinical experience and competency evaluation in performing routine radiographic procedures with emphasis on radiation protection, patient care, equipment orientation, radiographic technique, darkroom procedures, and film quality evaluation.

RTE 1814 3 Credits
RADIOGRAPHIC CLINICAL EDUCATION II
Corequisite: RTE 1516C. Continuation of supervised clinical experience and competency evaluation in performing routine radiographic procedures with emphasis on radiation protection, patient care, equipment orientation, radiographic technique, darkroom procedures, and film quality evaluation.

RTE 2418 2 Credits
RADIOGRAPHIC EXPOSURE
Study of factors that govern and influence production of radiographic image. Manipulation of these factors and use of accessory devices to accommodate patient conditions.

RTE 2417C 3 Credits
RADIOGRAPHIC PROCEDURES III
Prerequisite: RTE 1416C. Continuation of Radiographic Procedures II to include semi-special vascular and nonvascular procedures.

RTE 2473C 2 Credits
RADIOGRAPHIC QUALITY ASSURANCE
Prerequisite: RTE 2413. Introduction to evaluation of radiographic systems, including film screen systems and processing, to assure consistency in production of quality images. Tests and procedures to evaluate radiographic systems performed. State and federal regulations and quality assurance documentation addressed.

RTE 2613C 3 Credits
IMAGING MODALITIES
Prerequisite: PHY 1002. Study of physical principles and applications of imaging equipment: radiographic/fluoroscopic, tomography, computed tomography, digital imaging, magnetic resonance imaging, and other specialized modalities.

RTE 2824 4 Credits
RADIOGRAPHIC CLINICAL EDUCATION III
Corequisite: RTE 2417C. Continuation of supervised clinical experience and competency evaluation in performing routine radiographic procedures with emphasis on radiation protection, patient care, radiographic technique, darkroom procedures, film quality evaluation, and computerized axial tomography.

RTE 2867L 5 Credits
RADIOGRAPHIC CLINICAL PRACTICUM
Prerequisite: RTE 2879L. Supervised clinical practice with emphasis on final competency evaluation of radiographic examinations.
RTE 2879L
RADIODRAPHIC CLINICAL EVALUATION IV
Prerequisite: RTE 2849L. Continuation of supervised clinical experience and competency evaluation in performing routine radiographic procedures with emphasis on radiation protection, patient care, radiographic technique, film quality evaluation, and computerized axial tomography, magnetic resonance imaging, angiography/digital vascular imaging, xerography, ultrasound, nuclear medicine, and radiation therapy.

RTE 2930
RADIOLOGIC SCIENCE SEMINAR
Prerequisite: All RTE courses. Seminar on all aspects of radiography in preparation for national certifying examination.

READING

REA 0001
COLLEGE-PREP READING I
Required for students scoring 33 or below on ASSET or making equivalent score on other state-approved entry test. Study of literal and critical comprehension skills with emphasis on literal skills and organizational patterns of information. Includes strategies for vocabulary development. Three hours of classroom instruction; two hours of support in lab. Credit does not apply toward associate degree. Upon successful completion student must take REA 0002.

REA 0002
COLLEGE-PREP READING II
Prerequisite: Successful completion of REA 0001 or score of 34-36 on ASSET or equivalent score on other state approved entry test. Review and reinforcement of skills covered in REA 0001. Emphasis on additional critical comprehension skills. Strategies for vocabulary development. Three hours of classroom instruction; two hours of support in lab. Credit does not apply toward associate degree. Students who pass with scores equivalent to 37-40 on ASSET strongly encouraged to enroll in REA 1106.

REA 1106
READING SKILLS
Prerequisite: REA 0002 or score of 37 on ASSET. Reinforcement of comprehension skills and vocabulary development. Emphasis on developing strategies for learning and remembering new words.

REA 1205
READING SKILLS
Designed to assist students with average and above-average reading ability to develop optimal reading skills. Emphasis on increasing reading speed and flexibility; developing thorough, accurate, and critical comprehension; and acquiring precise and extensive vocabulary.

REA 1620
STUDY SKILLS FOR COLLEGE
Series of courses designed to improve textbook study, reading ability, time management, and critical thinking and problem-solving skills. Includes study skills for College survival, test-taking and critical reading and thinking. May be taken for one, two, or three credits as arranged with professor. Sample minicourses include time control; study-reading College textbooks; notetaking on textbook reading - underlining, outlining, summarizing, mapping, memory improvement; listening to and taking notes on lectures; preparing for and taking examinations; reducing test anxiety; graph, map and chart reading; critical reading; creative thinking and problem-solving.

REA 2930
SELECTED TOPICS IN READING
Seminar for students interested in research, discussion, and observation of special topics in reading.

REAL ESTATE

REE 1000
REAL ESTATE PRINCIPLES AND PRACTICES
Corequisite: REE 1400 or departmental approval. Study of legal and economic aspects of real estate with emphasis on ownership, realty market, instruments of record, mortgages, taxes and government regulations. Students interested in sitting for Florida Real Estate Commission exam must take combined REE 1000 and REE 1400 end-of-course exam and receive grade of 70 percent or better.

REE 1010
HOUSING AND HOME OWNERSHIP
Introduction to economic, physical, legal and esthetic properties of home ownership, home construction and design. Special attention to factors to be considered in purchase and maintenance of home.

REE 1400
FLORIDA REAL ESTATE LAW
Corequisite: REE 1000. Introduction to Florida real estate license law and rules and regulations of Florida Real Estate Commission. Legal and ethical principles covered required knowledge for student entering real estate field and for state real estate license examination. Students interested in sitting for the Florida Real Estate Commission exam must take combined REE 1000 and REE 1400 end-of-course exam and receive a grade of 70 percent or better.

REE 2100
REAL ESTATE APPRAISING I
Introduction to basic theories and policies pertaining to social, economic and governmental forces influencing property values. Treatment of such factors as urban forces versus property values, site analysis, neighborhood characteristics and building construction.

REE 2101
REAL ESTATE APPRAISING II
Prerequisite: REE 2100. Continuation of REE 2100. Emphasis on application of theories studied in REE 2100 as well as study of current methods of determining property valuation by use of market, cost and income approaches.
REE 2200  
REAL ESTATE FINANCE I  
3 Credits  
Detailed study of basic concepts of financing real estate. Emphasis on legal aspects, sources of funds and methodologies of major lenders for real estate transactions.

REE 2201  
REAL ESTATE FINANCE II  
3 Credits  
Continuation of REE 2200. Emphasis on application of management approach to financing with special attention to use of funds, many facets of mortgages, long-term leases, purchases and lease-back arrangements.

REE 2300  
REAL ESTATE INVESTMENT  
3 Credits  
Designed to forecast and measure investment yields such as cash flow and profit analysis on real property. Analysis of houses, apartments, shopping centers, office buildings and industrial properties using various investment approaches.

REE 2500  
REAL ESTATE MANAGEMENT  
3 Credits  
Study of theories and techniques of professional management of real estate. Includes residential, business, industrial and investment properties.

REE 2930  
SELECTED TOPICS IN REAL ESTATE  
1-3 Credits  
For students interested in discussion observation and exploration of special topics in real estate.

REE 2949  
COOPERATIVE EDUCATION: REAL ESTATE FIELD EXPERIENCE  
2-4 Credits  
Prerequisite: Departmental approval. Student earns credit by working in supervised training assignment directly related to College major. May be repeated for credit.

RESPIRATORY CARE

RET 1025C  
PRINCIPLES OF RESPIRATORY CARE  
6 Credits  
Prerequisite: APB 2821C. Course and laboratory experience designed for beginning respiratory care student. Introduction and working knowledge of state of the art, basic principles of equipment operation and therapeutic objectives for administration of medical gases, humidity, aerosol, therapy modalities and airway management.

RET 1275C  
CLINICAL CARE TECHNIQUES  
Prerequisite: APB 2821C, RET 1025C. Presents basic principles and essential skills necessary to perform patient care safely and effectively. Includes medical asepsis, terminology, communication, patient assessment and positioning, medical ethics, and behavioral problems unique to patients with respiratory illness. Orientation to clinical rotation given. Student must maintain C through didactic portion to participate in clinical setting.

RET 1295C  
CHEST MEDICINE  
4 Credits  
Prerequisite: APB 2821C and RET 1025C. Course for respiratory therapy students to investigate nature and cause of pulmonary diseases which involve changes in structure and function. Etiology, clinical manifestations, pathogenesis, laboratory data and treatment for major chronic and acute pulmonary disease entities presented.

RET 1450C  
BASIC PHYSIOLOGIC MONITORING  
3 Credits  
Prerequisite: RET 1275C. Emphasis on basic diagnostic and monitoring principles used in determining clinical evaluation of patients. Cardiopulmonary assessment using electrocardiography, chest roentgenography and laboratory tests. (Lab Fee)

RET 1485C  
CARDIOPULMONARY PHYSIOLOGY  
4 Credits  
Prerequisite: APB 2821C or departmental approval. Includes pulmonary functions: normal ventilation and regulation of respiration, response to gases and ions, lung reflexes and ventilatory and mechanical factors. Includes pulmonary circulation, gas diffusion, manifestations of disease and blood gas analysis. Includes three-hour lab. (Special Fee)

RET 1874L  
CLINICAL PRACTICE I  
4 Credits  
Prerequisite: RET 1275C. Corequisite: Departmental approval. Student assigned clinical tasks in patient floor care under supervision of staff respiratory therapist or clinical instructor. Approximately 16 contact hours for every semester hours credit. (Special Fee and Insurance Fee - $19.00)

RET 1875L  
CLINICAL PRACTICE II  
4 Credits  
Prerequisite: RET 1264C, RET 1874L or departmental approval. Student assigned clinical practice in intensive care, cardiac care, progressive care and emergency room units under supervision of staff respiratory therapist or clinical instructor. Emphasis on volume ventilators and advanced patient care, pediatric/neonatal as well as adult. Approximately 24 contact hours credit. (Special Fee)

RET 2244  
LIFE SUPPORT  
3 Credits  
Prerequisite: RET 1450C and RET 1264C. Emphasis on advanced cardiopulmonary assessment diagnostic and monitoring techniques. Stresses cardiopulmonary hemodynamics, advanced pulmonary function studies and innovations.
SYG 2000H
INTRODUCTORY TO SOCIOLOGY - HONORS
Same as SYG 2000 with honors content. Honors program permission required.

SYG 2010
CONTEMPORARY AMERICAN SOCIAL PROBLEMS
Analysis of major social problems confronting American society. Special emphasis on critical thinking abilities in evaluating causes, effects and various approaches in dealing with social problems. Discussion includes such topics as mental illness, crime, juvenile delinquency, race relations, pollution, population, urbanization and influences detrimental to family stability: divorce, alcoholism, gambling, drug abuse.

SYG 2920
DEViant BEHAVIOR
Examination of sociological and social-psychological theories of deviant behavior. Considerable attention on understanding deviant actor's perceptions of own behavior and view of conventional perceptions of own behavior and view of conventional society. Major topics include: heterosexual deviance, homosexual deviance, urbanizational deviance, physical deviance, suicide, mental disorder and crime.

SYG 2430
MARRIAGE AND THE FAMILY
Assists student in developing perspective regarding areas of adjustment in marriage and family living. Attention to premarital behavior patterns, love and mate selection, communication, family finances, sexual relations, parenthood, divorce, widowhood and remarriage.

SYG 2985
SELECTED TOPICS IN SOCIOLOGY
Prerequisite: SYG 2000 or departmental approval. For students interested in special topics that explore further field of sociology through research, discussion and observation.

SYG 2994
COOPERATIVE EDUCATION: SOCIOLOGY FIELD EXPERIENCE:
Prerequisite: Departmental approval. Student earns credit by working in supervised training assignment related to College major. May be repeated for credit.

SPANISH

SPN 1000
BASIC SPANISH
Prerequisite for SPN 1100 For students without recent high school language skills. Emphasis on everyday use of the language. Introduces basic grammar, vocabulary and composition through conversational approach to Spanish.

SPN 1030-1031
CONVERSATIONAL SPANISH FOR HEALTH RELATED PERSONNEL.
Conversational Spanish for students in health related programs only. Emphasis on practical application of Spanish to situations relative to patients.
SPN 1040-1041
CONVERSATIONAL SPANISH FOR CRIMINAL JUSTICE PERSONNEL
Beginning conversational class for students in criminal justice and other programs. Vocabulary presented benefits those dealing with Spanish speaking people in all areas.

3 Credits each

SPN 1100
ELEMENTARY SPANISH I
Prerequisite: SPN 1000 or two years of high school Spanish or departmental approval. Continuation of fundamental Spanish grammar. Includes one-hour lab.

3 Credits

SPN 1101
ELEMENTARY SPANISH II
Prerequisite: SPN 1100 or departmental approval. Continuation of SPN 1100.

3 Credits

SPN 1170-2270
OVERSEAS STUDY IN SPANISH LANGUAGE AND CULTURE I AND II
Prerequisite: Departmental approval. Courses consist of two phases: (1) Orientation program gives student opportunity to make certain cultural, personal and educational adjustments prior to beginning of summer study at Spanish university; (2) Period of study at university offers student excursions, field trips and special activities. After summer courses, organized travel tours broaden student's cultural experience. Student takes for credit or audit six or 12 hours.

6-6 Credits

SPN 2200
INTERMEDIATE SPANISH I
Prerequisite: SPN 1101 or departmental approval. Conversational approach with readings adapted from Spanish newspapers and magazines. Includes one-hour lab.

3 Credits

SPN 2200H
INTERMEDIATE SPANISH I - HONORS
Same as SPN 2200 with honors content. Honors program permission required.

3 Credits

SPN 2201
INTERMEDIATE SPANISH II
Prerequisite: SPN 2200 or departmental approval. Conversational approach with readings adapted from Spanish newspapers and magazines. Includes one-hour lab.

3 Credits

SPN 2201H
INTERMEDIATE SPANISH II - HONORS
Same as SPN 2201 with honors content. Honors program permission required.

3 Credits

SPN 2510
INTRODUCTION TO SPANISH CIVILIZATION
Prerequisite: SPN 2201 or equivalent. Basic study of history, culture and art of Spain. Emphasis on development of conversational skills in Spanish.

3 Credits

SPN 2930
SELECTED TOPICS IN SPANISH
For students interested in special topics that explore further field of Spanish.

1-3 Credits

SPW 2100-2101
INTRODUCTION TO SPANISH LITERATURE
Prerequisite: SPN 2201 or equivalent. First semester surveys literary masterpieces of Spain from 12th century to Golden Age. Second semester continuation from 1800 to 20th century. Includes three hour laboratory.

3-3 Credits

SPEECH

ORI 1000
ORAL INTERPRETATION

3 Credits

SPC 1051
SPEECH AND WRITING IMPROVEMENTS
Improvement of language skills by developing and understanding effective articulation of American English through use of audiolingual approach.

3 Credits

SPC 1300
INFORMAL COMMUNICATION
Study and application of communication principles to remove verbal and non-verbal barriers. Emphasis on role playing, simulated conflicts, and dynamics of group discussion.

3 Credits

SPC 1600
FUNDAMENTALS OF SPEECH
Principles of oral communication common to speaking and listening. Emphasis on listening techniques, preparation and delivery techniques for extemporaneous speaking.

3 Credits

SPC 1600H
FUNDAMENTALS OF SPEECH - HONORS
Same as SPC 1600 with honors content. Honors program permission required.

3 Credits

SPC 1603
PUBLIC SPEAKING
Prerequisite: SPC 1600. Advanced principles of audience communication. Methods of presentation include impromptu, extemporaneous and manuscript. Categories include informative, entertainment, persuasion and group discussion.

3 Credits

SPC 1700
CROSS CULTURAL COMMUNICATION
Study and application of awareness skills for communication with people of other cultures. Upon completion, student uses problem analysis skills when communicating with people of other cultures.

3 Credits

SPC 2930
SELECTED TOPICS IN SPEECH
For students interested in research, discussion, and observation of special topics in speech.

1-3 Credits
STUDENT DEVELOPMENT

SLS 1261 3 Credits

STUDENT LEADERSHIP DEVELOPMENT
Dynamics of student organizational behavior with emphasis on personal and group goal setting, self affirmation, conflict resolution and development of leadership skills.

STUDENT LIFE SKILLS

SLS 1101 1 Credit

COLLEGE SURVIVAL SKILLS
Provides students with knowledge and skills for College survival. Includes an introduction to College and its resources, selected study skills and personal resource management skills. Students identify skill areas and levels they wish to improve.

SLS 1122 3 Credits

STUDENT SUCCESS
Students learn and adopt methods to promote success in College. Includes an introduction to the College and its resources, an understanding of learning skills, and personal development skills in an extended orientation setting. Students improve by practicing learning skills in note-taking, test-taking, and studying.

SURVEYING TECHNOLOGY

SUR 1100 4 Credits

BASIC SURVEYING AND MEASUREMENTS (Surveying I)
Elementary surveying including fundamentals of plane surveying; use and care of equipment. Accurate measuring of distance; theory and practice of leveling, angles and bearings; principles and use of transit; curves; stadia; and topographic and land surveying studied in coordinated class, lab and field assignments.

SUR 2201C 4 Credits

HIGHWAY DRAFTING AND ROUTE DESIGN
Prerequisite: SUR 1100, TAR 1120C. Highway drafting includes topographic maps, plans and profiles and cross sections. Route design covers traffic and vehicular sections. Route design covers traffic and vehicular characteristics, curvature and elevation of roadbeds, earthwork and aerial photography as they affect cost and route design. (Special Fee)

SUR 2300 3 Credits

TOPOGRAPHY AND MAPPING
Prerequisite: SUR 1100. Study of field and drafting techniques of map construction, control surveys, detail surveys, transit-tape; transit-stadia; plane table; map drafting; contour construction; use of contour maps; cross-section field work and drafting; earthwork computations; theory and use of state plane coordinate systems; map reproduction techniques.

SUR 2321 2 Credits

PROFESSIONAL DRAFTING FOR SURVEYORS
Techniques and drawings used in surveying profession. Includes lettering, line (pencil and ink) drafting, traverse and curve plotting, cross sections, lot surveys and boundary plats.

SUR 2330 2 Credits

PHOTOGAMMETRY
Introduction to science of aerial photo interpretation as it applies to obtaining reliable information for surveying and development of land maps. Includes parallax measurements, stereo plotting, remote sensing and radial line plotting.

SUR 2400 3 Credits

LEGAL ASPECTS OF SURVEYING
Prerequisite: SUR 2610. Legal principles of boundary location and professionalism; history of boundary surveys; sectional surveys; legal descriptions, property transfer, resurveys, subdivision plats; surveyor in court; water boundaries.

SUR 2402 3 Credits

LAND SURVEYING AND DESCRIPTIONS
Prerequisite: SUR 2610 and SUR 2400. Construction of land descriptions and techniques of surveying boundaries of described parcel of land; metes and bounds descriptions and surveys; lot and block descriptions and surveys; sectional descriptions and surveys; water boundary descriptions and surveys. (Includes all associated computations.)

SUR 2460 3 Credits

SUBDIVISIONS
Prerequisite: SUR 2640. Plat construction from tract description to final record plat; plat drafting; necessary computations; lettering meaning of legal parts; current plat laws and regulations.

SUR 2500 3 Credits

ELECTRONIC AND GEODETIC SURVEYING
Prerequisite: SUR 2610. Electronic distance measurements and geodetic techniques in surveying; theory construction and use of electronic measuring devices (geodimeter, telemeter, ranger-laser); applied geodetic astronomy (bearing and latitude determination using stars, sun, elongations, etc.); geodetic corrections to surveys of large extent.

