CONTENTS
Academic Policies ................................................................. 25
Accreditation ........................................................................ 3
Admissions and Registration ................................................ 8
Associate Degree .................................................................. 41
Associate in Arts Degree ..................................................... 45
Associate in Science Degree ................................................ 55
Calendar – Student Services ................................................ 4
College Credit Certificates .................................................. 105
College Preparatory Curriculum ........................................ 39
Course Descriptions .......................................................... 136
Disability Services ............................................................... 30
Equal Access/Equal Opportunity/Educational Equity ........... 2
Fees and Financial Information ............................................. 16
Financial Aid ......................................................................... 18
Health Science Programs ...................................................... 57
Locations, HCC ................................................................. 7
Mission Statement .............................................................. 2
Program Placement Rates ..................................................... 128
Postsecondary Adult Vocational Programs ......................... 122
Records Policies ................................................................. 36
Registration .......................................................................... 13
Residency Requirements ...................................................... 11
Student Activities ............................................................... 32
Student Housing ................................................................. 31
Student Policies ................................................................. 33
Student Services ............................................................... 29
Technical Programs ........................................................... 73

www.hccfl.edu

Hillsborough Community College reserves the right to make changes in the regulations, offerings, requirements and any provision announced in this catalog at any time as circumstances require.
President
Dr. Ken Atwater

Board of Trustees 2012-2013
Hillsborough Community College is governed by a Board of Trustees appointed by the Governor.
Randall Reid, Chair
MarDee Buchman
James T. Burt II
Andrew V. Pittman
Nancy H. Watkins

Vision
Hillsborough Community College will deliver education of the highest standards enabling a diverse community of life-long learners to achieve their maximum potential in a global society.

Mission
Hillsborough Community College, a public, comprehensive institution of higher education, empowers students to excel through its superior teaching and service in an innovative learning environment.

Values
• Visionary, Ethical Leadership that upholds participatory decision-making; that acknowledges the contributions of others; and that creates a culture of openness, inclusion, trust, fairness, respect, loyalty, and appreciation.
• Academic Quality and Integrity that maintain the highest standards for providing the educational experiences that will ensure student achievement in current and future endeavors.
• Accountability that responds to the college’s internal and external community. The college will provide a work environment that fulfills its mission, and it will continually monitor results and review its strategic plans.
• Community Relations that include collaborative partnerships, shared resources, and continuous communication. The college commits itself to community forums, advisory committees, and other means of participation.
• Educational Support Services that provide broad access for students through excellent staffing, modern materials, and technological resources. The college will promote student completion of desired programs. Support services aim to enhance student diversity, development, and growth.
• A Learning Environment that offers creative delivery of programs and advances opportunities and successes through the use of traditional and nontraditional student-centered instruction.
• Fiscal Responsibility that demonstrates sound management, long-range planning, and comprehensive participation in the budget process.
• Development Opportunities that focus employees’ work toward students and that motivates employees to maintain high standards.
• Cultural Diversity that celebrates individual talents and experiences that enrich one another’s lives as well as improve the college’s curricular and extracurricular offerings.
• Strategic planning that not only responds to internal and external needs, but also assesses and anticipates strengths, weaknesses, and opportunities. This planning will be practical, comprehensive, and visionary in its approaches.

Equal Access/Equal Opportunity and Educational Equity
Hillsborough Community College is an equal access/equal opportunity employer that makes employment and education-related decisions without regard to race, color, gender, religion, national origin, age, disability sexual orientation, marital status or any other bias that is or may be prohibited by law. In addition, the college does not discriminate in employment practices or in the admission and treatment of students. HCC is committed to equitable treatment of all students and employees and to a learning and working environment free of discrimination and harassment for current as well as future students and employees. The college provides equal educational opportunities to qualified individuals with disabilities and complies with, as well as, supports the Americans with Disabilities Act.
HCC’s equity officer ensures compliance with federal and state laws prohibiting discrimination and sexual harassment.
Employees and students who believe they have been a victim of discrimination or sexual harassment should contact:
Special Assistant to the President for Equity and Special Programs
GWS District Administration Center
39 Columbia Drive
Tampa, FL 33606
Telephone: 253-7037
Email: jholmes16@hccfl.edu
Accreditation

Hillsborough Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate degrees, diplomas, and certificates. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Hillsborough Community College.

Hillsborough Community College also meets the requirements of the following:

- The Florida Department of Education
- The Joint Review Committee on Education in conjunction with the Committee on Allied Health Education and Accreditation (CAHEA) of the American Medical Association
- Committee on Accreditation of the National Association of Schools of Music (NASM)

The Florida Department of Education will accept credit earned at HCC to satisfy various teacher certification requirements. In addition:

- The State of Florida approves HCC for veteran’s training.
- The State of Florida recognizes HCC as a training center for Emergency Medical Services.
- The Florida Department of Law Enforcement certifies HCC as a regional training center for law enforcement, corrections, and correctional probation officers.

Multiple national organizations accredit or approve HCC’s health sciences and career programs:

- The Counseling and Human Services program by the Council for Standards in Human Services Education
- The Culinary Management and Restaurant Management programs by the Accrediting Commission of the American Culinary Federation’s Foundation (ACFF)
- The Dental Hygiene and Dental Assisting programs by the American Dental Association Commission on Accreditation
- The Diagnostic Medical Sonography program by the Joint Review Committee on Education in Diagnostic Medical Sonography in cooperation with the Commission on Accreditation of Allied Health Education Programs (CAAHEP)
- The Dietetic Technician program by the Commission on Accreditation for Dietetics Education (CADE)
- The Nuclear Medicine Technology program by the Joint Review Committee for Educational Programs in Nuclear Medicine Technology
- The Nursing (Associate Degree) R.N. program by the Florida State Board of Nursing and National League for Nursing Accrediting Commission
- The Opticianry program by the Commission on Opticianry Accreditation
- The Paramedic program by the Committee on Accreditation of Educational Programs for EMS Professionals (CoAEMSP) in cooperation with the Commission on Accreditation of Allied Health Education Programs (CAAHEP)
- The Radiography program by the Joint Review Committee on Education in Radiologic Technology
- The Radiation Therapy program by the Joint Review Committee on Education in Radiologic Technology
- The Respiratory Care program by the Committee on Accreditation for Respiratory Care
## HILLSBOROUGH COMMUNITY COLLEGE

**Student Services Important Calendar Dates for Students**

### Regular 16-Week Classes Only

<table>
<thead>
<tr>
<th>FALL TERM 8/20/12 - 12/10/12</th>
<th>SPRING TERM 1/7/13 - 5/3/13</th>
<th>SUMMER TERM 5/13/13 - 8/9/13</th>
</tr>
</thead>
</table>

### Application Dates for Late Start Classes

- **Regular Classes Only**
  - 2012 - 2013

- **FALL TERM**
  - Aug 6
- **SPRING TERM**
  - Dec 10
- **SUMMER TERM**
  - May 6

Students submitting applications after the late start dates will be eligible to enroll for late start courses only. Students will not be eligible to enroll in the regular 16 week session.

### Priority Registration Period

<table>
<thead>
<tr>
<th>Honor Students/Athletes</th>
<th>Apr 16</th>
<th>Nov 1</th>
<th>Mar 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently Enrolled Students</td>
<td>Apr 17</td>
<td>Nov 2</td>
<td>Mar 19</td>
</tr>
<tr>
<td>New/Former Returning/ &amp;Dual Enrolled Students</td>
<td>May 1</td>
<td>Nov 13</td>
<td>Mar 25</td>
</tr>
<tr>
<td>Non Degree Seeking Students</td>
<td>Jun 1</td>
<td>Nov 19</td>
<td>Mar 29</td>
</tr>
<tr>
<td>Financial Aid Priority Awarding Due Dates</td>
<td>Jul 13</td>
<td>Nov 1</td>
<td>Apr 1</td>
</tr>
</tbody>
</table>

Due date for submitting all financial aid documents to ensure financial aid awarding by the payment due date.