SUR 2600C 3 Credits

SURVEYING CALCULATIONS
Prerequisite: SUR 1100 or departmental approval. Prepares student to solve field problems on hand-held calculator. Emphasis on economical ordering and handling of data in workplace. Analysis of data from projects important to working surveyor/businessperson. Includes lecture and in-class use of calculator.

SUR 2610 3 Credits

INTERMEDIATE SURVEYING COMPUTATIONS (Surveying II)
Prerequisite: SUR 1100. Field techniques and associated computations; adjustment of transit errors in angle measurements; errors in distance measurements; field techniques of traversing; traverse computations (closure and balancing); field techniques of typing points to control; tie-in computations; layout of horizontal curves; horizontal curve computations; field techniques and computations of precise levels; vertical curve computations.

166
SUR 2621 3 Credits
COGO CAD FOR SURVEYORS
Prerequisite: SUR 1100 or departmental approval. Prepares student to solve and graph on computer most common field surveying projects. Provides in-class computer experience in adjusted final coordinates and maps of route surveys, plats, level lines, subdivisions, etc. Includes lecture and computer lab.

SUR 2640 4 Credits
ADVANCED SURVEYING COMPUTATIONS (Surveying III)
Prerequisite: SUR 1610. Advanced surveying office computations; traverse, horizontal curve, and vertical curve review; coordinates areas by D.M.D. and coordinates; partitioning-problems; intersection problems (line-line, line-curve, curve-curve); missing traverse parts; compound and reverse curve computations; spirals; principles of significant figures and solution analysis.

SUR 2949 2-4 Credits
COOPERATIVE EDUCATION: SURVEYING FIELD EXPERIENCE
Prerequisites: SUR 2610 and departmental approval. Student earns credit by working in supervised training assignment directly related to College major. May be repeated for credit.

THE 1302 3 Credits
DEVELOPMENT OF THEATER AND DRAMA: IBSEN TO PRESENT
Survey of theater and drama from times of Ibsen to present. Places theater in social framework of its age with emphasis on producers, actors, audiences and playhouses, including setting, lighting, music, costumes and makeup. Representative plays studied.

THE 2930 1-3 Credits
SELECTED TOPICS IN THEATER
For students interested in research, discussion and observation of special topics in drama and theater.

TPA 1210 3 Credits
BASIC STAGECRAFT I
Methods of scenery construction. Covers tools, materials, hardware and basic approaches to building scenery using hands-on experience to complement lectures.

TPA 1211 3 Credits
BASIC STAGECRAFT II
Prerequisite: TPA 1210. Continuation of TPA 1210 with special emphasis on construction of props, scene painting techniques, special effects and installation.

TPA 1230 2 Credits
COSTUME TECHNIQUES AND WARDROBE PRACTICES
Emphasis on planning, execution and running of costumes for production.

TPA 1250 2 Credits
MAKEUP FOR THE STAGE
Study of principles, materials and applications of theatrical makeup.

TPA 2010 3 Credits
BASIC THEATER DESIGN
Involves students in preliminary concepts of stage, lighting, and custom design. Teaches student history of theatrical presentation and motivation for design concepts.

TPA 2220 4 Credits
INTRODUCTION TO STAGE LIGHTING
Stage lighting techniques, practices and equipment. Includes electrical theory, use of dimming systems and implementation of lighting designs. Includes two-hour lab.

TPA 2260 4 Credits
SOUND FOR THE STAGE
Theory and practices in sound reinforcement and effects composition for indoor and outdoor stage. Covers audio equipment and systems, recording techniques and operation of sound for performance. Includes two-hour lab.

TPA 2282 4 Credits
THEATER EQUIPMENT MAINTENANCE
Prerequisite: TPA 2260, TPA 2220 or departmental approval. Provides students systematic approach to maintenance and trouble-shooting of theater sound and lighting equipment. Includes two-hour lab.
TPA 2290 1-3 Credits
TECHNICAL THEATER PRODUCTION
Participation by student as technician in dramatic productions at College. May be repeated for up to 12 hours credit.

TPA 2942 1-3 Credits
THEATER INTERNSHIP
Prerequisite: Departmental approval. Student earns credit by working in supervised training assignment directly related to College program. Three additional hours in TPA 2290 may be substituted for course. May be repeated for up to six hours credit.

TP 1110 3 Credits
ACTING I
Introduction to practical skills necessary to art of acting. Includes character analysis and development; script analysis; learning techniques for performance preparation, including relaxation, physical and vocal warm ups; study of acting methods and styles; rehearsal behavior, performance of monologues and scenes.

TPA 1111 3 Credits
ACTING II
Prerequisite: TPP 1110. Further application of the principles studied in Acting I. Includes selection, rehearsal and performance of repertoire of monologues, preparing resume, auditioning techniques, and public performance in one-act plays. Focus is on Acting as career choice.

TPP 1112 3 Credits
ACTING III
Prerequisite: TPP 1110. Examination of historical acting styles: Greek, Elizabethan, Restoration, Commedia Dell’Arte, Comedy of Manners; includes research in period costumes, deportment, music, manners, and decor; analysis of verse speaking: performance of sonnets, scenes and monologues.

TPP 1113 3 Credits
ACTING IV
Prerequisite: TPP 1110. Further application of principles studied in Acting I. Advanced scene study, with emphasis on modern classics (i.e. Williams, Miller, O’Neill, Chekhov, Albee). Includes in-depth work on character development in laboratory environment; study of critical analysis of performance; performance of scenes.

TPP 2310 3 Credits
DIRECTING I
Acquaints student of theater with overall function of director of play. Includes study of history and theory of directing, as well as practical experience in selecting and casting play, planning rehearsals, blocking, script analysis, working with actors. Also includes overseeing scenery, lighting, costumes, properties, and stage management. Students direct one-act play for public performance.
Valencia Community College recognizes the need for using the resources of individuals within the community to help develop realistic and practical career and community programs. It is essential that career programs be cooperatively planned and that a close working relationship exist among educators, industry, business and labor in order to create programs that provide students with marketable job-entry skills. To this end, advisory committees are established to assist in the development and evaluation of new curricula and for constant reevaluation and updating of those curricula presently offered. In general, the duty of the advisory committees is to advise the professional staff of Valencia on such matters as current and projected employment needs, curricula content, equipment and facilities.

The advisory committees serving Valencia Community College have contributed tremendous aid and assistance in the development of career programs, as reflected in the strength and effectiveness of the curricula offered.

ACCOUNTING TECHNOLOGY
Joyce Aide
Windham & Shores, P.A.
R.A. Allen, CPA
Reiter & Allen
Henry Anderson
University of Central Florida
Charles Black
Orlando Utilities Commission
Kenneth A. Cassady
Martin Marietta
Larry Chastang
Chastang, Ferrel & Walker
Jim Enos
Holiday Inn
Bill Hemmerly
General Mills Restaurants
Bill O'Toole
Walt Disney World
Pablo Perez
Tupperware Home Parties
Jo Ellen Ross
Arthur Anderson

Ronald Shuck
Lovelace, Roby & Co.
Gary Singleton
Orlando Regional Medical Center
Ken Spearman
Citrus Central
Pam Prinz Stewart
Robert Half of Orlando
Mike Thornton
SunBank
Richard Williams
Orlando, FL
Sam Wilson, CPA
Cuisine Des Chefs, Inc.

VALENCIA
Carolyn Allen
George Dow
Laurie Larson Gardner
Miriam Gateley
Edmund Gross
Deborah Hopkins
Roger Smith
Stanley Stone
Joan Tiller
Sam Tish
Jane Wiese

BUILDING CONSTRUCTION TECHNOLOGY
Joseph H. Dixon, Jr.
University of Central Florida
Donald Hampton
Hampton, Monday & Associates, P.A.
Tom R. Hunton, AIA
Hunton, Brady, Pryor, Maso Architects, P.A.
Harold Johnson
Architect
Lee Koepke
Lee Koepke, Inc.
Frank W. Kynast
Orlando, FL
Samuel E. Mathis
General Mills Restaurants, Inc.
William Palm
Glace and Radcliff, Inc.

Paul C. Palmer, Jr.
Palmer Homes

VALENCIA
Edmund Gross
Shannon Hellard
Wiley Jones
Hugh Rogers
Joan Tiller

BUSINESS ADMINISTRATION AND MANAGEMENT
John Barry
John Barry & Company
Gloria Corsoro
Orange Management Corporation
Tony Galloway
Xerox Education Specialist
Phillis Intro
Economic Development Commission
Raymond Katzish
Disney Development
Ana B. Kerr
Crummer Graduate School of Business
Robert Miller
Circle K
Robery Ray
The Runger Company
Lexa Ruoff
Universal Studios
Raleigh F. Seay, Jr.
Orlando, FL
Betty S. Watson
Southern Bell Telephone Company
Dottie Wynn
Adoli Enterprises, Inc.

VALENCIA
Carolyn Allen
Arden Gastineau
Edmund Gross
Deborah Hopkins
Corinne B. Linton
Stanley H. Stone
Joe Straub
Joan Tiller
COMPUTER ASSISTED DESIGN FOR THE DISABLED

Paul Arsenault
United Telephone of Florida

Jim Austin
United Telephone of Florida

Carlos Barrios
Huntz, Brady, Pryor, Maso, P.A.

Chris Bohme
Bowyer-Singleton

David Boldt
V.O.A. & Associates, Inc.

John Braga
Braga, Burton & Braswell

Will Braswell
Braga, Burton & Braswell

Bill Burkholder
Orange County G.I.S.

Gary Burton
Braga, Burton & Braswell

Gary Chase
HWH Architects, Engineers & Planners

Dale Crosby
Dyer, Riddle, Mills & Precourt

Wilt Cunningham
Tilden, Lohbitt & Cooper, Inc.

Marion Daitzman
Private Industry Council of Central Florida, Inc.

Bob Egeston
Hansen, Lind, Meyer, Inc.

Alton Elliott
ITEC Productions, Inc.

Dick Ferrone
Westinghouse Electric Corporation

Lynn Finch
Cadtek Services, Inc.

John Foley
CADD Pro

Rick Frymyer
Orlando Utilities Commission

Paul Hall
SEI Technical Services

Jim Harrison
Orange County Engineering

Ted Hunter
Fuglberg Koch Architects

Tom Jaeger
HWH Architects, Engineers & Planners

David Jakiela
Tilden, Lohnitz and Cooper, Inc.

Jeff Jenson
ITEC Productions, Inc.

Ken Johnson
Westinghouse Electric Corporation

Doug Kinison
IBM Corporation

Mark Matzinger
Braga, Burton & Braswell

Connie McGowan
Private Industry Council of Central Florida, Inc.

John McLeod
Private Industry Council of Central Florida, Inc.

Greg Mundy
IMDC

Ricardo Oliver
Center for Independent Living

John C. Pacione
Florida Hospital Medical Center

AL Pandolfi
Equal Access, Inc.

Jim Parke
Orlando Reprographics, Inc.

Maureen Quint
D.A.G. Design

Edith Raby
Center for Independent Living

Jim Ross
Ross Design Group

Doug Sangster
Schweitzer, Inc.

Jim Shalls
Vocational Rehabilitation

John M. Sikes
Blount, Sikes & Associates

Sandy Smith
MacGregor Smith Blue Printer, Inc.

Pete Stenborg
Rochester Precision

Bill Stum
Walt Disney World

Louis Tooker
Sverdruk Corporation

Roger Trubey
Post, Buckley, Schuh and Jernigan

Ken VanVelen
Drafting By KVan

Alan Waldrop
Orange County Public Schools

Cris Whidden
National Graphicon

Tom Wille
Commonwealth Engineering Associates, Inc.

Scott Williams
Blount, Sikes & Associates

Carrie Wynkoop
United Telephone of Florida

Mike Zerofsky
Martin Marietta

VALENCIA

Carolyn Allen
Deborah H. Clark
JoAnn Gregg
Carolyn Gresham
Edmund Gross
Pam Overholt
Hugh Rogers
Joan Tiller
Pat Young

COMPUTER PROGRAMMER TRAINING FOR THE DISABLED BUSINESS ADVISORY COUNCIL

Steve Baker
FIS

Nancy Bartram
Airborne Express

Wils Bell
Professional Resources Center

Jim Black
Orange County Public Schools
Bill Bond
Orange County Data Center

Bruce Hawkins
Walt Disney World

Charlie Pelton
FIS

David J. Boorman
SiemensStromberg-Carlson

Laura Hooks
Attorney's Title Insurance Company

Micky Pohlar
Suntrust Service Corporation

Paul Bruno
Wilson Learning Corporation

Jae Inglish
Balfour Company

Mary Lou Quinn
Ciber, Inc.

Tom Burke
Orlando Regional Medical Center

Judi Johnson
Mrs. J's Specialty Baskets

Edith Raby
Center for Independent Living

Suzanne Burns
City of Orlando

Ron Johnson
Mr. J's Coffee Systems

Nancy Rochette
City of Orlando

Len Burry
Valencia Community College

Peter Karp
Orange County Data Center

David Salazar
AXIS

Bob Caicross
IBM Corporation

Lisa Ketchersid
Citicorp Information Resources

Jim Shalls
Vocational Rehabilitation

Kathy Campbell
Center for Independent Living

Rod Kist
First Federal of Osceola

Dick Shorthouse
Martin Marietta

Virginia Clark
AT&T

Cathy Lafferty
Ciber, Inc.

Ed Stucky
Newtrend Group

Ed Cohen
Jennifer Mackenzie Associates

Steve Laird
AT&T

Bill Suter
Harcourt Brace Jovanovich, Inc.

John B. Coleman
AT&T

Herb Lins
Great Western Bank

Lowell Thomas
Winter Park Memorial Hospital

Craig A. Copeland
Citicorp Information Resources

Bill Malan
NCR Corp.

Mike Thompson
Westinghouse Electric Corporation

Edward Corn
NCR Corporation

Jack McConnell
IBM Corporation

Danny Tilloston
Park Centre Software

Fred Costello
Oxford Marketing Group, Inc.

Barry Mestel
Moore Business Forms

Bernie Tomasky
Systematics, Inc.

Joanne T. Cox
Great Western Bank

Tom Metcalf
Martin Marietta

Hal White
Executrain

Marion Daitzman
Private Industry Council of Central Florida

Carolyn McKinney
Valencia Community College

Terry Wilkes
AXIS

Terry R. Dermon
Keane, Inc.

Bruce Miller
IBAX Healthcare Systems

Marie Williams
Westinghouse Electric Corporation

Stan Duffendack
Digital Equipment Corp.

Roger M. Nixon
Anlen, Inc.

Marvin Williams
Walt Disney World

Bill Ferrara
Operating Systems Specialist, Inc.

Janice Ormanian
Norell Services, Inc.

Bob Wood
Travelers/EBS, Inc.

Kathy Crinkel
EBS Users Group

Ronald G. Parks
Orlando Utilities Commission

Woody Woodall
ISAC

Cindy Hagerty
City of Winter Park

Pat Pattishall
FIS

Thomas G. Wright
Clerk of Circuit Court

Frank Hagy
City of Orlando

Bill Paynter
Shearson Lehman Hutton, Inc.

VALENCIA

Carolyn Allen
Deborah H. Clark
Donna Deltrick
Diep Gotich  
Vincent Jones  
Althea Malay  
Pam Overhoff  
Stanley Stone  
Joan Tiller  
Daisy Williams

**COMPUTER PROGRAMMING AND ANALYSIS**

Thomas E. Duchano  
Super Food Services, Inc.

Edward Griffin  
Martin Marietta

Kahild Jafr  
Excellence International, Inc.

Henry Ott  
Orlando, FL

G. Ali Shay Khian  
University of Central Florida

James C. Staples  
Martin Marietta

Pat Wolski  
The Orlando Sentinel

**VALENCIA**

Carolyn Allen  
William Hunt  
Bob Mille  
Stanley Stone  
Joan Tiller  
Reneva Walker

**DENTAL HYGIENE**

Isaac Angel  
The Dental Society of Greater Orlando

Tom Blain, DDS  
Kissimmee, FL.

Christine Nicholas, RDH  
Sanford, FL

Pam Ridilla, RDH  
Orange County Dental Hygiene Society

Cindy Sensabaugh, RDH  
Orange County Dental Hygiene Society

Carole R. Todini  
Central Florida Area Health Education Center

Rose Walls, CDA  
Orlando Vocational - Technical Center

**VALENCIA**

**CRIMINAL JUSTICE TECHNOLOGY**

Roger Clark  
Florida Highway Patrol

Frederick Dixon  
Orlando Community Corrections Center

Sgt. Pete Gauntlett  
Orlando Police Department

Sgt. Tom Gerans  
Orange County Department of Corrections

Lt. Samuel B. Ings  
Orlando Police Department

Sgt. Fran Iwanski  
Kissimmee Police Department

**DIEETIC TECHNOLOGY**

Elizabeth Dorsey, R.D.  
Orlando, FL

Margaret Feld  
Orlando Vocational - Technical Center

Dona Greenwood  
Florida Hospital

Jack Gunner, CDM  
Winter Springs, FL

Jean Handy  
Orlando Vocational - Technical Center

Douglas Knoblet  
Orange County Public Schools

Joan T. Newman  
Orlando Vocational - Technical Center

Robin Niedz, R.D.  
Winter Park Memorial Hospital

Glenna Raidt, R.D.  
Longwood, FL

Marta W. Simpson  
Orlando, FL

Brenda Somer, DTR  
Florida Hospital

Valerie Somerville  
Orange County Public Schools

Charlotte Sosa  
Orange County Public Health

Lorraine Surlak, R.D.  
Altamonte Springs, FL

**VALENCIA**

Carolyn Allen  
Edmund Gross  
Stanley Stone  
Joan Tiller  
Ruth Webb

**DRAFTING AND DESIGN TECHNOLOGY**

Patricia Courington  
Mid-Florida Technical Institute

Joseph H. Dixon, Jr.  
University of Central Florida

E. L. Green  
Martin Marietta
EMERGENCY MEDICAL SERVICES TECHNOLOGY

Cindy Bell
West Orange Ambulance Service

Mike Brandt
Orange County Fire and Rescue

Gary Denton
Florida Regional -EMS

Dan Hardesty
Matlant Fire Department

Dave Freeman
Orlando Fire Department -EMS

Kathy Keene
Orlando Fire Department -EMS

Robert Langfeldt
West Orange Ambulance Service

Lynn Pettingill
Apopka Fire Department

Joan Pyle
Orange County-EMS

Louie Salado
Winter Park Fire Department

Barbara Smith
American Medical Transport

Mark Trach
Florida Hospital

Eileen Wagner, R.N.
Orlando Regional Medical Center

EDUCATIONAL AND VOCATIONAL TECHNOLOGY

VALENCIA

Edmund Gross
Shannon Hellard
Hugh Rogers
Bob Thorhill
Joan Tiller
Joe Ward

ELECTRONIC ENGINEERING TECHNOLOGY

Barry Campbell
Martin Marietta

Anthony DiBerardino
Martin Marietta

David Flinchbaugh
Orlando, Florida

Edward Griffin
Clermont, Florida

William Haynes
Orlando, FL

Dan Lenhof
Stromberg-Carlson

James McBrayer
University of Central Florida

Henry Ott
Martin Marietta

James Welty
Northwest Instrument Systems

VALENCIA

Edmund Gross
Cary Hawat
Tom Bartoli
Walter Perkins
Hugh Rogers
Harvey Saltz
Joan Tiller

FILM PRODUCTION TECHNOLOGY

Richard Banales
Walt Disney World

Gary Blair
Post Production Supervisor
Super Force

Cynthia Carraway
Stage Eq. & Ltg., Inc.

Matt Cokee
Audio Services Corporation

John Cummings
The Motion Picture Company

Joe Foglia
Southeast Audio Services

Joe Guzzi
Audio Services Corporation

Steven Heller
Panavision

Tim Brodeur
Malcom Pimie, Inc.

Phillip Graves
Geneva, FL

Bert Hale
Orange County

Mike Johnson
Orange Osceola Utilities

Jeff Lanphere
City of Orlando

Coy Mathis
Orange County Public Utilities

Don McIntosh
McIntosh Associates

Armando Rodriguez
Walt Disney World Co.

Michael Sims
Michael Sims and Associates

Elizabeth Skene
Dept. of Environmental Services

VALENCIA

Carolyn Allen
Rick Nieves
Joan Tiller
Silvia Zapico
Tom Zurosky

ENVIRONMENTAL SCIENCE TECHNOLOGY

Bill Allman
City of Orlando

Mike Anders
Earth Resources Consultants

Cheryl Archer
Orange County Public Utilities

John Bateman
Orange County

173
Ben Hogan
Panavision

Brian Lawlor
I.A.T.S.E. Local 631

Kerry Levin
Universal Studios Florida

Steve Mitchell
Eastman Kodak

Todd Nichols
Disney/MGM Studios

Michael Ott
The Post Group

Dick Palmer
Walt Disney World

Dominic Palmeri
Orlando, FL.

Kathy Ramesberger
Economic Development Commission

Tammy L. Stone
Sun-State Productions Services Inc.

Bob Storer
Digital Multi-Med. Post, Inc.

VALENCIA

Carolyn Allen
Jim Barber
Michael Corbett
Melinda Epperson
Julia Gagne
Michael Shugg
Quentia Thom
Joan Tiller

FINANCIAL SERVICES

Sheldon Aronoff
Dean, Whitter, Reynolds, Inc.

Shirley Boykin
Metropolitan Orlando
Urban Leasage

Sharon Brousard, CFP
Star Partners

Celita Davis, CFP, EA
Financial Directions, Inc.

Thomas Ebree
Navy-Orlando Federal Credit Union

Sharon Littleton
Citizens Bank of Oviedo

Beverly Paulk, CFP
Aegis Financial Advisors

Bonnie Poe
Credit Counseling Service of Central Florida

David Raleigh
Orlando, Florida

Tim Whitefield
Great Western Bank

Carolyn Allen
Corinne Linton
Stanley Stone
Joan Tiller

Ozzie Alarcon
Barnett Bank, N.A.

Betty Burton
SunBank, N.A.

Scott Callaway
Barnett Bank, N.A.

Geoffrey Clett
First Union National Bank

Sharyn Dickerson
Southern Bank of Central Florida

Dick Fusaro
Longwood, FL

Bob Klettner
Barnett Bank, N.A.

Gary L. Lewis
The Citizens & Southern Bank

Sharon Littleton
Citizens Bank of Oviedo

Patrick Macken
Bank of Central Florida

Penney McMahon
Liberty National Bank

Patricia Perkins
Barnett Bank, N.A.

John H. Strandquest
SunBank, N.A.

Cindy Wegner
Barnett Bank

Susan Wentz
First Union National Bank

VALENCIA

Carolyn Allen
Edmund Gross
Kenneth Hise
Deborah G. Hopkins
Steve Kinder
Sandra Santos
Stanley H. Stone
Joan Tiller

FINANCIAL SERVICES -
SAVINGS & LOAN

Candy Bealer
First Federal of Osceola

Chuck Bolick
Casselberry, FL

Kathy Murphy
Coral Gables Federal S&L

Pat Pattishall
Florida Inforamagement Services

Lois Stahl
Crown Savings Association

Marta VanVoorst
Meritor Savings

VALENCIA

Carolyn Allen
Deborah Clark
Stanley Stone
Joan Tiller

FIRE SCIENCE TECHNOLOGY

Hamid Bahadori, PFE
Orlando Fire Department

Deputy Chief Bob Bowman
Orlando Fire Department

Chief Doug Bressler
Orange County Fire Department

Captain Steve Chancey
Greater Orlando Aviation Authority

Chief Jim Coley
Kissimmee Fire Department

Chief Mitch Floyd
Orange County Fire Department

Chief Danny Garaguso
St. Cloud Fire Department
Chief E.L. Kendrick
Orlando Fire Department

Chief Frank Montes de Oca
Orange County Fire Rescue Division

Lt. Suzie Paxton
Orlando Fire Department

Lt. Louis Salado
Winter Park Fire Department

Chief Ed Spahn
Orange County Fire Rescue Division

VALENCIA

Edmund Gross
Ken Kincaid
Joan Tiller
Ruth Webb

GRAPHIC DESIGN TECHNOLOGY

Charles Atkins, Jr.
Atkins Paper Company

Eloiise Bissen
Peterson Outdoor Advertising Corp.

George Buchanan
Typographics

Jagdish Chavda
University of Central Florida

Charles Fassier
Orlando, FL

Cliff Heenie
Westinghouse

Tommy Jaslonowski
Tupperware

Meredy Jenkins
Orlando, FL

Rick Kilby
Church Street Station

Frank Nathe
Insty Prints

Len Rizzo
Martin Marietta

Bill Ryerson
Buena Vista Association

Jack Schero
Vaughan Press

Tom Stockwell
Graphics Arts Association of Central Florida

Donna Walden
Mid-Florida Technical Institute

Susan Tyler
Tribune Media Services

Mark Williams
The Orlando Sentinel

Steve Zollman
Harcourt Brace Jovanovich

VALENCIA

Carolyn Allen
Edmund Gross
Barbara Peterson
Hugh Rogers
Querntia Throm
Joan Tiller
Joe Ward

HOSPITALITY MANAGEMENT

Ms. Lynne Daniel
The Swan

Dan Darrow
Walt Disney World

E. Taylor Ellis
University of Central Florida

Michael French, CHA
The Peabody

Linda Gale
TGI Friday

Julio Garcia
Orlando, FL

Cathy A. Holloway
Holiday Inn International Airport

Wilbur Houston
Orlando, FL

Martin Hunter
The Gateway Inn

Marshall Kelberman, CHRE
The Peabody

John Labruzzo
Tishman Realty/Construction

Larry Leckart
Ronnie's Restaurant

Michael Levine
Seminole County Sheriff's Dept.

Larry Proulx
Florida Restaurant Association

Rhonda Rhodes
The Dolphin

Harris Rosen
Quality Inn International

Ms. Linda Sampieri
General Mills Restaurants, Inc.

Samir Shafei
Hilton at Walt Disney World

Bonnie Sharp
International Visitors Bureau

Garneta Swenson
Sheraton Plaza Hotel

Mary Tiffany
Management Developing & Consulting Group

Garret Toohey
Quality Inn Plaza International

Larry Walker, CHA
Cypress Hotel Management Co.

Steve Ward
Ward & Compeny

William J. Watson, Jr.
Central Florida Hotel & Motel Association

VALENCIA

Edmund Gross
Deborah Hopkin
Michael E. Pizycki
Joan Tiller

IMAGING

James Deinlein
Orlando Regional Medical Center

Domenick DiGregorio
Orlando Regional Medical Center

Tom Edwards
University of Central Florida

Rick Golab, GNMT
Orlando Regional Medical Center

Lennard Greenbaum
Orlando Regional Medical Center

David Harding
Orlando Regional Medical Center

Pradip Jannaadas
Orlando, FL
<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Full Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Larry Johnston</td>
<td>VALENCIA</td>
<td>Cynthia Newman</td>
</tr>
<tr>
<td>Florida Hospital</td>
<td></td>
<td>Kissimmee, FL</td>
</tr>
<tr>
<td>Richard Lovas</td>
<td></td>
<td>Hugh Palmer</td>
</tr>
<tr>
<td>Orlando Regional Medical Center</td>
<td></td>
<td>Attorney at Law</td>
</tr>
<tr>
<td>Merle Peterson</td>
<td></td>
<td>Ana Tangel Rodriguez</td>
</tr>
<tr>
<td>Florida Hospital</td>
<td></td>
<td>Attorney at Law</td>
</tr>
<tr>
<td>Dorothy Stottlemyer, R.T.T.</td>
<td></td>
<td>Deborah J. Townsend</td>
</tr>
<tr>
<td>Orlando Cancer Center</td>
<td></td>
<td>Attorney at Law</td>
</tr>
<tr>
<td>Charles Walbroel</td>
<td></td>
<td>Carolyn Allen</td>
</tr>
<tr>
<td>Florida Hospital</td>
<td></td>
<td>Kenneth Bevan</td>
</tr>
<tr>
<td>VALENCIA</td>
<td></td>
<td>Stanley Stone</td>
</tr>
<tr>
<td>Karen Blondeau</td>
<td></td>
<td>Joan Tiller</td>
</tr>
<tr>
<td>Edmund Gross</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Julie Guy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandra Karol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shelly Kimmerle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joan Tiller</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ruth Webb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAND SURVEYING TECHNOLOGY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glen Bryan, PLS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post, Buckley, Schuh &amp; Jermigan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michael J. Cavalere, PLS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dyer, Riddle, Mills &amp; Precourt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phil Hampton, PLS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hampton Land Surveyors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victor Haas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State of Florida</td>
<td></td>
<td></td>
</tr>
<tr>
<td>William C. Hart, Jr., PLS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hart Surveyors of Osceola</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diane Jones, PLS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jones, Wood, and Gentry, Inc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>George Massey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistant County Surveyor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dann L. McKee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>County Surveyor, Orange County</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mike Rudd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blount Sikes &amp; Associates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>David White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Engineering Consultants, Inc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charles Woodward</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aerial Cartographics of America</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gerald Zerrrip, PLS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walt Disney World</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R.S. Adhav</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantum Technology, Inc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>David Finchbaugh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orlando, Florida</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jim Johnson</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rockwell Laser Industries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>John Kemp</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walt Disney World</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robert McMahan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McMahan Electro-Optics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>James Porter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Martin Marietta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joe Scordato</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laserralliance Technologies, Inc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jay Staley</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orlando Vocational - Technical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phil Hampton, PLS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hampton Land Surveyors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victor Haas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State of Florida</td>
<td></td>
<td></td>
</tr>
<tr>
<td>William C. Hart, Jr., PLS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hart Surveyors of Osceola</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diane Jones, PLS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jones, Wood, and Gentry, Inc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>George Massey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistant County Surveyor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dann L. McKee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>County Surveyor, Orange County</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mike Rudd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blount Sikes &amp; Associates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>David White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Engineering Consultants, Inc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charles Woodward</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aerial Cartographics of America</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gerald Zerrrip, PLS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walt Disney World</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edmund Gross</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hugh Rogers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shannon Hellard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joan Tiller</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deborah Kelly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal Assistant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nancy Honsa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal Assistant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ed Forant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orlando, FL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lynda Ulmer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheryl Stone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Orange Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linda Martin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orlando, FL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anna Banker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Martinez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange County Regional Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Vandewater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leesburg Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judy Wiggins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminole Memorial Hospital</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

176
NONTRADITIONAL CAREER AWARENESS AND TRAINING

Dottie Campbell
AT&T Microelectronics

Carl G. Carlander
Carlander and Associates, Inc.

Buddy Cartenito
C&F Data

Diana Chichonski
Martha Marietta

Peggy Harris
P&D Metals & Refrigeration, Inc.

Jill Jeter
Walt Disney World

Susan Mahood
Kissimmee, FL

Joseph D. Pirrotta
J.D. Pirrotta Company

Cliff Thomas
Private Industry Council

Betty Gayle Williams
Orlando Public Utilities

Lynn Wright
Winter Park Fire Department

VALENCIA

Gaby Hawat
Vera Poiitier
DLaine Priest
Sandra Todd Sarantos
Joan Tiller

NURSING, R.N.

Cathy Canniff-Gilliam
Sand Lake Hospital

Jane Jenkins
Orlando General Hospital

Jean Kijek
University of Central Florida

Carol Kunau
Florida Hospital

Nina Lamanno-Aucker
Huma Hospital-Lucerne

Jo Manion
Creative Nursing Management

Joan T. Newman
Orlando Vocational - Technical Center

Ann F. O'Brien
Winter Park Memorial Hospital

Anne Peach
Orlando Regional Medical Center

Marsha K. Rauch
Southern College

Kate Reagan
Winter Park Memorial Hospital

Judith Rehak
Glenleigh Hospital of Orlando

Dawn Sedlacek
Orlando Regional Medical Center

Bonnie Semenic
Winter Park Memorial Hospital

Louise Shives
Orlando, FL

Suzie Strifer
Sand Lake Hospital

Belinda Williams
AMI Hospital

VALENCIA

Edmund Gross
Anne Miller
Joan Tiller
Ruth Webb

OFFICE SYSTEMS TECHNOLOGY

Sandra Atkinson, CPS
American Football Coaches Association

Carol Barr, RRA
University of Central Florida

Mary Bates
Gastroenterology Association of Central Florida

Sandra Chandler, CPS
SunTrust Service Corporation

Margaret R. Clara
Gray, Harris & Robinson, P.A.

Barbara J. Coad, PLS
Honigman, Miller, Schwartz & Cohn

Judith L. Edquist, CPS
Litchford, Christopher & Milbrath

Linda Fryant
Harcourt Brace Jovanovich

Gisela Gonzalez
Jewett Orthopedic Clinic

Diane Hogan
Orange County Public Schools

Elaine Holt
Disney Development Company

Nancy Hulcher
Martin Marietta

Anne R. Hurlock
Martin Marietta

William A. Iles
Florida Hospital

May M. Malone, CPS
Harriscorp Corporation GS&D

Beverly Miller, PLS
Gurney & Handley

Karen Moehl
O'Neill, Chapin, Marks & Liebman

Carolyn Palko
Walt Disney World

Joann Sanders
Walt Disney World

Deborah Sargent
Orlando, FL

Patricia Thrush
Walt Disney World

Tonyia Todd
Job Service of Florida

Roberta Wagner
The Peabody Hotel

Veronica Wilson
City of Orlando

Pat Wray
Red Lobster

VALENCIA

Carolyn Allen
Chris Croft
Jo Ferguson
Mildred Franceschi
Edmund Gross
Marsha Gurr
Deborah Hopkins
Stanley Stone
Joan Tiller
Sam Tish
<table>
<thead>
<tr>
<th>Name</th>
<th>Company/Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linda Adams</td>
<td>Florida Nurserymen &amp; Growers Association, Inc.</td>
</tr>
<tr>
<td>Calvin Anderson</td>
<td>Mar-Cal Growers</td>
</tr>
<tr>
<td>Martha Anderson</td>
<td>Mar-Cal Growers</td>
</tr>
<tr>
<td>Fred W. Bistline</td>
<td>Coca-Cola Foods Division</td>
</tr>
<tr>
<td>Dennis Brinkman</td>
<td>V-J Growers Supply</td>
</tr>
<tr>
<td>George Busby</td>
<td>State Department of Education</td>
</tr>
<tr>
<td>John Denmark</td>
<td>State Department of Education</td>
</tr>
<tr>
<td>Paul Faircloth</td>
<td>Horticulture Enterprises</td>
</tr>
<tr>
<td>Alan Heinrich</td>
<td>Cherry Lake Tree Farm</td>
</tr>
<tr>
<td>John T. Hicks, Jr.</td>
<td>Orlando, FL</td>
</tr>
<tr>
<td>Michael Hopkins</td>
<td>Orlando, FL</td>
</tr>
<tr>
<td>Carol K. Hosfield</td>
<td>Bureau of City Planning</td>
</tr>
<tr>
<td>Andrew Kittsley</td>
<td>City of Orlando</td>
</tr>
<tr>
<td>Paul Klinger, Jr.</td>
<td>Lake Brantley Plant Corporation</td>
</tr>
<tr>
<td>Floyd Ledbetter</td>
<td>Orange County Public Schools</td>
</tr>
<tr>
<td>Jim Lee</td>
<td>Jim Lee Associates</td>
</tr>
<tr>
<td>Henry Hobitaille</td>
<td>EPCOT Center</td>
</tr>
<tr>
<td>Linda Russo</td>
<td>Coca-Cola Foods Division</td>
</tr>
<tr>
<td>Robert Stamps</td>
<td>University of Florida, IFAS Central Florida Research and</td>
</tr>
<tr>
<td>Ger van der Made</td>
<td>American Horticultural Marketing Council</td>
</tr>
<tr>
<td>Robert Vidler</td>
<td>Sea World</td>
</tr>
<tr>
<td>Mr. Michael West</td>
<td>Stouffer Orlando Resort</td>
</tr>
<tr>
<td>Todd Wiederkehr</td>
<td>Walt Disney World</td>
</tr>
<tr>
<td>Uday Yadav</td>
<td>Seminole County Cooperative Extension Service</td>
</tr>
<tr>
<td>John Centko</td>
<td>VALENCIA</td>
</tr>
<tr>
<td>Edmund Gross</td>
<td>VALENCIA</td>
</tr>
<tr>
<td>Deborah Hopkins</td>
<td>VALENCIA</td>
</tr>
<tr>
<td>Joan Tiller</td>
<td>VALENCIA</td>
</tr>
<tr>
<td>POSTAL SERVICES</td>
<td>MANAGEMENT</td>
</tr>
<tr>
<td>Jim Ballard</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Dana Cleborne</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Earl Hammond</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Steve Hooks</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Richard Hyde</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Ronnie Johnson</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Robert King</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>James Langford</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Ed Link</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Roy Phillips</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Richard Sherrill</td>
<td>Postmaster - Lake Mary</td>
</tr>
<tr>
<td>Larry Spanos</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Ray Van Camp</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>John Whitener</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Carolynn Allen</td>
<td>VALENCIA</td>
</tr>
<tr>
<td>Edmund Gross</td>
<td>VALENCIA</td>
</tr>
<tr>
<td>Deborah Hopkins</td>
<td>VALENCIA</td>
</tr>
<tr>
<td>Stanely Stone</td>
<td>VALENCIA</td>
</tr>
<tr>
<td>Joan Tiller</td>
<td>VALENCIA</td>
</tr>
<tr>
<td>POSTAL SERVICES</td>
<td>MANAGEMENT</td>
</tr>
<tr>
<td>Jim Ballard</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Dana Cleborne</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Earl Hammond</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Steve Hooks</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Richard Hyde</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Ronnie Johnson</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Robert King</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>James Langford</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Ed Link</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Roy Phillips</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Richard Sherrill</td>
<td>Postmaster - Lake Mary</td>
</tr>
<tr>
<td>Larry Spanos</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Ray Van Camp</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>John Whitener</td>
<td>United States Postal Service</td>
</tr>
<tr>
<td>Carolyn Allen</td>
<td>VALENCIA</td>
</tr>
<tr>
<td>Edmund Gross</td>
<td>VALENCIA</td>
</tr>
<tr>
<td>Deborah Hopkins</td>
<td>VALENCIA</td>
</tr>
<tr>
<td>Stanely Stone</td>
<td>VALENCIA</td>
</tr>
<tr>
<td>Joan Tiller</td>
<td>VALENCIA</td>
</tr>
<tr>
<td>POSTAL SERVICES</td>
<td>MANAGEMENT</td>
</tr>
<tr>
<td>Joe Edwards</td>
<td>University of Central Florida</td>
</tr>
<tr>
<td>Larry Johnston</td>
<td>Florida Hospital</td>
</tr>
<tr>
<td>Merle Peterson</td>
<td>Florida Hospital</td>
</tr>
<tr>
<td>Charles E. Walbroel, M.D.</td>
<td>Florida Hospital</td>
</tr>
<tr>
<td>REAL ESTATE MANAGEMENT</td>
<td></td>
</tr>
<tr>
<td>Joseph L. Amos</td>
<td>Brass and Schneider, Inc.</td>
</tr>
<tr>
<td>Marilyn B. Burton</td>
<td>Orlando, Florida</td>
</tr>
<tr>
<td>George M. Carroll</td>
<td>Orlando, Florida</td>
</tr>
<tr>
<td>Errol L. Green</td>
<td>Winter Park, Florida</td>
</tr>
<tr>
<td>Jerry Guinn</td>
<td>Prudential Florida Realty</td>
</tr>
<tr>
<td>Milton W. Hooper</td>
<td>Fern Park, Florida</td>
</tr>
<tr>
<td>Paul W. Lilling</td>
<td>Maitland, Florida</td>
</tr>
<tr>
<td>H.G. Pullum</td>
<td>Orlando, Florida</td>
</tr>
<tr>
<td>Elvis Purvis</td>
<td>Century 21</td>
</tr>
<tr>
<td>Clara H. Robertson</td>
<td>CLATO, Inc.</td>
</tr>
<tr>
<td>Bill Simmons</td>
<td>Orlando, Florida</td>
</tr>
</tbody>
</table>
SCIENCE
Juanita E. Black
Orlando Science Center
Jo Ann Clark
Orlando Laboratories, Inc.
Richard Danner
Reedy Creek Improvement District
Scott Davidson
Reedy Creek Improvement District
Gregory Dorf
Earth Shuttle
Bob Douglas
Martin Marietta
Michelle Figueroa
Sea World of Florida
Kimberly Hunter
Orlando Science Center
Tom Jacobs
Aquatic Symbiotics, Inc.
Frank Juge
University of Central Florida
Peggy Keele
Sea World of Florida
Ted Klenk
Apopka High School
Jeff Kosik
Walt Disney World
Mark Kromis
Bionomics Laboratory, Inc.
Greg D. Livingston
Reedy Creek Improvement District
Dallas W. Maddron
Orange County Public Schools
D. Howard Miles
University of Central Florida
Mary Orlandella
Orlando Science Museum
Bob Pickman
IBM
Miles Smart
Breedlove, Dennis & Associates, Inc.
Matthew N. Stein
Orlando Science Center
Ron Stumpf
Martin Marietta