### Payment Due Dates

- Aug 10
- Jan 3
- May 6

*After these dates students must pay for classes on the day they register.*

### Open Registration Period

- **Transient/Cross-enrolled Students**
  - Jul 1
- **State Employee and Senior Citizen**
  - Aug 20

### Late Registration Period

<table>
<thead>
<tr>
<th>Late Fee Charged After This Date</th>
<th>Aug 19</th>
<th>Jan 6</th>
<th>May 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLASSES BEGIN</td>
<td>Aug 20</td>
<td>Jan 7</td>
<td>May 13</td>
</tr>
<tr>
<td>Winter Break Classes</td>
<td>N/A</td>
<td>Dec 13-28</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Drop/Add (16 week term only)

| Aug 20-24 | Jan 7-11 | May 13-17 |

### Drop/Add (for all other classes)

Check your course schedule for classes that have start and end dates that differ from the regular 16 week schedule. These classes will have individual drop and add dates that differ from the regular 16 week schedule. All students, including financial aid recipients, must drop any class that they do not plan to attend.

### Deadline for Refund

| Aug 24 | Jan 11 | May 17 |

### Non-Class Days

<table>
<thead>
<tr>
<th>Sept 3 Labor Day</th>
<th>Feb 18 President Day (DM/YB/MD/BR/SS/GWSC only)</th>
<th>July 4 Independence Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 19 All College Day</td>
<td>Nov 12 Veterans Day</td>
<td>Mar 4 Strawberry Festival (PC only)</td>
</tr>
<tr>
<td>Nov 22-23 Thanksgiving</td>
<td>Mar 11-15 Mid-term</td>
<td></td>
</tr>
<tr>
<td>Dec 11-Jan 6 Winter Break</td>
<td>Mar 29 Spring Day</td>
<td></td>
</tr>
</tbody>
</table>

### Last Day to Remove "I" Grade

| Mar 4 | Oct 14 | Oct 14 |

### Last Day to Withdraw

| Oct 26 | Mar 13 | July 5 |

Check your course schedule for classes that have start and end dates that differ from the regular 16 week schedule. These classes will have individual drop and withdrawal deadlines. If financial aid students withdraw from all classes prior to these dates, students may be required to repay some or all financial aid received.

### Classes End

| Dec 10 | May 3 |

### College Closed

| Dec 19-Jan 1 | Mar 11-17 |

**NOTE:** COMMENCEMENT IS FRIDAY, MAY 3, 2013
HILLSBOROUGH COMMUNITY COLLEGE
Student Services Important Calendar Dates for Students

WEEKEND COLLEGE
Regular 16-Week Classes Only
2012-2013

<table>
<thead>
<tr>
<th></th>
<th>FALL TERM 16 WEEK</th>
<th>SPRING TERM 16 WEEK</th>
<th>SUMMER TERM 16 WEEK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8/25/12 – 12/8/12</td>
<td>1/12/13 – 4/27/13</td>
<td>5/18/13 – 8/3/13</td>
</tr>
<tr>
<td>Application Dates for Late Start Classes</td>
<td>Aug 6</td>
<td>Dec 12</td>
<td>May 6</td>
</tr>
</tbody>
</table>

Students submitting applications after the late start dates will be eligible to enroll for late start courses only. Students will not be eligible to enroll in the regular 16 week session.

### Priority Registration Period

<table>
<thead>
<tr>
<th>Category</th>
<th>FALL TERM</th>
<th>SPRING TERM</th>
<th>SUMMER TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honor Students / Athletes</td>
<td>April 16</td>
<td>Nov 1</td>
<td>Mar 18</td>
</tr>
<tr>
<td>Currently Enrolled Students</td>
<td>April 17</td>
<td>Nov 2</td>
<td>Mar 19</td>
</tr>
<tr>
<td>New/ Former Returning &amp; Dual Enrolled Students</td>
<td>May 1</td>
<td>Nov 13</td>
<td>Mar 25</td>
</tr>
<tr>
<td>Non Degree Seeking Students</td>
<td>Jun 1</td>
<td>Nov 19</td>
<td>Mar 29</td>
</tr>
<tr>
<td>Financial Aid Priority Awarding Dates</td>
<td>Jul 13</td>
<td>Nov 1</td>
<td>Apr 1</td>
</tr>
</tbody>
</table>

Due dates for submitting all financial aid documents to ensure financial aid awarding by the payment due date.

<table>
<thead>
<tr>
<th>Payment Due Date</th>
<th>FALL TERM</th>
<th>SPRING TERM</th>
<th>SUMMER TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aug 10</td>
<td>Jan 3</td>
<td>May 6</td>
</tr>
</tbody>
</table>

After these dates students must pay for classes on the day they register.