Walter H. Wheeler
Aquatic Symbiotics, Inc.
Phil Wittman
AT&T

VALENCIA
Carolyn Allen
Jack Benefield
Edmund Gross
Paul Kinser
Joan Tiller
Silvia Zapico

SINGLE PARENT/DISPLACED
HOMEMAKER/SINGLE PREGNANT
WOMEN PROGRAM
Lill Chitwood
Orlando, FL
Deborah Gabriele
CONSERVCO
Diane Hamilton
Single Parent Services
Eileen Kelly
Counselor
Mary Jane Nail
Private Industry Council
Brian Parramore
Cleveland Coin Machine Exchange, Inc.
Julie Purdy
Walt Disney World
Teri Robinson
Sea World of Florida

VALENCIA
Vera Poitier
Terry Rafter
Sandra Todd Saratos
Joan Tiller

THEATER AND ENTERTAINMENT
TECHNOLOGY
Tony Alley
I.A.T.S.E.
Jan Bennett
Lighting Designer
James Birnie
Southern Scenic
John Bishop
I.A.T.S.E.
William Byrd
Disney/MGM Studios
Frank Cates
ACE Music
Bob Cherry
Tupperware Convention Center
Gene Columbus
Walt Disney World
Glen Gettings
Gettings Productions
Wally Harper
Walt Disney World
Dennis Phillips
Allied Costumes
Danny Pressler
Sea World of Florida
Roger Stewart
Ocoee, FL

Jason Tart
Sea World of Florida

VALENCIA
Carolyn Allen
Michael Corbett
Julia Gagne
Rick Rietveld
Michael Shugg
Quentinia Throm
Joan Tiller

BLACK ADVISORY COMMITTEE
Harry Bing
Paul C. Gianini, Jr.
Reginald B. McGill

Consultants:
Rufus Brooks
Edmund K. Gross
Deborah Murphy
Cecil Boston
Joe Caldwell
Jerome Hargrett
Ella Parramore
Thelma Dudley
Marva Carter
Ken Howard
Vera Poitier
COLLEGEWIDE ADMINISTRATION

Paul C. Gianini, Jr. .................................................................President
W. Carolyn Allen .................................................................Vice President for
Student Affairs and Provost of the East Campus
Jack C. Crawford .................................................................Vice President for
Administrative Services
Edmund K. Gross .................................................................Vice President for
Instructional Affairs and Provost of the West Campus
W. Michael Hooks .................................................................Vice President for
Planning, Research and Development
Sandra Todd Sarantos ..........................................................Vice President for
Educational and Economic Development Services and
Provost of the Open Campus
Thomas M. Henkel, Jr. .........................................................Assistant to the President
Leonard R. Burr .................................................................Assistant Vice President
for Computer Services
Susan E. Kelley .................................................................Assistant Vice President
for Resource Development
James R. Reinschmidt .........................................................Assistant Vice President, Facilities
Barbara Joan Tiller ...............................................................Dean of Technical Education
E. Michael Break ...............................................................Director of Personnel Services and Employee Relations
Charles H. Drozin ...............................................................Director of Admissions and Student Records
M. Keese Perry .................................................................Controller
Preston D. Rosser ...............................................................Director of Financial Aid
Eric R. Straumanis ...............................................................Director of Institutional Research
Geraldine F. Thompson .........................................................Assistant to the President for Equal Opportunity

EAST CAMPUS ADMINISTRATION

W. Carolyn Allen .................................................................Vice President for
Student Affairs and Provost of the East Campus
Judith M. Jones .................................................................Chairman of Mathematics/
Physical Education
Grace S. Kehrer .................................................................Chairman of Communications/
Foreign Language
Stanley H. Stone ...............................................................Chairman of Business and Public
Service Programs
Quentinia P. Thom .............................................................Chairman of Fine Arts/
Humanities/Visual and Performing Arts
Karen C. Lehmann ............................................................Director of Student Services
Silvia Zapico .................................................................Chairman of Science/Social Science

OPEN CAMPUS ADMINISTRATION

Sandra Todd Sarantos ..........................................................Vice President for
Educational and Economic Development Services and
Provost of the Open Campus
Vera R. Potter .................................................................Director, Extension Centers
Ruth Nicholson .................................................................Director, Center for Professional
Development
Paul A. Kinser .................................................................Dean of the Oceola Center and
Instructional Telecommunications
Robert L. Milke ...............................................................Director of Governmental Services Program
Steve Kinder .................................................................Managing Director of the McCoy
Center for Business and Industry Services

WEST CAMPUS ADMINISTRATION

Edmund K. Gross .................................................................Vice President for
Instructional Affairs and Provost of the West Campus
Jack W. Benefield ...............................................................Chairman of Science
Cliff C. Morris .................................................................Acting Chairman of Mathematics
Deborah G. Hopkins ...........................................................Chairman of Business
Tyrone S. Johnson .............................................................Director of Student Services
Rosita Martinez .................................................................Chairman of Foreign Language,
Humanities, and ENS
William C. Prentiss ...........................................................Chairman of Social Science/
Physical Education
Hugh K. Rogers ...............................................................Chairman of Technical and
Engineering Related Programs
Donald J. Tighe .................................................................Chairman of Communications
Ruth Y. Webb .................................................................Chairman of Health and Public Services
Alderman, Freddie L.
Mathematics
B.S., Florida A&M University
M.A., Rollins College

Alexander, Andrew R.
Humanities
B.A., Columbia College
M.A., Teachers College
Ed.D., Teachers College

Allen, W. Carolyn
Vice President for Student Affairs & Provost of the East Campus
B.S., Florida State University
M.S., University of Tennessee
Ph.D., Florida State University

Altman, Judy E.
Speech
B.A., University of California, Los Angeles
M.S., Florida International University

Anota, Carol T.
Interdisciplinary Studies
B.A., Syracuse University
M.S., Syracuse University

Andrews, Donald W.
Humanities
B.A., Florida State University
M.A., Florida State University

Aneja, Kusum R.
Librarian
B.A., Maharis College
M.A., University of Rajasthan
M.S., University of Villanova

Applebaum, Ivan R.
Psychology
B.G.S., Rollins College
M.C.S., Rollins College
M.S., University of Central Florida
Ed.S., Florida Atlantic University
Ed.D., University of Central Florida

Armour, Lisa
Mathematics
B.A., Rollins College
M.S., University of Florida

Bardgett, Margarita M.
Spanish
B.A., University of Central Florida
M.A., Washington University

Barlow, Mailin
English
B.A., University of Central Florida
M.A., Florida State University

Beaver, Rheta M.
Mathematics
B.A., University of Central Florida
M.A., University of Central Florida

Benefield, Jack W.
Chairman, Science Department, West Campus
B.S., Ed., University of Georgia
M.Ed., University of Georgia

Bennett, Lula M.
Political Science
A.B., Vaidosta State College
M.A.T., Rollins College
Ed.D., Nova University

Bennett, Richard
Facilities Planner
B.A., University of Florida

Bever, Kenneth V.
Legal Assistant Program
B.A., University of Florida
J.D., Samford University

Bishop, Philip E.
Humanities
B.A., Davidson College
M.A., University of Wisconsin
Ph.D., University of Wisconsin

Blackney, W.R.
Art
B.S., Western Michigan University
M.A., Western Michigan University

Boudet-Clary, Lucy
Communications and Marketing
B.S., University of Florida

Boytel, Therlene
Mathematics
B.S., West Texas State University
M.S., West Texas State University

Brady, Patrick F.
Spanish
B.A., University of Missouri
M.A., University of Missouri

Brandolini, Ronald G.
Economics/Collegewide Honors Program
B.A., University of Vermont
M.A., State University of New York/Binghampton

Break, E. Michael
Director of Personnel Services and Employee Relations
B.A., California State University
M.S., Rollins College
Ed.S., Florida Atlantic University
Ed.D., Florida Atlantic University

Bredin, Brenda A.
Foreign Language
B.A., Thiel College
M.A., Kutztown State College

Brugier, Karen G.
Counseling
B.A., Syracuse University
M.A., DePaul University

Brumbaugh, Judith A.
Assistant to Provost, East Campus
B.A., Adrian College
M.A., University of Georgia

Burke, Connie L.
Institute for Business & Industry
B.A., Regis College
M.S., Amber University

Burry, Leonard R.
Assistant Vice President
Computer Services

Byrnes, Thomas J.
Political Science
B.A., Marquette University
M.A., University of Florida

Caldero, Ana
Spanish
B.A., University of Central Florida
M.A., University of Wisconsin

Capraun, Lynn W.
Respiratory Therapy
B.S., University of Central Florida
M.S., University of Central Florida

Carignan, Ann M.
Nursing
B.S.N., St. Anselm College
M.S., Boston University

Carver, Donna J.
Coordinator, Learning Resources Center, West Campus
B.A., University of Central Florida
M.L.S., Florida State University

Castellano, Donna R.
Coordinator, Learning Resources Center, East Campus
B.S., Mississippi State College for Women
M.S., Florida State University

Castellano, William R.
Assistant Vice President for Student Affairs
B.A., University of Central Florida
M.A., University of Central Florida

183
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Institution</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centko, John M.</td>
<td>Horticulture</td>
<td>B.S., Murray State University</td>
<td>M.S., Murray State University</td>
</tr>
<tr>
<td>Chaffin, Barbara J.</td>
<td>Continuing Education for Dentists/EMT/Paramedics</td>
<td>B.S., Emory University</td>
<td>M.A., University of South Florida</td>
</tr>
<tr>
<td>Chambless, Jack A.</td>
<td>Economics</td>
<td>B.A., University of Oklahoma</td>
<td>M.A., North Carolina State University</td>
</tr>
<tr>
<td>Chandler, Elizabeth A.</td>
<td>Assistant to the Vice President, Educational &amp; Economic Development Services</td>
<td>B.S., University of Central Florida</td>
<td>M.Ed., University of Central Florida</td>
</tr>
<tr>
<td>Cheatham, Ben H., Jr.</td>
<td>Mathematics</td>
<td>B.A., University of Florida</td>
<td>M.Ed., University of Florida</td>
</tr>
<tr>
<td>Clark, Deborah H.</td>
<td>Center for High Tech Training for the Disabled</td>
<td>B.S., Florida A&amp;M University</td>
<td>M.S., Florida A&amp;M University</td>
</tr>
<tr>
<td>Clossen, David L.</td>
<td>English/Interdisciplinary Humanities</td>
<td>B.A., Lincoln University</td>
<td>M.A., University of Pennsylvania</td>
</tr>
<tr>
<td>Clossen, Rosemary B.</td>
<td>Teacher Education Center</td>
<td>B.S., Howard University</td>
<td>M.A., Nova University</td>
</tr>
<tr>
<td>Coccagna, Joni M.</td>
<td>Health Education</td>
<td>B.S., College of Notre Dame</td>
<td></td>
</tr>
<tr>
<td>Coorrough, Randall P.</td>
<td>Instructional Technology Center</td>
<td>B.S., University of Wisconsin-La Crosse</td>
<td>M.A., University of Florida</td>
</tr>
<tr>
<td>Cox, Dennis M., Jr.</td>
<td>Physical Education</td>
<td>B.S., Eckerd College</td>
<td></td>
</tr>
<tr>
<td>Coyne, George W.</td>
<td>Physics</td>
<td>B.S., Purdue University</td>
<td>M.S., Purdue University</td>
</tr>
<tr>
<td>Crawford, Jack C.</td>
<td>Vice President for Administrative Services</td>
<td>B.A., University of Nebraska</td>
<td>M.B.A., University of Central Florida</td>
</tr>
<tr>
<td>Croft, Christine M.</td>
<td>Secretarial Science</td>
<td>B.S., Delta College</td>
<td>M.B.E., University of Mississippi</td>
</tr>
<tr>
<td>Crosby, Mary Jane</td>
<td>Disney University Learning Center</td>
<td>B.S., University of Central Florida</td>
<td></td>
</tr>
<tr>
<td>Davis, Carolyn B.</td>
<td>Counseling</td>
<td>B.A., Lincoln University</td>
<td>M.Ed., Stetson University</td>
</tr>
<tr>
<td>DeLisle, Judith A.</td>
<td>Librarian</td>
<td>B.A., Michigan State University</td>
<td>M.L.S., University of Michigan</td>
</tr>
<tr>
<td>Dickerson, John A.</td>
<td>Mathematics</td>
<td>B.S., Purdue University</td>
<td>M.S., Purdue University</td>
</tr>
<tr>
<td>DiLaurenzo, Heather M.</td>
<td>Librarian</td>
<td>B.S., West Virginia Wesleyan College</td>
<td>M.S., Catholic University of America</td>
</tr>
<tr>
<td>DiMartino, Jacalyn M.</td>
<td>Mathematics</td>
<td>B.S., Florida Atlantic University</td>
<td>M.S., Nova University</td>
</tr>
<tr>
<td>Dolan, James D.</td>
<td>Business</td>
<td>J.D., University of Baltimore</td>
<td></td>
</tr>
<tr>
<td>Dome, Charles H., IV</td>
<td>Sociology</td>
<td>B.A., University of Central Florida</td>
<td>M.S., Florida State University</td>
</tr>
<tr>
<td>Dow, George M.</td>
<td>Business/Accounting</td>
<td>B.S., B.A., University of Florida</td>
<td>M.B.A., M.S., University of Central Florida</td>
</tr>
<tr>
<td>Drosin, Charles H.</td>
<td>Director of Admissions and Records</td>
<td>B.A., Florida Atlantic University</td>
<td>M.Ed., University of Central Florida</td>
</tr>
<tr>
<td>Dunn, Walter F.</td>
<td>Counseling</td>
<td>B.A., East Tennessee State University</td>
<td>M.S., George Washington University</td>
</tr>
<tr>
<td>Edmonds, Margaret E.</td>
<td>Counseling, Handicapped Services</td>
<td>B.A., Chestnut Hill College</td>
<td>M.A., Rollins College</td>
</tr>
<tr>
<td>Edwards, David W.</td>
<td>Psychology</td>
<td>B.S., Ohio University</td>
<td>M.S., Indiana University</td>
</tr>
<tr>
<td>Edwards, Louis M.</td>
<td>Mathematics</td>
<td>B.S., University of Florida</td>
<td>M.Ed., University of Florida</td>
</tr>
<tr>
<td>Enns-Wilson, Janice</td>
<td>Chemistry</td>
<td>B.A., St. Mary-of-the-Woods College</td>
<td>M.S., Wayne State University</td>
</tr>
<tr>
<td>Ensminger, Rebecca</td>
<td>Nursing</td>
<td>B.S.N., Troy State University</td>
<td>M.S.N., University of Alabama</td>
</tr>
<tr>
<td>Epperson, Melinda</td>
<td>Conference Development</td>
<td>B.S., University of Tennessee</td>
<td></td>
</tr>
<tr>
<td>Fear, David E.</td>
<td>English</td>
<td>B.S., Southern Illinois University</td>
<td>M.S.Ed., Southern Illinois University</td>
</tr>
<tr>
<td>Ferguson, Josephine B.</td>
<td>Business Education</td>
<td>B.S., Ball State University</td>
<td>M.A.T., Rollins College</td>
</tr>
<tr>
<td>Fogal, Carroll E.</td>
<td>Mathematics</td>
<td>B.S., University of Tampa</td>
<td></td>
</tr>
<tr>
<td>Forehand, Susie</td>
<td>Nursing</td>
<td>B.S.N., University of South Florida</td>
<td>M.S.N., University of South Florida</td>
</tr>
<tr>
<td>Foster, Cynthia C.</td>
<td>Transfer Student Success Program</td>
<td>B.A., Rollins College</td>
<td></td>
</tr>
<tr>
<td>Franceschi, Mildred</td>
<td>Office Systems Technology</td>
<td>B.S., University of Puerto Rico</td>
<td>M.A., New York University</td>
</tr>
</tbody>
</table>
Franklin, James T.
Mathematics
B.S., University of Central Florida
M.S., Florida State University

Frierson, Frances A.
Biology
B.S., University of Florida
M.D., University of Miami

Gagne, Julia A.
Drama
B.A., University of Central Florida
M.A., Florida State University

Galletta, Michael E.
Art
B.A., University of Central Florida
M.F.A., Wichita State University

Garwood, Joe A.
Economics
B.A., Denison University
B.A., Washburn University
M.S., Florida State University

Gastineau, G. Arlen
Marketing
B.S., Bethany Nazarene College
M.C.S., Rollins College
Ed.D., Nova University

Gateley, Miriam E.
Business
B.S., University of Central Florida
M.S., University of Central Florida

Germaine, Michael B.
Political Science
B.A., University of South Florida
M.S., Florida State University

Gianini, Paul C., Jr.
President
B.A., Yankton College
M.Ed., University of Nebraska
Ed.S., University of Florida
Ed.D., University of Florida

Graham, Larry N.
Music
B.M., Sanford University
M.M., University of Florida

Gresham, Carolyn I.
CADD

Grogan, Timothy M.
Biology
B.A., Purdue University
B.S., Purdue University
M.S., Purdue University

Grosch, Randy A.
Sociology
B.A., Florida Atlantic University
M.A., Florida Atlantic University

Gross, Edmund K.
Vice President for Instructional Affairs & Provost of the West Campus
B.S., University of Florida
M.Ed., University of Florida
Ed.D., University of Florida

Gundin, Rafael
English
B.A., University of Puerto Rico
M.S., State University of New York
M.A., Trenton State College

Gurr, Marsha E.
Business Education
B.S., Kansas State College
M.A., University of South Florida

Halnon, Timothy D.
Resource Development
B.A., University of Denver
M.A., Rutgers University

Hardy, George W.
Mathematics
B.S., University of Florida
M.Ed., University of Florida

Harris, Valerie L.
Emergency Medical Services
B.A., University of South Florida
R.N., Paramedic
M.Ed., University of Central Florida

Hawat, Gaby
Electronics Technology
B.S., Florida Institute of Technology
M.S., Florida Institute of Technology

Hayden, Glenn R.
English
B.A., University of Central Florida
M.A., University of Kentucky

Hellard, Shannon L.
Land Surveying
B.S., University of Kentucky
M.A., University of Kentucky

Henderson, Patricia A.
Librarian
B.A., Florida State University
M.Ln., Emory University

Henkel, Thomas M., Jr.
Assistant to the President
B.A., University of Florida
J.D., University of Florida

Henningsen, James D.
Decision Support Systems
B.A., University of Vermont

Hild, Fred E.
Assistant to the Provost,
West Campus
B.A., Coe College
M.B.A., George Washington University

Hoff, Mary J.
English
B.A., Marymount College
M.A., University of Tulsa

Holland, Bob T.
Counseling
B.A., Union University
B.S., Southeastern Baptist Theological Seminary
M.S.M., Southern Baptist Theological Seminary
Ph.D., Florida State University

Hollister, Merton A.
Mathematics/Science
B.S., Rollins College
M.S., Rollins College
J.D., Mercer University

Holmes, Terri L.
Physical Education
B.S., Black Hills State College

Hooper, Emily A.
Counseling
B.A., Hanover College
M.S., Butler University

Hicks, William Michael
Vice President for Planning, Research and Development
B.S., Indiana State University
M.S., Indiana State University
Ph.D., Florida State University

Hopkins, Deborah C.
Chairman, Business Department,
West Campus
B.S., East Carolina University
M.A., East Carolina University
Ed.D., Nova University

Hosman, David K.
Counseling
B.A., Gordon College
M.A., Ball State University
Ed.D., Nova University

Hughes, John C.
Communications
B.S., University of Southern Mississippi
M.A., University of Southern Mississippi

Hunt, Louise I.
Medical Transcription
B.A., Trevecca Nazarene College
M.A., University of Central Florida

185
Hunt, William S.  
Criminal Justice  
B.S., Florida State University  
M.S., Michigan State University

Hunter, Janice K.  
English  
B.A., Eckerd College  
M.A., University of South Florida  
Ed.D., University of Florida

Jay, Nancy E.  
Art  
B.A., Georgia College at Milledgeville  
M.F.A., Florida State University

Johnson, Boyd L.  
Physical Education  
B.A., University of Kentucky  
M.A., University of Kentucky

Johnson, Carol  
Credit Coordinator/ Academic Advisor  
B.S., Baldwin-Wallace College

Johnson, James A.  
Data Processing  
B.S., Lehigh University  
M.S., University of Northern Colorado

Johnson, Tyron S.  
Director, Student Services, West Campus  
B.A., Johnson C. Smith University  
M.A., Rollins College

Johnson, Walter D.  
Counseling, Handicapped Services  
B.A., University of Central Florida  
M.A., Rollins College

Jones, David W.  
Physical Education  
B.S., Ashland College  
M.S., Nova University

Jones, Judith M.  
Chairman, Mathematics/  
Physical Education Department, East Campus  
B.A., Cast-Western Reserve University  
M.S., University of Florida  
Ed.D., University of Central Florida

Jones, June B.  
Mathematics  
B.S., University of Florida  
M.S., Nova University

Jones, Wiley E.  
Building Construction  
B.S., Louisiana Technical University  
M.S., University of Texas

Jore, Phyllis H.  
Mathematics  
B.A., Cornell University  
M.Ed., University of Central Florida  
Ed.S., University of Florida

Kanar, Carol S.  
Reading and English  
B.A., University of Florida  
M.Ed., Rollins College  
M.A., University of Florida

Kavalec-Miller, Celine M.  
Communications  
B.A., University of Indianapolis  
M.A., Butler University

Kazanas, Jack G.  
Assistant to Provost, Open Campus  
B.S., Florida State University

Kehrer, Grace S.  
Chairman, Communications/  
Foreign Language Department, East Campus  
B.A., University of Central Florida  
M.A., University of South Florida  
Ed.S., Florida Atlantic University

Kelley, Susan E.  
Assistant Vice President for  
Resource Development  
B.A., West Virginia University  
M.S.M., West Virginia College of Graduate Studies

Keyes, Lula C.  
Spanish  
B.A., University of Florida  
M.A.T., University of Florida

Killing, Charles L., III  
Political Science  
B.A., Southwestern at Memphis  
M.A., College of William and Mary  
Ph.D., Florida State University

Kimble, Daniel J.  
Librarian  
B.A.E., University of Florida  
M.Ed., University of Florida

Kinder, Steve S.  
Business & Industry  
B.S., University of Central Florida

Kinsey, Mary Ann  
Assistant to the Vice President for  
College and Community Relations  
B.A., University of California, Los Angeles  
M.Ed., University of California, Los Angeles

Kinsey, Paul A.  
Dean, Osceola Center/  
Instructional Telecommunications  
B.A., Indiana State University  
M.S., Indiana State University  
Ed.D., Nova University

Klingar, Chris  
Counseling, Educational Occupations  
B.A., Temple University  
M.A., Marywood College

Kluger, Edward W.  
Chemistry  
B.S., East Stroudsburg State University  
M.A., Trenton State College  
Ph.D., Drexel University

Krygier, Barbara J.  
Articulation Tech Prep  
B.S.N., Oregon Health Science Center  
M.P.A., University of Alaska

Lang, James D.  
Mathematics  
B.S., Georgia Institute of Technology  
M.S., Georgia Institute of Technology  
M.S., University of Illinois

Lathrop, F. Keith  
Mathematics  
B.S., Barry College  
M.A., Louisiana State University

Lathrop, Roxanne G.  
Communications  
B.A., Florida Southern College  
M.F.A., Warren Wilson College

Lee, Maryke  
Mathematics  
B.S., University of Central Florida  
M.S., University of Central Florida

Legg, Mary N.  
Education/Sociology  
B.A., Northwestern Oklahoma State University  
M.S., Oklahoma State University

Lehmann, Karen C.  
Director, Student Services,  
East Campus  
B.S., State University of N.Y.  
M.S., Queens College  
M.A., New York University

Lehmann, Timothy L.  
Psychology  
B.A., University of Florida  
M.Ed., University of Florida  
Ed.D., University of Florida

Licata, Paul  
Interdisciplinary Studies Program  
B.A., Long Island University  
M.A., Long Island University
<table>
<thead>
<tr>
<th>Name</th>
<th>Degree/Title/Institution</th>
</tr>
</thead>
</table>
| Linton, Corrine B. | Business  
B.A., Notre Dame of Maryland  
B.S., Rollins College  
M.B.A., Stetson University  
M.Ed., University of Florida  
Ed.D., University of Florida |
| Lippert, Don E.    | Cooperative and Experiential Education  
B.S., University of Southern Mississippi  
M.Ed., University of Central Florida |
| Ludy, Jeffery      | Respiratory Therapy  
B.A., Syracuse University  
M.Ed., University of Virginia |
| Ludy, Maryanne M.  | Nursing  
B.S.N., Catholic University of America  
M.S.N., Northern Illinois University |
| Mable, Howard E.   | Physical Education  
B.S., State University of New York  
M.Ed., University of Central Florida |
| Mabry, Sally H.    | Nursing  
B.Ed., University of Toledo  
M.S.N., Medical College of Ohio |
| Maneer, William S. | Mathematics  
B.S., Clarion College  
M.A., Wayne State University |
| Marek, Joseph A.   | Physical Education  
B.A., University of Central Florida  
M.A., University of Central Florida |
| Martinez, Rosita N.| Chairman, Foreign Language, Humanities and  
ENS Dept., West Campus  
Degrees from Normal School for Teachers, Mantaas, Cuba, and  
University of Havana  
M.A., Middlebury College  
Ph.D., Havana University |
| McAndrew, Michele K.| Alcohol & Drug Education  
B.A., Seton Hill College  
M.A., Duquesne University |
| McCord, Dolores    | Counseling  
B.A., University of Florida  
M.Ed., University of Florida |
| McComb, William M. | Physics  
B.A., Vanderbilt University  
M.A., George Peabody College for Teachers of Vanderbilt University  
M.B.S., University of Colorado |
| McDonald, Robert C. | Chemistry  
B.S., Florida State University  
M.A., Appalachian State University  
Ed.D., Nova University |
| McDowell, Annie R. | Minority Affairs Counseling  
B.S., Florida A&M University  
M.Ed., University of Central Florida |
| McKinnon, Mary Jane| Osceola Center  
B.A., Otterbein College |
| McNamara, Lois L.  | Humanities  
B.A., Lawrence College  
M.A.T., Rollins College |
| Meade, Susan N.    | Dental Hygiene  
B.S., University of Louisville  
M.A., Nova University |
| Melnick, Stanley   | Political Science  
B.S., Florida State University  
M.S., Florida State University  
Ed.D., Nova University |
| Milke, Robert L.   | Director, Governmental Services Program  
B.S., Marquette University |
| Miller, Gwida A.   | Nursing  
B.S.N., University of Florida  
M.A., Rollins College |
| Morales, Gustavo A.| Geology/Earth Sciences  
B.S., Baylor University  
M.A., University of Missouri  
Ph.D., Louisiana State University |
| Morris, Cliff C., Jr.| Acting Chairman, Mathematics, West Campus  
B.S., Florida A&M University  
M.Ed., Florida A&M University  
Ph.D., University of South Florida |
| Morrison, Elizabeth M.| Mathematics  
B.A., Florida State University  
M.S., Florida State University |
| Mulholland, Kevin  | Humanities  
B.A., Cambridge University  
M.A., Cambridge University  
M.A., University of New Brunswick |
| Musick, Bennett L. | Business and Real Estate  
B.S., Rollins College  
M.A.T., Rollins College |
| Myers, Steven      | Biology  
B.S., Florida State University  
M.S., University of Central Florida |
| Nelson, Ronald B.  | Title III Retention  
B.A., Florida State University  
M.A., Florida State University  
Ed.D., Nova University |
| Niblack, Ernest    | Counseling  
B.S., Florida A&M University  
M.Ed., Florida A&M University |
| Nicholson, Ruth A. | Center for Professional Development  
B.A., Rollins College  
M.A., Rollins College |
| Olin, Susan M.     | Office Systems Technology Institute  
B.A., University of South Florida |
| Oswald, Eileen M.  | Speech/English  
B.A., St. Bonaventure University  
M.Ed., University of Central Florida |
| Page, Mary Ellen   | Spanish  
B.A., Western Reserve University  
M.A., Western Reserve University |
| Parker, Chauncey C.| English  
B.A., Harvard University  
M.B.A., Harvard Business School |
| Pape, Lori         | Nursing  
B.S.N., University of Nebraska Medical Center  
M.S.N., University of Texas |
| Paul, Della W.     | English  
B.A., Bethune-Cookman College  
M.A., Rollins College |
| Pendergraft, Sandra C.| Nursing  
B.S., University of North Carolina  
M.S., University of North Carolina |
Perry, Annie Blue
Reading
B.A., University of North Carolina
M.A.T., Rollins College
Ed.S., Florida State University

Perry, M. Keese
Controller
A.B., Mercer University
B.A., Stetson University

Peterson, Barbara P.
Graphic Arts Technology
B.A., Florida State University
M.A., University of Central Florida

Phillips, Peggy J.
English
B.A., Lenoir Rhyne College
M.Ed., University of Florida

Piephoff, William B.
Visiting Artist Program
B.A., University of North Carolina
M.F.A., University of North Carolina

Pierce, Thomas C.
Journalism
B.A., University of Florida
M.S., University of South Florida

Pitts, Louise N.
Nursing
B.S., Florida State University
M.S., University of Alabama

Pizicky, Michael E.
Hospitality Management
B.S., Florida State University
M.S., Florida State University

Polier, Vera R.
Extension Centers
B.S., Florida A&M University
M.Ed., University of Central Florida

Prentiss, William C.
Chairman, Social Science and Physical Education Dept., West Campus
B.A., University of the South
M.A., University of Virginia
Ed.D., University of Florida

Priest, DeLaine D.
Nontraditional Options in Training for Employment
B.A., University of Alabama
M.A., University of Alabama

Puyana, Ann E.
English
B.A., University of Pittsburgh
M.A., School for International Training

Rafter, Terry L.
Orlando Displaced Homemaker Program/Job Search Project
B.A., University of Central Florida
M.A., University of Central Florida

Reddick, Alzo J.
Assistant to Vice President for Planning
B.S., Paul Quinn College
M.A., Florida A&M University
Ed.D., Nova University

Redmon, Malcolm E.
Mathematics/Physics
B.A., Catholic University
M.S., University of Notre Dame

Reinheus, Ronald W.
Political Science
B.A., University of Alabama
M.A., University of Alabama
Ed.D., Nova University

Reinschmidt, James R.
Assistant Vice President, Facilities
B.A., University of Cincinnati
M.S.T., University of Florida

Rhamstone, Ernest L.
Biology
B.A., University of South Florida
M.A., University of South Florida
Ed.D., Nova University

Ribley, Julia H.
Coordinator of International/Intercultural Education
B.A., Birmingham Southern College
M.S., Florida State University

Ribley, Thomas J.
Mathematics
B.S., Otterbein College
M.M., University of South Carolina
Ph.D., Wayne State University

Riddle, Laura G.
Health & Human Services
B.A., University of South Florida
M.A., University of Central Florida

Riddle, Sonya
Disney University Learning Center
B.S., University of Central Florida

Rietveld, Richard D.
Performing Arts Center/Theater Technology Program
B.A., Hope College
M.S., Colorado State University

Riles, M. Carol
Assessment and Learning Center
B.A., University of Central Florida
M.A., Rollins College

Roach, Eugene W.
Political Science and History
B.A., West Virginia Wesleyan
M.A., West Virginia University

Rodriguez, Roland J.
Biology
B.S., University of Kansas
M.S., University of Central Florida

Rogers, Hugh K.
Chairman, Technical and Engineering Related Programs
B.S., East Tennessee State University
M.A., East Tennessee State University
Ed.D., University of Pennsylvania

Romano, Joyce C.
Student Development, West Campus
B.A., S.U.N.Y. College at Cortland
M.S., Central Washington University
Ed.D., University of Kansas

Rosser, Preston D.
Director of Financial Aid and Veterans' Affairs
B.S., Troy State University
M.S., Rollins College
Ed.D, Nova University

Rutledge, Donald E.
Physical Education
B.S.E.E., University of Florida
M.P.H., University of Florida

Salsberry, Ruth B.
Communications
B.A., Texas Woman's University
M.A., Texas Woman's University

Salz, Harvey
Electronics/Electromechanical Technology
B.F.E., Polytechnic Institute of New York
M.E.E., Polytechnic Institute of New York

Sample, Margaret G.
Biology
B.A., Lindenwood College
M.S., Ohio State University

Sanderlin, Miriam
Nursing
B.S., Albany State College
R.N., Orange Memorial Hospital School of Nursing
M.A., University of Florida

Sansone, Richard L.
English as a Second Language/Portuguese
B.A., Rollins College
M.A., University of Arizona
Santos, Marilyn
Foreign Language
B.A., Syracuse University
M.A., University of Hawaii

Sarantos, Sandra Todd
Vice President for Educational & Economic Development Services & Provost of the Open Campus
B.F.A., University of North Carolina
M.Ed., University of North Carolina
Ed.D., University of North Carolina

Sathre, LeRoy
Mathematics
B.A., DePauw University
M.S., University of Florida

Sathre, Winona S.
Title III Retention
B.G.S., Rollins College
M.A.T., Rollins College

Schaefer, Virginia R.
Medical Laboratory Technology
B.S., University of Bridgeport
M.S., University of Bridgeport

Sermon-Wilson, Cheryl A.
Disadvantaged/Outreach Recruiting
B.S., Clark College

Servie, Pamela J.
Dental Hygiene
B.S., Bradley University
M.A., Bradley University

Sessions, Raymond R., Jr.
Counseling
B.S., East Texas University
M.S., East Texas University
Ph.D., East Texas University

Shank, Judy L.
English
B.A., Pennsylvania State University
M.A., Florida State University

Shaw, Mary K.
Nontraditional Career Awareness & Training
B.S., Presbyterian College
M.A., Rollins College

Shemelya, Phyllis K.
Physical Education
B.A., University of Kentucky
M.A., New York University

Shuman, Gerry E.
Biology
B.S., University of Tampa
M.N.S., University of Oklahoma

Skinner, K. David
Psychology
B.A., University of West Florida
M.A., University of West Florida
Psy.D., Florida Institute of Technology

Smith, David L.
Biology
B.S., Ball State University
M.A., Purdue University
Ed.D., Ball State University

Smith, Kathryn
Dental Hygiene
B.S., University of Missouri
M.B.A., Florida Institute of Technology

Smith, Kay L.
Communications
B.A., Indiana State University
M.A., Purdue University
M.A., Eastern Illinois University

Smith, Paulette
Librarian
B.A., University of Iowa
M.L.S., University of Iowa

Smith, Peter C.
Biology
B.S., Florida State University
M.S., Florida State University

Snider, William J.
Speech
B.A., University of Central Florida
M.A., University of Central Florida

Sonnenberg, Robert N.
Mathematics
B.S., University of Florida
M.S., University of Central Florida

Spencer, Marlene A.
Humanities, Religion and Philosophy
B.A., Berry College
M.A., Florida State University
M.A., Florida State University
M.A., Rollins College
Ph.D., Florida State University

Speranza, Linda M.
Nursing
B.S.N., Florida State University
M.Ed., University of Central Florida

Steffancin, Mary A.
English
B.S., Ohio State University
M.A., University of Central Florida

Stone, Stanley H.
Chairman, Business and Public Service
East Campus
B.A., Howard University
J.D., Howard University

Stovall, Randall H.
Assistant Vice President for
Instructional Affairs/Director,
Title III Articulation
B.S., University of Texas at Arlington
M.A., University of Texas at Arlington
Ph.D., Oklahoma State University

Stover, John L.
Counseling/Student Concern
B.A., University of Central Florida
M.A., University of Central Florida

Straub, Joseph T.
Business
B.S., Florida State University
M.A., Rollins College
M.S., Rollins College

Straunamanis, Eric R.
Director of Institutional Research
B.A., Tufts University
M.A., University of Maryland
Ph.D., University of Maryland

Stuart, Virginia E.
Displaced Homemaker Program
B.A., Rutgers University
M.A., Rollins College

Sugeir, Mary
Speech
B.S., Indiana State College
M.A., Western Michigan University

Sutton, David O.
Interdisciplinary Studies
B.A., University of Central Florida
M.A., Florida State University

Tapp, William M.
Title III Articulation
B.A., College of Sante Fe
M.B.A., Monmouth College
Ed.D., University of Houston

Taylor, Beverly P.
Mathematics
B.S., University of Southern Mississippi
M.S., Indiana University

Taylor, Mary Lorene
Sociology
B.A., Mercer University
M.S., Florida State University

Telleria, Alma
Counseling
B.A., State University at Albany, N.Y.
M.Ed., Long Island University

Thompson, Geraldine F.
Assistant to the President for
Equal Opportunity
B.E., University of Miami
M.S., Florida State University
Thompson, Nancy S.
French and German
B.A., Transylvania College
M.A., Indiana University