### Open Registration Period

<table>
<thead>
<tr>
<th>Category</th>
<th>FALL TERM</th>
<th>SPRING TERM</th>
<th>SUMMER TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transient / Cross-enrolled students</td>
<td>Jul 1</td>
<td>Dec 3</td>
<td>Apr 15</td>
</tr>
<tr>
<td>State Employee and Senior Citizen</td>
<td>Aug 25</td>
<td>Jan 12</td>
<td>May 18</td>
</tr>
</tbody>
</table>

### Late Registration Period

<table>
<thead>
<tr>
<th>Late fee charged after this date</th>
<th>FALL TERM</th>
<th>SPRING TERM</th>
<th>SUMMER TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aug 24</td>
<td>Jan 11</td>
<td>May 17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CLASSES BEGIN</th>
<th>FALL TERM</th>
<th>SPRING TERM</th>
<th>SUMMER TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aug 25</td>
<td>Jan 12</td>
<td>May 18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Break Classes</th>
<th>FALL TERM</th>
<th>SPRING TERM</th>
<th>SUMMER TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N/A</td>
<td>Dec 13-28</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Winter Break students must pay or have their financial aid approved by December 13th.

### Drop/Add (16 week term only)

<table>
<thead>
<tr>
<th>Drop/Add (16 week term only)</th>
<th>FALL TERM</th>
<th>SPRING TERM</th>
<th>SUMMER TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 25-30</td>
<td>Jan 12-17</td>
<td>May 18-23</td>
<td></td>
</tr>
</tbody>
</table>

### Drop/Add (for all other classes)

Check your course schedule for classes that have start and end dates that differ from the regular 16 week schedule. These classes will have individual drop and add dates that differ from the regular 16 week schedule. All students, including financial aid recipients, must drop any class that they do not plan to attend.

### Deadline for Refund

<table>
<thead>
<tr>
<th>Deadline for Refund</th>
<th>FALL TERM</th>
<th>SPRING TERM</th>
<th>SUMMER TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aug 30</td>
<td>Jan 17</td>
<td>May 23</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-Class Days</th>
<th>FALL TERM</th>
<th>SPRING TERM</th>
<th>SUMMER TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept 1-2 Labor Day</td>
<td>Mar 16-17</td>
<td>May 27 Memorial Day</td>
<td></td>
</tr>
<tr>
<td>Oct 27 Guavaween (Ybor Campus Only)</td>
<td>Mar 30-31 Spring Day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov 24-25 Thanksgiving</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 11-Jan 1 Winter Break</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Last Day to Remove "I" Grade

<table>
<thead>
<tr>
<th>Last Day to Remove &quot;I&quot; Grade</th>
<th>FALL TERM</th>
<th>SPRING TERM</th>
<th>SUMMER TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar 4</td>
<td>Oct 14</td>
<td>Oct 14</td>
<td></td>
</tr>
</tbody>
</table>

### Last Day to Withdraw

<table>
<thead>
<tr>
<th>Last Day to Withdraw</th>
<th>FALL TERM</th>
<th>SPRING TERM</th>
<th>SUMMER TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 26</td>
<td>Mar 13</td>
<td>July 5</td>
<td></td>
</tr>
</tbody>
</table>

Check your course schedule for classes that have start and end dates that differ from the regular 16 week schedule. These classes will have individual drop and withdrawal deadlines. If financial aid students withdraw from all classes prior to these dates, students may be required to repay some or all financial aid received.

### Classes End

<table>
<thead>
<tr>
<th>Classes End</th>
<th>FALL TERM</th>
<th>SPRING TERM</th>
<th>SUMMER TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 8</td>
<td>Apr 27</td>
<td>Aug 3</td>
<td></td>
</tr>
</tbody>
</table>

### College Closed

<table>
<thead>
<tr>
<th>College Closed</th>
<th>FALL TERM</th>
<th>SPRING TERM</th>
<th>SUMMER TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 19-Jan 1</td>
<td>Mar 11-17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: GRADUATION DAY IS FRIDAY, MAY 3, 2013
## Academic Year

### JULY 2012

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

### AUGUST 2012

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

### SEPTEMBER 2012

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

### OCTOBER 2012

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

### NOVEMBER 2012

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>13</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>16</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>19</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>22</td>
<td>23</td>
<td>24</td>
</tr>
</tbody>
</table>