Thorne, Darryl
Economics
B.A., Pace University
M.A., New School for Social Research

Throm, Quintin P.
Chairman, Humanities/Visual and Performing Arts Department, East Campus
B.S., Shorter College
M.A., Florida State University

Tighe, Donald J.
Chairman, Communications Department, West Campus
B.S.Ed., Concord College
M.A., West Virginia University

Tillier, Joan
Dean, Technical Education
B.A., University of South Florida
M.A., University of South Florida

Tisch, Samuel A.
Business
B.A., University of Central Florida
M.Ed., University of Central Florida

Tracy, Carol Law
Humanities
B.A., University of Massachusetts
M.A.T., University of Massachusetts
Ph.D., Florida State University

Trubilcock, Greta
Employee Benefits
B.S., University of Maryland

Turner, Margaret Elaine
Student Development, East Campus
B.A., University of Central Florida

Tyson, H. Jeannette
Mathematics
B.S., Florida A&M University
M.A., Florida A&M University

Vandermast, Roberta J.
Humanities
B.A., Florida State University
M.A., Florida State University

Villa, Linda
Extension Centers
B.A., University of South Florida
M.A., University of South Florida

Villegas, Penny J.
English
B.S., University of Missouri
M.A., University of Missouri

Walker, Darl B.
Television Programs
B.A., Memphis State University

Walker, Renee E.
Data Processing
B.S., Western Kentucky University
M.S., Western Kentucky University

Walsh, J. Anthony
Institute of Entertainment Technology
B.A., Hofstra University
M.A., Adelphi University

Wasniewski, Emil F.
Institutional Research
B.S., U.S. Merchant Marine Academy
B.S., U.S. Naval Post Graduate School
M.A., George Washington University
Ed.S., George Washington University
Ed.D., George Washington University

Watson, Rose H.
English
B.A., State University College of New York at Buffalo
M.S., State University College

Watson, Walker W.
Computer Training Institute
B.A., University of Central Florida

Webb, Ruth Y.
Chairman, Health and Public Service Department, West Campus
B.S.N., University of Florida
M.A.T., Rollins College
Ed.D., Nova University

Weed, Larry V.
Music
B.M., Oklahoma City University
M.M., Eastman School of Music
D.M.A., University of Michigan

Wiese, Jane G.
Accounting
M.A., Washington University
M.S.M., Rollins College

White, Hal E.
Nursing
B.S., University of North Alabama
M.A., University of Mississippi
M.S.N., University of Alabama in Birmingham

Williams, Audrey J.
English
B.A., Talladega College
M.A.T., Rollins College

Williams, Earl M.
Communications
B.A., Mississippi College
M.A., University of Mississippi
Ph.D., Florida State University

Williamson, Laurel V.
English
B.A., University of Southern Mississippi
M.A., University of Southern Mississippi

Wilson, David L.
Biology
B.S., University of Florida
M.S., Wayne State University
Ph.D., Wayne State University

Wilson, M. Lee
Nursing
B.S.N., University of Virginia

Witt, Joanne
Nursing
B.S.N., Fairleigh Dickinson University
M.S.N., Medical College of Georgia
Ed.S., University of Central Florida

Woodard, Nora D.
Reading
B.S., Albany State College
M.A., University of Central Florida

Woodbery, Patricia M.
Nursing
B.S.N., University of Virginia
M.S.N., Medical College of Virginia

Wright, Richard J.
Biology
B.S., Eastern Kentucky University
M.A., University of Kentucky
Ed.D., Nova University

Zapico, Silvia C.
Chairman, Science/Social Science, East Campus
B.S., Oglethorpe University
M.S., University of Miami
Ed.D., University of Central Florida

Zurosky, Thomas S.
Chemistry
B.S., California State College
M.S., Clarkson College of Technology
Adams, Kathleen A.  
Word Processing Specialist II

Adams, Thomas W.  
Educational Advisor

Ali, Bebi A.  
Secretary II

Alvarez, Gustavo  
Cashier Working Supervisor

Amendolara, Frank  
Small Engine Mechanic

Amos, Lorraine B.  
Educational Advisor

Anderson, James W.  
Small Engine Mechanic

Anderson, Karen A.  
Financial Aid Clerk II

Anderson, Marquita D.  
Program Analyst II

Appoo, Maybelle S.  
Financial Aid Specialist I

Arias, Emilia V.  
Custodian I

Atkinson, Dixie L.  
Educational Advisor

Ayala, Luis  
Custodian I

Bailer, Patricia  
Financial Aid Clerk II

Bailey, Joanne T.  
Secretary I

Balda, Raul A.  
Graphic Production Specialist

Balkom, Sharon R.  
Paraprofessional, Greenhouse

Ball, Gwendolyn  
Secretary I

Barber, James P.  
Film/Video Equipment Technician

Bartoli, Thomas J.  
Senior Laboratory Technician - Electronics

Bastin, Brian  
Accounting Clerk I

Bean, Barbara J.  
Media Production/Graphic Specialist

Bearden, Rosie  
Admissions/Records Specialist

Bechard, John P.  
Security Guard

Beever, Joy J.  
Accounting Clerk II

Bell, Denise K.  
Manager, Office Systems

Bennett, Geneva R.  
Cashier Working Supervisor

Benson-Beaver, Rebecca  
Instructional Assistant - Math

Blais, Patricia A.  
Assistant to Director of Personnel Services

Blais, Paul E.  
Manager, Computer Support Center

Blistan, Sharron G.  
Superintendent, Plant Operations

Blount, June M.  
Admissions/Records Specialist

Bonilla, Karin  
Secretary III

Borden, Dixie L.  
Office Supervisor III

Bracey, Louise A.  
Secretary I

Brennan, Lois  
Secretary I

Brewster, Margie B.  
Computer Operator

Brown, Barbara L.  
Secretary I

Brown, Linda M.  
Coordinator, Open Instructional Lab

Bruce, Shirley E.  
Coordinator, Instructional Lab

Brumbaugh, JoAnn  
Secretary I

Brunson, Bernadette H.  
Secretary III

Bryan, Susan J.  
Microcomputer Specialist / Programmer

Buffo, Emil A.  
Air Conditioning Technician I

Bullard, Dana B.  
Custodian I

Burke, Glyne A.  
Security Guard

Burlinson, Donald  
Photographer

Burry, Joan B.  
Cashier

Bustillo, Vicente De V.  
Security Guard

Bye, Mikal  
Supervisor, Finance Office, West

Byrd, Evelyn E.  
Custodian I

Caballero, Maria E.  
Word Processing Specialist I

Calvin, Michael L.  
Programmer Analyst II

Camacho, Marcelina  
Accounting Clerk I

Campbell, Roger T.  
Air Conditioning Technician I

Cannady, Leroy  
Custodian I

Castillo, Migdalia  
Library Assistant

Catagnus, Lore Lei  
Custodian I

Chaney, John L.  
Groundskeeper I

Cheatham, Emanuel  
Custodian I

Childress, Steven R.  
Manager, Purchasing & Risk Management

Churchwell, Sybil E.  
Coordinator, Telecommunications
Clark, Kelly  
Secretary I

Clayton, Inez  
Admissions/Records Specialist

Coleman, Lorayne M.  
Secretary I

Covey, Joanna  
Supervisor, Admissions/Records/Open Campus

Cranford, Catherine  
Accounting Clerk I

Crum, Francine  
Learning Center Specialist

Cruz, Cynthia M.  
Grants Records Specialist

Curran, Jeanne E.  
Admissions/Records Specialist

Curry, Ernest E.  
Supervisor, Mail & Courier Services

Dailey, Vivian M.  
Mail Clerk

Damon, Peter K.  
Supervisor, Grounds Maintenance, East

Davis, Candace I.  
Reprographics Equipment Operator

Davis, Gwendolyn  
Office Supervisor II

Deltrick, Donna  
Program Coordinator, CPTD

Delaney, Debra J.  
Financial Aid Specialist II

DeLeon, Pablo J.  
Groundskeeper I

Delgirmeno, Edward J.  
Security Guard

DeLong, Donna  
Word Processing Specialist II

Denny, Sondra J.  
Admissions/Records Specialist

Denton, William A.  
Assistant to Controller

Deter, Dawn V.  
Secretary I

Dewees, Barbara E.  
Administrative Assistant to President & Board of Trustees

Diaz, Efrain  
Shipping & Receiving Clerk

Dion, Kathryn A.  
Security Guard

Dixon, Sherri  
Grants Record Specialist

Dupree, Cynthia  
Office Supervisor II

Dyer, Helen J.  
PBX Operator

Eberley, Peter B.  
Microcomputer Support Specialist

Eddy, Sally A.  
Secretary I

Eichenauer, Kurt  
Supervisor, Trades & Maintenance

Eldridge, Charlotte L.  
Secretary I

Elkins, Mary Beth  
Office Supervisor III

Ellson, James M.  
Programmer Analyst I

Emery, Gina J.  
Educational Advisor

Epstein, Judy L.  
Paraprofessional Valencia/UCF Academic Center

Espinosa, Brandi M.  
Cashier

Everton, Bruce H.  
Supervisor, Public Services

Ewing, Michal O.  
Office Supervisor I

Fader, Joanne M.  
Educational Advisor

Fansler, Charles B.  
Learning Center Specialist

Fansler, Sharon K.  
Career Advisor

Felton, Doris  
Custodian I

Fernandez, Beatrice  
Systems Programmer I

Ferrer, Asmaldo C.  
Custodian I

Figueroa, Pedro J.  
Custodian I

Figueroa, Ricardo  
Supervisor, Finance Office - East

Findley, Terry A.  
Manager, Office Systems

Flanders, Barbara J.  
Accounting Clerk I

Fletcher, Mark A.  
Maintenance Technician I

Flick, Natalie  
Secretary I

Floyd, Lori A.  
Educational Advisor/International

Foreman, Nancy A.  
Office Supervisor I

French, Jacquelyn A.  
Secretary/Bookkeeper

Froehner, Erica H.  
Groundskeeper Working Supervisor

Galasso, Regina  
Assessment Specialist

Gallant, Henry W., Jr.  
Facilities Assistant II

Garcia, Jose L.  
Maintenance Technician III

Garcia, Nazario  
Custodian I

Gardell, Carmen  
Coordinator Financial Aid/Veterans Affairs

Gelaides, Karen L.  
Secretary I

Gelle, Menchita C.  
Admissions/Records Specialist

Gibson, Donna  
Secretary II

Giesel, Dale  
Security Field Supervisor

Giessuebel, Teriann  
Financial Aid Specialist I
Hill, Clara M.
Mail Clerk/Custodian

Hill, Roosevelt
Groundskeeper I

Holley, William C.
Manager, Computer Operations

Hopkins, Rebecca M.
Word Processing Specialist II

Hudson, Kimberly D.
Secretary I

Hudson-Charles, Bobbie
Assistant to the Project Director
Title III Articulation

Hughes, Consuelo A.
Financial Aid Specialist I

Hull, L. Renee
Supervisor, Admissions/Records East

Humphries, Bernice
Custodian I

Hunt, Hilda J.
Media Processing Specialist III

Hunt, Todd
Assistant Manager Bookstore

Hurst, John C.
Custodian I

Husbands, Dale
Instructional Assistant - Osceola

Ings, Tominsina L.
Technical Specialist

Jackson, Bunnie Jean
Reprographics Equipment Operator

Jackson, Romena
Custodian I

Jacobs, Fairrell
Plant Operations Specialist II

Janz, Carol P.
Office Supervisor I

Jenkins, Lee Ella
Custodian I

Jester, Barbara A.
Educational Advisor/International

Jones, Brenda G.
Facilities Specialist III

Jones, Carol J.
Coordinator, Instructional Support Services

Jones, Diane M.
Financial Aid Specialist I

Jones, Lena B.
Secretary I

Jones, Shelia Y.
Admissions/Records Specialist

Justice, William J.
Process Camera Operator/Stripper

Kawamukai, Geraldine
Testing Technician

Kelley, Thomas W.
Laboratory Assistant - CADD

Kerr, Gail
Office Supervisor I

Kinsley, Sally M.
Admissions/Records Specialist

Koerner, Nancy W.
Accounting Clerk II

Kornack, Amanda L.
Secretary I

Kuhn, Elizabeth
Supervisor, Custodial Services

Laber, Harry R.
Groundskeeper Working Supervisor

Lansing, Louise
Secretary I

Lawrence, Albourne O.
Groundskeeper I

Lawson, Harold K.
Supervisor, Trades & Maintenance

Lebron, Lillian
Accounting Clerk II

Lebron, Miguel
Custodian I

Lee, Catherine
Custodian I

Leiback, Janet M.
Supervisor, Admissions, West

Leigh, Harold E.
Engine Mechanic

Leigh, Janice A.
Cashier

Lewis, Anthony M.
Instructional Assistant - English/Reading
Long, Bernice T.
Health & Public Service Advisor

Lowe, Vicky Ann
Secretary II

Lowhorn, Gloria J.
Secretary I

Luse, Barbara L.
Secretary II

Lynch, Carolyn A.
Evening Admissions/Records Analyst

Magee, Sharon W.
Paraprofessional Oil/Testing

Mantione, Vicky L.
Accounting Clerk I

Marcia, Linda I.
Personnel Specialist

Marini, Diana
Secretary III

Marsh, William W.
Air Conditioning Technician II

Martin, Vivian
Secretary II

Martos, Haydee R.
Custodian I

Mathena, Harriett E.
Evening Admissions/Records Analyst

Matson, Paul A.
Facilities Inspector

Maukonen, Kenneth
Technical Lab Assistant - Physics

Mayberry, Florence R.
Media Processing Specialist II

McAdams, Jack R.
Programmer Analyst II

McBurney, Ralph
Custodian I

McCall, Ronnie
Security Guard

McGee, Zelma
Evening Admissions/Records Analyst

McGuire, Theresa A.
Supervisor, Printing Services

McKinney, Carolyn J.
Systems Analyst II

Meeks, Connie J.
Laboratory Assistant - Science

Mejias, Vivian
Instructional Assistant/Office Systems Technology

Messer, Catherine M.
Office Supervisor I

Mikel, Mariann C.
Personnel Specialist

Miller, Denver W.
Maintenance Technician II

Miller, Dialynn
Educational Advisor

Miller, Robin L.
Supervisor, Grounds Maintenance, West

Mills, Vilma M.
Secretary/Bookkeeper

Mills, David G.
Custodian I

Miner, Karen
Word Processing Specialist II

Mitteff, Suann
Instructional Assistant - DP

Mobley, Randy
Manager, PEC Bldg Equipment

Moore, Bonnie S.
Admissions/Records Specialist

Moore, Chris R.
Media Processing Specialist II

Moore, Geneva J.
Custodian I

Moore, Robert F.
Maintenance Technician III

Mora, Gloria M.
Cashier Working Supervisor

Moreno, Maria T.
Library Assistant

Morris, Karen
Secretary I

Moses, Cynthia E.
Computer Operator

Moultrie, Alice G.
Custodian I

Moultrie, Calvin
Custodian I

Muckel, Vicki E.
Secretary II

Murray, Parathil K.
Secretary I

Musgrave, Richard B.
Programmer Analyst II

Narring, Bryan E.
Groundskeeper I

Neverdale, Joan L.
Secretary II

Nicholas, Patricia A.
Word Processing Specialist II

Obrenski, Rose E.
Senior Payroll Specialist

Oliver, Rose
Library Assistant

O'Neal, Kevin S.
Groundskeeper I

Olmstead, Ronald G.
Laboratory Assistant

Ortiz, Petra
PBX Operator

Otero-San Inocencio, Delia
Accounting Clerk I

Overholt, Pamela C.
Secretary II

Pabon, Cru cita
Secretary I

Page, Judith
Gallery Curator

Pahl, Lee D.
Facilities CADD Technician I

Palmer, Betty H.
Secretary IV

Parah, Betsy E.
Coordinator Learning Center

Parker, Mary Ann
Secretary II

Parramore, Fay
Word Processing Specialist II

Pate, Daniel J.
Graphic Designer

Patzer, Ernest T.
Groundskeeper I

Pecunia, Frank
Custodian I
Peebles, Carlos E.  
Maintenance Technician II

Perez, Ana A.  
Admissions/Records Specialist

Perez, Ana C.  
Custodian I

Perez, Carmen  
Secretary I

Perez, Wilfredo E.  
Custodian I

Perkins, Walter W.  
Electronics Lab Technician

Persico, Kathryn  
Secretary III

Petty, Marlene  
Supervisor, Employment

Phillips, Archie  
Press Operator

Phillips, Clara H.  
Office Supervisor I

Pinkney, Lois E.  
Secretary I

Powhida, Gayle Z.  
Secretary I

Proacci, Eileen G.  
Secretary II

Proctor, Edward H.  
Property Records Specialist

Proietti, Kathy  
Educational Advisor

Provido, Jose G.  
Security Guard

Pruim, Evelyn  
Testing Technician

Purcell, Marva A.  
Secretary I

Pyster, Doris  
Office Supervisor I

Rahberg, Donna L.  
Instructional Assistant - Science

Ramaley, Martha Ann  
Coordinator, Learning Center

Ramnarine, Bharat  
Accounting Clerk I

Ramos, Edelmiro  
Custodian II

Randolph, Stephanie  
Cashier

Ratliff, Barbara G.  
Supervisor, Payroll

Ratliff, Robert E.  
Facilities Coordinator

Reed, Donald  
Custodian I

Rhodes, Clarence  
Assistant Computer Operator

Ribbe, Helen  
Office Supervisor I

Riley, Delores Y.  
PBX Operator

Rivera, Pedro  
Manager, Accounting

Rivera, Luz M.  
Cashier

Rivera, Pedro Luis  
Security Guard

Roake, James R.  
Groundskeeper I

Robinett, Robert J.  
Project Records Specialist

Roder, Joseph E.  
Supervisor, Security

Rodgers, Brinson  
Groundskeeper I

Rosenfeld, Howard  
Security Guard

Rothman, Margaret  
Supervisor, Public Services

Ruiz, Carmen I.  
Word Processing Specialist I

Ruiz, Ileana  
Secretary I

Sampson, Julius  
Custodian I

Sanders, Mae Rose  
Custodian I

Schindler, Treva L.  
Secretary II

Schmidt, Carl  
Security Guard

Schmidt, Sharon  
Security Operations Specialist I

Scoltock, Nancy A.  
Secretary III

Scott, Melvin  
Supervisor, Custodial Services

Scott, Michael  
Custodian I

Shaw, Corine B.  
Media Processing Specialist II

Shugg, Michael J.  
Scenographer/Graphic Specialist

Sides, Vernelle J.  
Supervisor, Accounts

Sinanan-Singh, Ramaward J.  
Chief Engineer, TV System

Smith, Joann S.  
Secretary I

Smith, Roger P.  
Internal Auditor

Smoke, Leonard  
Coordinator, Technical Service

Sorrough, Sharon  
Secretary I

Spachter, Earl  
Groundskeeper I

Spachter, Shirley M.  
Custodian I

Staaf, Sandra J.  
Office Supervisor I

Stephen, E. Gail  
Administrative Services Staff Assistant

Stevenson, Cora N.  
Personnel Specialist

Stevenson, Sherian M.  
Secretary II

Stillwell, William S.  
Senior Physics Lab Assistant

Stokes, John D.  
AV/TV Distribution Technician

Stout, Richard C.  
Media Production Specialist
GLOSSARY

Accreditation - Certification that the College has met established standards and is nationally recognized by appropriate accrediting agencies. Valencia’s major accrediting agency is the Southern Association of Colleges and Schools (SACS).

ACT (American College Testing Program)- used for placement.

Activity Period - A non-class period set aside for student activities and various presentations.

Advanced Placement - College credits earned prior to enrollment at Valencia Community College through certain examinations, such as those administered by the College Entrance Examination Board.

Afternoon College - Classes offered during afternoon hours during the regular academic year.

Arena - West Campus weekly student affairs publication which contains announcements and important information for students and staff.

Articulation Agreement - Agreement between Florida’s public junior/community colleges and universities assuring junior-level status to students who complete the community college general education and graduation requirements in university parallel programs.

Assessment - Initial and subsequent evaluation of students to aid in placement and progress in reading comprehension, writing, English language skills, arithmetic, and algebra.

ASSET (Assessment of Skills for Successful Entry and Transfer)-major assessment test used for placement in English, mathematics, and reading.

Audit - Credit course taken for non-credit.

Career Programs - Two-year A.S. degree programs with courses designed to prepare students for specialized occupations.

Class Period - Normally a clock hour per week per credit hour.

CLAST (College-Level Academic Skills Test) - State-prepared and state-administered test of college-level competencies in English language skills, essay, reading, and computation given to students who have earned no fewer than 18 college-level credits, including Freshman Composition I and Intermediate Algebra or higher math course with grades of C or higher. To qualify for the A.A. degree, a student must pass all four components of CLAST. To transfer to a state university with junior status, a student must pass at least three components and pass the other component before completing 36 hours at the university.

CLEP (College-Level Examination Program) - Credit by examination by College Entrance Examination Board tests in specified subjects, with such credit applicable toward a degree.

College Night - An evening for students, prospective students, families, and friends to visit Valencia to meet representatives of more than 100 colleges and universities. Usually held second week of October.

Continuing Education - A variety of subjects offered at numerous sites for adults of the community in noncredit programs and courses.

C.E.U. (Continuing Education Unit) - One C.E.U. is awarded for every 10 contact hours of instruction in an organized continuing education/noncredit course.

Corequisite - A course required to be taken at the same time as another course.

Credit by Examination - College credit in specified subjects granted by successful completion of local or national tests.

Credit Hour - A semester hour of credit usually equals an hour per week that a class meets per regular session. Laboratories usually equate to one credit.

Cross-Enrollment - Enrollment by mutual agreement at one educational institution where a degree is sought by a student who is taking certain specified courses at another institution at the same time in order to meet particular degree requirements.

Dual Enrollment - Concurrent enrollment at two educational institutions.

Early Admission - Enrollment at Valencia by high school seniors in lieu of or in addition to their senior year of high school. Usually permission of high school is required.

East Wind - Weekly East Campus student publication which contains announcements and important information for students and staff.

ELPA (English Language Proficiency Assessment) - Assessment taken by students whose native language is not English.

ENS (English as a second language) - classes offered at Valencia at the low - intermediate levels.

Entry-Level Assessment - System through which students are helped to plan an educational program in which they will be successful.

Fee - A non-refundable financial charge for services rendered, such as for admission, laboratory, special tests, and graduation.

Foreign Language Requirement - The requirement by Florida’s state universities that students transferring to the university must have earned two years of sequential foreign language at the high school level or the equivalent at a community college. Effective August 1, 1989.

Full-Time Student - Enrollment for 12 or more semester hours in Sessions 1, 2, and 5; six or more semester hours in Session 3 or 4.

General Education - Specific number of semester hours of basic liberal arts courses required as foundation in university parallel A.A. degree programs.

Gordon Rule - State Board of Education rule requires that students successfully complete 12 credit hours of course work in
which he/she is required to demonstrate written skills and six
credit hours of mathematics course work at college algebra - level
or higher.

Grade - Alphabetical measure of academic success or failure
ranging from excellent (A) to failure (F).

GPA (Grade-Point Average) - Dividing total quality points earned
by total semester hours completed. GPAs range from 4.0 downward.

Graduation Check - Formal list of courses completed and
required to be completed to qualify for graduation. A graduation
check is performed by the Admission's Office at the student's
request. A student should make such a request after completing
successfully 40 semester hours, but before her/his last semester.

Grant - Funds awarded for college expenses to qualified students
in financial need.

Independent Study - Capable students may acquire course credits
at their own pace through non-classroom student-faculty
interaction. An additional fee is charged.

International Student - A student who has entered the United
States on a nonimmigrant visa, most often an individual on a
student visa. Immigrants, refugees, and U.S. citizens who do not
speak English as a native language are not classified as
international students at Valencia.

MACC (Mathematics and Communications Center) - West
Campus math, reading, and writing support center for scheduled
classes, referrals, and drop-in students needing help with
academic mathematics, reading, and writing projects. Self-paced
classes in math and reading are scheduled in MACC. MACC is
also the home of the West Campus Writing Center.

MAPS (Multiple Assessment Programs and Services) -
Assessment instrument used for placement purposes.

Matador Day - Annual day of entertainment and fun in Session 2.
Courses do not meet between 11:00 a.m. and 5:00 p.m.

Minimester - A short term (seven weeks) of credit instruction
offered during Sessions 1 and 2.

Noncredit - A continuing education course for which college
credit is not granted.

Open Campus - The "campus without walls" offers both credit
and noncredit courses at numerous times and sites throughout
Orange and Osceola counties to meet community educational
needs.

Operation Student Concern - Student participation in community
service projects for which some academic credit may be granted.

PAC (Performing Arts Center) - on East Campus.

Part-Time Student - Student enrolled for fewer than 12 semester
hours in Session 1, 2, or 5 or fewer than six semester hours in
Session 3 or 4.

PEC (Physical Education Center) - on West Campus.

Prerequisite - Course which must be satisfactorily completed
before a higher-level related course can be taken.

Probation - A status given to students who fail to maintain
satisfactory academic progress.

Provisional Student - Degree-seeking student who has not met all
necessary requirements of admission.

Quality Points - The value, ranging from 4 to 0, for grades from A
to F for all courses completed, used in determining academic
average. See also GPA.

Regular Student - A student whose admission requirements have
been fully met and who is working toward a degree.

Re locatingals - Temporary classroom and office buildings on any
campus.

R.O.T.C (Reserve Officers Training Corps) - R.O.T.C. programs
are offered at Stetson University and the University of Central
Florida. Valencia Community College students may, through
cross- or dual-enrollment, earn college R.O.T.C. credit and degree
credit.

Residency - To qualify for in-state tuition, students must sign a
notarized statement confirming that they have resided in Florida
12 calendar months prior to the start of classes in the semester
they wish to enroll.

Rotunda - Sunken area in some permanent buildings on East and
West campuses where lounging and student activities may take
place.

Scholarships - Financial assistance for tuition and fee payment
granted by donors to qualified recipients.

SAT (Scholastic Aptitude Test) - used for placement.

Servicemen's Opportunity College - Programs and special
services designed to meet unique needs of active-duty military
personnel.

Session - Time period, roughly equivalent to a semester, in which
classes meet. Sessions 1, 2, and 5 are usually 14 weeks each;
Sessions 3, 4, and minimesters are usually seven weeks each.

Special Services - Support, counseling, testing, tutoring and other
services provided to students who, under a federally funded
program, qualify because of educational, economic, cultural,
language, or physical disadvantages.

Special Student - Student taking credit courses but not for a
degree.

Student Activities - Various college-sanctioned projects,
endeavors, contests, and functions of an extracurricular nature
engaged in by students.

Student Classification - Pertains to full-time or part-time, regular
or special, freshman or sophomore, audit or credit, career or
university parallel, etc.

SGA (Student Government Association) - Official representatives
of the student body to the administration in matters concerning
student life.

Student Load - Number of credit hours carried by a student in any
session.
Suspension - Student status under which she/he is not permitted to attend college for a specific period of time.

the paper - Collegewide student newspaper published biweekly during Sessions 1 and 2 as part of journalism offerings.

Telecourses - College credit courses televised weekly on local television and cable outlets.

Transcript - Official record in Admission's Office of college courses taken by a particular student.

Transfer Student - Student who attended a college or university before coming to Valencia.

Transient Student - Student taking one or more classes at Valencia to complete degree requirements and major course work at another institution.

Tuition - Financial charge for each credit hour of instruction.

Tutorial Assistance - Special academic help in specified subjects. See also MACC.

University Parallel Program - Courses of study leading to A.A. degree which parallel the lower-level requirements of a four-year degree.

Valencian - Humanities magazine of poems, short stories, essays, and visual arts published once a year on alternating campuses.

VISA (Volunteers for International Student Activities) - An organization open to all students who want to learn about other cultures and countries, promote international understanding on campus and in the community, and make new friends.

VTV (Valencia Television) - See Telecourses

Weekend College - Classes offered Friday evening, Saturday, and Sunday during Sessions 1 and 2 for the convenience of persons who work during weekdays.

Withdrawal - Removal from a course or courses by completion of proper forms in the Admission's Office or by faculty member for excessive absences.
<table>
<thead>
<tr>
<th>Index</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Averages, 34</td>
<td>Buckley Amendment, inside front cover</td>
<td></td>
</tr>
<tr>
<td>Academic Course Load, 34</td>
<td>Building Construction Technology, 63</td>
<td></td>
</tr>
<tr>
<td>Academic Grievance, 34</td>
<td>Business Courses, 108</td>
<td></td>
</tr>
<tr>
<td>Academic Honors, 57</td>
<td>Business - Accounting Option Program, 61</td>
<td></td>
</tr>
<tr>
<td>Academic Policies, 32</td>
<td>Business - Banking Option, 77, 79</td>
<td></td>
</tr>
<tr>
<td>Academic Progress, 34</td>
<td>Business - Finance Option Program, 76</td>
<td></td>
</tr>
<tr>
<td>Academic Skills Testing, 51</td>
<td>Business - Hospitality Management Option Program, 83</td>
<td></td>
</tr>
<tr>
<td>Academic Standards, 32</td>
<td>Business - Management and Marketing Option Program, 62</td>
<td></td>
</tr>
<tr>
<td>Accounting Technology, 61</td>
<td>Business - Postal Management Option, 97</td>
<td></td>
</tr>
<tr>
<td>Accreditation, inside front cover</td>
<td>Business - Postal Operations Certificate, 97</td>
<td></td>
</tr>
<tr>
<td>Administration of College, 181</td>
<td>Business and Industry Institute, 20</td>
<td></td>
</tr>
<tr>
<td>Administrative Offices, 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admissions Process, 25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admission Requirements, 23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Placement, 27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Placement Examinations (CEEB), 27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advising, 44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advising Sessions, 44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advisory Committees for Career and Community</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programs, 169-180</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Algebra Courses, 149</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alien Students, inside front cover</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative to General Education, 58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alumni Association, 17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anatomy Courses, 107</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anthropology Courses, 106</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appeal by Students, 50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appeal Procedure, 32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application, 26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application Fee, 37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applied Music, 151</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architectural and Building Construction Technology Program, 63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architectural Courses, 120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arena, 198</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art Courses, 106</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Articulation Agreement, 49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment Session, 26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate in Arts Degree (AA), 53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate in Arts Degree Programs Requirements, 53, 57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate in Science Degree (AS), 59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate in Science Degree Programs Requirements, 59, 60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Athletics, 46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attendance, 35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audit Student, 28</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bad Check Collection, 39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology Courses, 107</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black Advisory Committee, 180</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bookstore, 45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hours, 46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment, 46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchasing, 46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Returns, 56</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
F
- Faculty, 183
- Family Education, 20
- Fee and Tuition Schedule, 37
- Fees, 37
  - Application, 37
  - Continuing Education, 39
  - Dental Hygiene Expenses, 37
  - Examination, 39
  - Laboratory, 37
  - Medical Laboratory Technology, 37
  - Music, 37
  - Nursing Expenses, 38
  - Special, 39
- Film Production Technology Courses, 136
- Film Production Technology Program, 75
- Final Examinations, 35
- Financial Aid, 39
  - Aid Grant Basis, 40
  - Application, 40, 41
  - Eligibility, 39
  - Financial Aid Form (FAF), 40
- Financial Assistance Programs, 41
- Financial Information, 40, 41
- Financial Services Program, 76
- Fines, Parking, 47
- Fire Science Courses, 136
- Fire Science Program, 80
- Five Year Rule, 53
- Florida Resident, 26
- Florida Student Assistance Grant (FSAG), 40
- Foreign Language Courses, 137, 159, 164
- Foreign Language Requirement, 59
- Foreign Student, 26, 40
- Food Management Courses, 83
- Food Services, 46
- Found and Lost, 47
- Foundation, 16
- Founding Date, 14
- Fraud, 26
- French Courses, 137
- Freshman, 28
- Full-Time Student, 28
- Functions of College, 15
- G
  - Gardening Courses, 141
  - General Education, 55
  - General Education Development (GED), 23
  - General Education Electives, 60
  - General Education Requirements, 55, 60
  - General Information, 53
  - Geography Courses, 137
  - German Courses, 137
- Glossary, 198
- Gordon Rule, 35
- Government Courses, 159
- Governmental Services, 20
- Grade Point Average (GPA), 34
- Grades, 34
- Grades Due, 35
- Graduation Application, 53
- Graduation Check, 54
- Graduation Requirements, 53
  - Associate in Arts Degree, 53
  - Associate in Science Degree, 59
  - Five Year Rule, 53
- Grants, 40
- Graphic Design Program, 82
- Graphics Technology Courses, 138
- Graphics Technology Program, 81
- Grievance Hearing, 34
- Grievance Process, 34
- Growth of Valencia, 14
- Guaranteed Student Loan (GSL), 40
- H
  - Handicapped Student Services, 45
  - Health and Human Services, 101
  - Health Related Courses, 140
  - Health Related Programs
    - Admission Requirements, 27
    - Dental Hygiene, 68
    - Dietetic Technology, 70
    - Emergency Medical Services, 73
    - Medical Laboratory Technology, 87
    - Nursing, 89
    - Respiratory Care, 101
  - Health Services, 46
  - Hearings, 32
  - High School Credit, 23
  - History Courses, 140
  - History of Valencia, 14
  - Holidays, 10-13
  - Home Campus, 25
  - Honors Program, 57
  - Honor Lists, 33
  - Horticulture Courses, 141
  - Horticulture Programs, 95, 96
  - Hospitality Courses, 144
  - Hospitality Program, 83
  - Housing, 46
  - Humanities Courses, 145
  - Humanities Requirements, 55
- I
  - Important College Dates, 10-13
  - Incomplete Grades, 34
  - Independent Study, 29
  - Institutional Work Study, 41
  - Institute for Business and Industry, 20
  - Institute of Government, 23
  - Insurance, 46
  - Interdisciplinary Studies (IDS), 58
  - Interdisciplinary Studies Courses, 146
  - International/Intercultural Education, 17
  - International Students, 26, 40
- J
  - Journalism Courses, 147
- L
  - Laboratory Fees, 37
  - Land Surveying Courses, 166
  - Land Surveying Program, 84
  - Late Registration, 10-13
Law Courses, 147
Law Enforcement Courses, 121
Law Enforcement Program, 67
Legal Assisting Courses, 147
Legal Assisting Program, 86
Learning Resources Center (LRC), 44
Legal Secretarial Science Courses, 112
Library, 44
Literature Courses, 133
Load, 34
Loan Collection, 39
Loans, 41
Logic Courses, 148
Lost and Found, 47

M
Mail, 47
Majors, 53
Management Courses, 108
Management Programs, 62
Mandated Courses, 35
Maps of Campus, 3-8
Map of College District, 3
Marketing Courses, 112
Mathematics Courses, 112 - 148
Mathematics Requirements, 56
Mathematics Requirements, AA Degree, 56
McCoy Center, 20
Medical Laboratory Technology Courses, 150
Medical Laboratory Technology Program, 87
Medical Laboratory Technology Expenses, 37
Medical Secretarial Science Courses, 113
Mid-Florida Technical Institute Credits, 39
Mid-Term Warning, 32
Military Service Training, 29
Military Transition Program, 29
Minimester, 10-13
Minority Affairs, 45
Misconduct Hearings, 32
Mission of College, 15
Music Courses, 151
Music Expenses, 37

N
Natural Science Requirements, 56
New Student Registration, 26
Noncredit Courses, 19
Nuclear Medicine Technology Courses, 152
Nuclear Medicine Technology Expenses, 38
Nuclear Medicine Technology Program, 88
Nursery and Greenhouse Management, 88
Nursing Courses, 153
Nursing Expenses, 38
Nursing Program, 89
Nutrition Courses, 156

O
Office Systems Technology Courses, 108
Office Systems Technology Institute, 21
Office Systems Technology Program, 90
Office of Minority Affairs, 45

Open Campus, 19
Open Instructional Laboratory, 45
Ornamental Horticulture Courses, 141
Ornamental Horticulture Program, 95
Osceola Campus, 21
Oversea Study, 18

P
Painting Courses, 106
Paramedic Courses, 131
Paramedic Expenses, 37
Paramedic Program, 73
Parking, 47
Part-Time Employment, 41
Part-Time Student, 35
Pell Grant, 40
Personnel of College, 181-196
Pest Control Courses, 142
Philosophy Courses, 156
Photography Courses, 107
Physical Education Courses, 156
Physical Science Courses, 156
Physical Science Requirements, 56
Physics Courses, 158
Placement, 26
Plant and Soil Courses, 141
Police Courses, 121
Political Science Courses, 159
Portuguese Course, 159
Postal Service Management Courses, 112
Postal Service Management Programs, 97
President of College, 154
President's Honor List, 33
Printmaking Courses, 106
Prior-Learning, 29, 30
Probation, 32
Professional Legal Secretary (PLS), 30
Provisional Student, 23
Psychology Courses, 159

Q
Quality Points, 34

R
Radiation Therapy Technology Courses, 160
Radiation Therapy Technology Expenses, 38
Radiation Therapy Technology Program, 98
Radiography Courses, 161
Radiography Program, 99
Reading Courses, 162
Reading Laboratory, 52
Real Estate Courses, 162
Real Estate Management Program, 100
Recertification for Teachers, 22
Records, 23, 25, 26
Recreational and Sports Courses, 156
Refund Deadline, 10-13, 39
Refund Policy, 39
Registration, 26
Registered Nurses (RN), 89
Regular Student, 28
Reinstatement, 40
Release of Information, 31
Repeated Courses, 34
Reserve Officers Training Corps (ROTC), 28
Residency, 26
Change of Residence, 26
Non-Florida Resident, 26
Respiratory Care Courses, 163
Respiratory Care Expenses, 37
Respiratory Care Program, 101
Restaurant Courses, 144
Restrictions on Enrollment, 27
Roles and Functions of Valencia, 15
ROTC, 28
S
Satisfactory Progress, 39
Scheduling Options, 28
Scholarships, 40
Science Courses, 107,108,117,156,159
Secretarial Courses, 112
Security, 47
Semester, 10
Servicemen's Opportunity College (SOC), 29
Services for Handicapped, 45
Session, 10
Short-Term Loans, 41
Social Science Courses, 164
Social Science Requirement, 60
Sociology Courses, 164
Sophomore, 28
Spanish Courses, 164
Speech Courses, 165
Sports Courses, 156
Staff, 183
Student Activities, 46
Student-Centered Learning Laboratories, 45
Student Classification, 28
Student Development Course, 166
Student Load, 34
Student Loans, 41
Student Organizations, 46
Student Services, 44
Study Abroad, 18
Supplemental Educational Opportunity Grant (SEOG), 40
Surveying Courses, 166
Surveying Technology Program, 84
Suspension, 32

T
Telecourses, 21
Television Courses, 167
Testing Service, 27,30,50
Admission and Career, 26,29,44
Theater Courses, 167
Theater Program, 102
Third Attempt Rule, 35
Transcripts, 23
Transfer of Credits, 23
Transfer Program, 49
Transportation, 46
Trustees, District Board of, 9
Tuition, 37
Tutoring, 45

Typewriting Courses, 112

U
Unacceptable Courses to AA Degree, 49,53
University Parallel Programs, 53

V
Valencia Community College Foundation, Inc., 16
Valencia Television, 21
Veterans Affairs, 42
Veterans Benefits, 42
Application, 42
Check, 42
Paying, 42
Requirements, 42
VTV, 21

W
Weekend College, 28
Withdrawal, 35
From Class, 33
From College, 33
Work Study, 41
Women's Center in Winter Park, 20
Writing and Research Reinforcement Requirements for AA, 49,53,54
Writing Courses, 133
Writing Laboratories, 45
GENERAL INSTRUCTIONS TO ALL APPLICANTS

1. Health Related Programs
In addition to this application, students seeking admission to Valencia Community College health related programs must complete an application for the specific program they are interested in.

2. Application Deadline
Your completed application, transcript, and any records necessary for admissions consideration should be in the admissions office before the application deadline listed in the calendar of the college catalog. Students are encouraged to submit their application well in advance of the deadline date to facilitate assessment and advising. International student admission requirements should be met three months prior to enrolling.

3. Application Fee
Please enclose a $15.00 non-refundable application fee (check or money order payable to Valencia Community College) with your application for admission. Students admitted within the past 12 months who did not enroll may be required to submit another application and fee. Former Valencia Community College Credit Students are not required to submit an additional application fee.

4. Submission of Transcripts
It is your responsibility to ensure that all high school and college transcripts are mailed or forwarded electronically from the educational institutions directly to the appropriate campus admissions office, Valencia Community College. As you request transcripts, provide your social security number, Florida Student ID Number (If you graduated from a Florida Public School after July 1, 1988) and the name(s) you used while attending that institution. Ask that your Social Security Number and correct name be added to your official transcript. All college transcripts must be received before your records can be evaluated.

5. Financial Aid
If you need to apply for financial aid, you should immediately contact the FINANCIAL AIDS OFFICE.

6. Veterans Benefits
If you plan to apply for veterans benefits, you should immediately contact the VETERANS AFFAIRS OFFICE.

7. Counseling
You may contact the COUNSELING OFFICE for academic advisement and program counseling.

8. Records
Students are able to schedule classes on any of the college campuses. To better serve you the college must maintain your records on either the East or West Campus. REMEMBER TO INDICATE THE CAMPUS ON WHICH YOU WISH TO HAVE YOUR RECORDS MAINTAINED.

9. Associate in Science Degrees
In addition to the Associate In Arts degree (first two years of a four year degree) Valencia Community College offers the following Associate in Science Degree programs which are designed to prepare students to enter a career upon completing the degree, with no further study required:

<table>
<thead>
<tr>
<th>CODE</th>
<th>PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>Ornamental Horticulture Technology</td>
</tr>
<tr>
<td>68</td>
<td>Production Specialization</td>
</tr>
<tr>
<td>69</td>
<td>Maintenance &amp; Construction Specialization</td>
</tr>
<tr>
<td>70</td>
<td>International Business Specialization</td>
</tr>
<tr>
<td>38</td>
<td>Accounting Technology</td>
</tr>
<tr>
<td>04</td>
<td>Business Administration and Management</td>
</tr>
<tr>
<td>05</td>
<td>Computer Programming and Analysis</td>
</tr>
<tr>
<td>28</td>
<td>Financial Services</td>
</tr>
<tr>
<td>56</td>
<td>Financial Services - Banking</td>
</tr>
<tr>
<td>62</td>
<td>Financial Services - Savings and Loan</td>
</tr>
<tr>
<td>40</td>
<td>Hospitality Management</td>
</tr>
<tr>
<td>07</td>
<td>Office Systems Technology</td>
</tr>
<tr>
<td>12</td>
<td>Legal Secretarial Technology</td>
</tr>
<tr>
<td>13</td>
<td>Medical Secretarial Technology</td>
</tr>
<tr>
<td>03</td>
<td>Word Processing Technology</td>
</tr>
<tr>
<td>49</td>
<td>Postal Service Management</td>
</tr>
<tr>
<td>30</td>
<td>Real Estate Management</td>
</tr>
<tr>
<td>41</td>
<td>Criminal Justice Technology</td>
</tr>
<tr>
<td>61</td>
<td>Environmental Science Technology</td>
</tr>
<tr>
<td>08</td>
<td>Fire Science Technology</td>
</tr>
<tr>
<td>32</td>
<td>Legal Assisting</td>
</tr>
<tr>
<td>42</td>
<td>Dietetic Technician</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CODE</th>
<th>PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>63</td>
<td>Cardiovascular Technology (Invasive)</td>
</tr>
<tr>
<td>35</td>
<td>Dental Hygiene</td>
</tr>
<tr>
<td>64</td>
<td>Diagnostic Medical Sonography</td>
</tr>
<tr>
<td>36</td>
<td>Emergency Medical Services Technology</td>
</tr>
<tr>
<td>14</td>
<td>Medical Laboratory Technology</td>
</tr>
<tr>
<td>66</td>
<td>Nuclear Medicine Technology</td>
</tr>
<tr>
<td>15</td>
<td>Nursing, R.N.</td>
</tr>
<tr>
<td>65</td>
<td>Radiation Therapy Technology</td>
</tr>
<tr>
<td>59</td>
<td>Radiologic Technology</td>
</tr>
<tr>
<td>10</td>
<td>Respiratory Care</td>
</tr>
<tr>
<td>19</td>
<td>Building Construction Technology - Civil Engineering</td>
</tr>
<tr>
<td>17</td>
<td>Architectural and Building Construction Technology</td>
</tr>
<tr>
<td>21</td>
<td>Computer Integrated Manufacturing Technology</td>
</tr>
<tr>
<td>06</td>
<td>Drafting and Design Technology</td>
</tr>
<tr>
<td>31</td>
<td>Electronics Engineering Technology</td>
</tr>
<tr>
<td>67</td>
<td>Film Production Technology</td>
</tr>
<tr>
<td>26</td>
<td>Graphic Arts Technology - Management</td>
</tr>
<tr>
<td>34</td>
<td>Land Surveying Technology</td>
</tr>
<tr>
<td>46</td>
<td>Laser Electro - Optic Engineering Technology</td>
</tr>
<tr>
<td>47</td>
<td>Theater and Entertainment Technology</td>
</tr>
<tr>
<td>39</td>
<td>Graphic Design Technology</td>
</tr>
</tbody>
</table>
**ADMISSION STATUS:** (please choose either degree or non-degree seeking and check only one box.)

<table>
<thead>
<tr>
<th>DEGREE SEEKING</th>
<th>NON-DEGREE SEEKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH SCHOOL EDUCATION</td>
<td></td>
</tr>
<tr>
<td>1 □ I have a high school diploma.</td>
<td>15 □ DUAL ENROLLMENT</td>
</tr>
<tr>
<td>14 □ I have a high school certificate of completion.</td>
<td>During my senior year of high school I plan to enroll in courses taught on my high school campus during school hours. (A Dual Enrollment Form with counselor approval must accompany this application).</td>
</tr>
<tr>
<td>6 □ I am at least 18 years of age and have completed high school equivalency diploma (State issued GED).</td>
<td></td>
</tr>
<tr>
<td>13 □ I am less than 18 years of age and have completed high school early by taking the GED. This is my first time in college.</td>
<td>3 □ TRANSIENT STUDENT</td>
</tr>
<tr>
<td>2 □ I am at least 18 years of age and have completed high school or have been enrolled in college before.</td>
<td>I have been enrolled at another college or university and want to take courses at Valencia Community College for transfer of credit back to that institution.</td>
</tr>
<tr>
<td>10 □ I have received a high school diploma or GED at Valencia Community College.</td>
<td>4 □ I am enrolling for personal enrichment or job improvement.</td>
</tr>
<tr>
<td>9 □ EARLY ADMISSIONS</td>
<td>18 □ TEACHER RECERTIFICATION</td>
</tr>
<tr>
<td>During my senior year of high school I plan to enroll in courses taught on the Valencia Community College campus. (An Early Admission Form must accompany this application.)</td>
<td>I am enrolling for Teacher Recertification. Students will not receive credit for courses in which they have previously earned a grade of A or B.</td>
</tr>
</tbody>
</table>

**High School Last Attended**

<table>
<thead>
<tr>
<th>H.S. Name</th>
<th>City</th>
<th>County</th>
<th>State</th>
<th>Graduation Date</th>
<th>Class Rank %</th>
</tr>
</thead>
<tbody>
<tr>
<td>(NAME ON HIGH SCHOOL RECORDS IF DIFFERENT FROM PRESENT NAME):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**General Equivalency Diploma**

<table>
<thead>
<tr>
<th>State Issuing GED</th>
<th>Date Issued</th>
</tr>
</thead>
<tbody>
<tr>
<td>(NAME ON GED RECORDS IF DIFFERENT FROM PRESENT NAME):</td>
<td></td>
</tr>
</tbody>
</table>

**Colleges or Universities (List all institutions attended)**

<table>
<thead>
<tr>
<th>Name</th>
<th>City</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dates Attended</th>
<th>credit hours completed</th>
<th>grade point average</th>
<th>degree earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>from Mo. Yr. to Mo. Yr.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(NAME ON ABOVE RECORDS IF DIFFERENT FROM PRESENT NAME):</th>
<th>Where do you want your records kept?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□ East Campus (Econlockhatchee Trail)</td>
</tr>
<tr>
<td></td>
<td>□ West Campus (Kirkman Road)</td>
</tr>
</tbody>
</table>

**What is your educational goal at VCC (Check one):**

| □ 1. Earn an AA degree. |
| □ 2. Earn an AS degree in (enter code here) | See first page for list of program code numbers. |
| □ 3. Earn a Certificate. |
| □ 4. Complete selected courses with no intent for a | (Non-degree) |
| VCC degree or certificate. |
| □ 5. Complete courses for job improvement. | (Non-degree) |

**What is your primary reason for attending college? (Check one):**

| □ 1. Prepare for entry into first career. |
| □ 2. Prepare for entry into a different career. |
| □ 3. Update skills for a current job. |
| □ 4. Prepare for transfer to a four-year institution. |
| □ 5. Self-enrichment. |
| □ 6. Explore an academic area. |
| □ 7. Explore an occupational area. |

How many years do you expect to be enrolled at Valencia to accomplish your educational objectives? Write number in this box. (If less than one year, enter zero.) □

**What is your current military status (please check one):**

[ ] 1. Active    [ ] 2. Retired    [ ] 3. Reserve    [ ] 4. Dependent    [ ] 5. None of the preceding

Are you eligible to receive V.A. educational benefits? Yes No.

Valencia Community College does not discriminate in admission or access to its programs on the basis of race, color, religion, sex, national origin, handicap or age.

I indicate by my signature that I have been notified of my rights as accorded by Statute 20, United States Code, section 1232g, (See privacy rights on reverse side of the application) and agree to have any transcripts and test scores released to this institution. I understand by my signature that while attending Valencia Community College I have given consent to and agree to uphold the policies of that institution and declare that I have not been suspended within the past year from any other college or university as a result of action taken subject to Florida Statutes (F.S.A. 239.55 & 239-582 - Illegal use or possession of drugs or narcotics).

**Date of Application** __________________________  **Applicant's Signature** __________________________

01/02
(Type or Print All Information Requested)

Office Use

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>

Finance Office Use

| # | $ | D |

Social Security Number  Last Name  First Name  Middle Initial

Florida Student ID Number (If you graduated from a Florida Public School after July 1, 1988)

Mailing Address  City  State  Zip Code

<table>
<thead>
<tr>
<th>Area Code</th>
<th>Telephone Number</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>County of Residency</th>
<th>State of Residency</th>
<th>Country of Citizenship</th>
</tr>
</thead>
</table>

**Civil Rights Category:**

- ☐ International Student
- ☐ Visa Type
- ☐ Resident Alien
- ☐ Immigration Number
- ☐ Refugee
- ☐ Immigration Number

**Sex:**

- 2 ☐ Female
- 1 ☐ Male

- 3 ☐ American Indian
- 5 ☐ Hispanic
- or Alaskan Native
- 2 ☐ Black (Non Hispanic Origin)
- 1 ☐ White (Non-Hispanic Origin)
- 4 ☐ Asian or Pacific Islander

**RESIDENCY STATEMENT**

If you have not lived in Florida for the last 12 consecutive months, give the name of the state in which you resided: ____________________________

If Florida has not been your permanent home for the last twelve consecutive months, you may change your status by following the procedure on the last page of this application.

If you qualify as a Florida resident complete the following statement. (See the last page of this application for the definition of residency). Residence in Florida must be for the purpose of establishing a permanent home and not merely incident to enrollment at an institution of higher education. Living in or attending school in Florida will not, in itself, establish residency. Additional documentation may be requested by the college.

I do hereby swear and affirm that ____________________________________________ is a bona fide resident of the STATE OF FLORIDA as defined on the last page of this application, and has resided in the COUNTY OF ______________________________________ since (month) __________ 19 ______ and prior to that in the COUNTY OF ______________________________________ since (month) __________ 19 ______

or that the applicant qualifies under Section 1 2 3 4 5 6 7 listed on the last page. I declare under penalty of perjury punishable by law as a misdemeanor under section 837.06, Florida Statutes, that the foregoing is true.

Sworn to and subscribed before me this ______ day of _______ 19 ______

(Signature of parent or legal guardian of applicant under 18 years of age)

(Signature of applicant over 18 years of age)

Notary Public

My Commission Expires

Date you plan to enroll at Valencia Community College (Refer to College Catalog for application deadline dates)

Year: _____

☐ Session 1 (August)  ☐ Session 3 (May)  ☐ Session 4 (June)

☐ Session 2 (January)  ☐ Session 5 (May)

Will you be enrolling in more than one class during your first semester at Valencia?  ☐ yes  ☐ no

Will you be enrolling in an English or Mathematics course during your first term at Valencia?  ☐ yes  ☐ no
RESIDENCY INFORMATION

READ THIS STATEMENT CAREFULLY BEFORE SIGNING AFFIDAVIT

All applicants who are bona fide residents of Florida are required to execute a notarized residency affidavit and submit it with their application to Valencia Community College. Applicants who are not Florida residents may attend Valencia Community College and they are not required to submit a residency affidavit. College fees and tuition assessments are based on the applicant's legal residence or the legal residence of his/her parents or legal guardian if the applicant is claimed as a dependent person.

A bona fide Florida resident, for purposes of admission and payment of fees to Valencia Community College, is defined as a person who is a citizen of the United States, a resident alien, or a legal alien granted indefinite stay, who has resided in his/her habitation, domicile, home, and permanent abode in the state of Florida for at least 12 months immediately preceding his/her current registration. Residence in Florida requires physical presence and must be for the purpose of establishing a permanent home and not merely incident to enrollment at an institution of higher education.

The following categories shall also be treated as Florida residents for tuition purposes:

1. Persons married to legal Florida residents who intend to make Florida a permanent home.
2. Active duty members of the armed services stationed in Florida (and spouse/dependent children) or military personnel not stationed in Florida whose home of record or state of legal residence certificate DD form 2058 is Florida (and spouse/dependent children).
3. Full-time instructional and administrative personnel employed by the State public school system, community colleges and institutions of higher education (and spouse/dependent children).
4. Dependent children residing with a legal resident adult relative other than the parent for at least 5 years.
5. Persons who were enrolled as Florida residents for tuition purposes at a Florida institution of higher education, but who abandon Florida residency and then re-enrolled in Florida within 2 months of the abandonment.
7. According to the United States Immigration and Naturalization Service, a permanent resident alien or other legal alien granted indefinite stay (INS documentation required). I have maintained domicile in Florida for at least twelve consecutive months.

Valencia Community College may deny college credits for work done by the student at the institution if it finds that the applicant has made false or fraudulent statements concerning his/her legal residence or his/her intention as to legal residence in connection with, or supplemental to, his/her application for admission.

Applicants who do not qualify as Florida students under these provisions will pay the non-Florida tuition and other charges required of non-Florida Students.

In establishing Florida residency for purposes of assessing this fee, the burden of proof rests with the applicant. Under the law, an applicant can change his/her place of residence from another state to the State of Florida only by actually and physically coming into the state and establishing his/her residence with the intention of permanently residing within the state. The domicile or legal residence of the wife is that of the husband or the domicile or legal residence of the husband is that of the wife as determined by the couple and duly expressed in writing and the legal residence of a minor is that of his/her parents, parent, or legal guardian of his/her person.

A non-Florida student may apply in writing for reclassification prior to any subsequent registration under the provisions set forth below. To qualify for reclassification as a Florida student, a person (or if a minor, his/her parents or legal guardian) shall have resided in Florida for 12 consecutive months and shall provide two types of verification. Documents that may be used to verify residence can include a valid Florida driver's license, a current voter's registration card, a Declaration of Domicile, or a valid Florida vehicle registration. These documents must have been issued at least 12 months prior to reclassification. An alien shall have resided in Florida for 12 consecutive months and must present United States immigration and naturalization certification that he/she is a resident alien or a legal alien granted indefinite stay. If the application is supported by evidence satisfactory to the community college that the student qualifies as a Florida student, his/her classification will be changed for future registrations. Reclassification must take place prior to the end of the Late Registration period each term.

PRIVACY ACTS OF PARENTS AND STUDENTS

Chapter 20, United States Code, section 1232g and regulations adopted pursuant thereto, hereafter referred to as Code, requires that each student be notified of the rights accorded him/her by the Code. The following is provided as basic general information relative to the Code. A copy of the complete Code is available in the Learning Resources Center on both the East and West Campus.

The Code provides for the institution to establish a category of student information termed "directory information." When available in college records any information falling in this category of "directory information" will be available to all persons on request. Valencia Community College has identified the following as "directory information."

1. Student's name
2. Address
3. Telephone listing
4. Race
5. Sex
6. Date and place of birth
7. Major field of study.
8. Participation in officially recognized activities and sports.
9. Weight and height of members of athletic teams.
10. Dates of attendance.
11. Degrees and awards received.
12. Most recent previous educational agency or institution attended.

All other information, such as health and medical records, disciplinary records, records of personal counseling, required student and family financial income records, transcripts or student permanent records, student placement records and other personally identifiable information shall be open for inspection only to the student and such members of the professional staff of the college as have responsibility for working with the student, and, when appropriate, to the parents or guardian of the student. Once a student reaches the age of 18 or is enrolled in a post-secondary program, parents no longer have any right under the Code unless (1) the student gives written consent to release the information to the student's parents; or (2) the parents provide evidence that the student is a dependent of the parents as defined in Section 152 of the Internal Revenue Code of 1954. Such information will not be released to second parties without the written consent of the student.

Except as required by law or when in the discharge of his official responsibilities as prescribed by law, regulations of the state board, and board policies, the designated custodian of such records may release information from these records to others only upon authorization in writing from the student or upon subpoena by a court of competent jurisdiction.
The college seal, developed after correspondence with the mayor of the City of Valencia, Spain, is an original design by a group of Valencia Community College faculty and students.

Valencia, Spain, is in the citrus growing center of Spain and was originally part of the Kingdom of Catalonia and Aragon. The city became a busy seaport after liberation by King James I. Today the city is located in the garden spot of the country and is fed by many rivers, making it a fertile region. Valencia Community College has operated a summer abroad program at the University of Valencia since 1975.