### DECEMBER 2012

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

### JANUARY 2013

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

### FEBRUARY 2013

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

### MARCH 2013

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

### APRIL 2013

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

### MAY 2013

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

### JUNE 2013

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

### JULY 2013

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

Gwendolyn W. Stephenson District Administration Center
39 Columbia Drive (Davis Islands)
Tampa, Florida 33606

Brandon Campus
10414 E. Columbus Dr.
Tampa, FL 33619

Dale Mabry Campus
4001 W. Tampa Bay Blvd.
Tampa, Florida 33614-7820
Dale Mabry Hwy. & Tampa Bay Blvd.

Plant City Campus
1206 North Park Road
Plant City, FL 33563

SouthShore Campus
551 24th Street North East
Ruskin FL 33570

Ybor City Campus
2112 N. 15th Street
Tampa, Florida 33605-3648

Ybor City Campus Training Center
5610 E. Columbus Drive
Tampa, Florida 33619

HCC-MacDill Center
HCC-MacDill Center
8102 Condor Street
MacDill AFB, FL 33621
Admissions and Registration

Steps for Admission
1. Application
2. Financing your education
3. Transcripts / Academic Evaluation
4. Orientation and Registration

For more information and to apply online, go to www.hccfl.edu/hcc-home.aspx.

Admissions Policies

HCC maintains an “open-door” policy. Students may be admitted if they meet one of the following criteria:

• Graduated with a standard diploma from a secondary school
• Earned a high school equivalency certificate or diploma through any state Department of Education or through the military
• Earned a Certificate of Completion, Eligible for College Placement Test (W8A) (graduating class of 2003 forward)
• Completed a home education program pursuant to the requirements of F.S. 1002.41
• Applied as a transfer student
• Applied as a transient student

In order to maintain the college ideals of scholarship and deportment, the right is reserved to deny admission to applicants for any reason, deemed to be in the best interest of the college.

Admissions Requirements

Associate Degree, College Credit Certificate Programs, and Applied Technology Diploma

To be eligible for admission to an associate degree program, college credit certificate, or applied technology diploma (F.S. 1007.263), applicants must have one of the following:

• A standard high school diploma.
• Florida public high school graduates must have met Florida graduation requirements (F.S. 1003.43).
• A high school equivalency diploma, or
• Completion of a home education program pursuant to the requirements of F.S. 1002.41.
• Some PSAV programs are excluded from this requirement.

NOTE: If the applicant received a special high school diploma such as the Certificate of Completion (W08) or another special high school diploma and wishes to apply for admission as a regular student, a high school equivalency diploma must be earned by successfully completing the GED exam offered through the Florida Board of Education.

There may be additional requirements for limited access programs. Check the webpage at www.hccfl.edu/departments.aspx or in the associate degrees/technical programs section of this catalog.

IMPORTANT: Students who hold education certificates from countries other than the United States should refer to the International Students section in this catalog.

Former Student Returning

Students maintain an active application status by attending HCC at least one term in an academic year. If students have not attended classes for more than one year, they must complete a new HCC application. Former students do not have to pay additional application fees. A former student returning to the college and pursuing a degree or certificate must meet the graduation requirements of the catalog in effect at the time the student returns to continuous enrollment at HCC.

NOTE: Since the college strives to provide the community with up-to-date, postsecondary educational opportunities, HCC’s curriculums are constantly reviewed and are often revised. HCC does not guarantee that the college will continue to offer previously required courses or their prerequisites made unnecessary by changes in programs.

Transfer Students

If students have attended other postsecondary institutions, they may be admitted as a transfer student. Within 30 days of the beginning of the term, students must provide their high school transcript and transcripts from all colleges previously attended.

Transient Students

Students attending other colleges or universities who wish to take courses at HCC in order to fulfill degree requirements at their home institutions may be admitted as transient students. Prior to registration, if students wish to apply as transient, they must submit an HCC application and documentation from the home institution that:

• Certifies they are in good academic standing.
• Indicates the HCC courses in which students may enroll.
• Affirms that they may use the courses completed and credits earned at HCC to meet the program requirements at the home institution.

Students attending a Florida postsecondary institution must submit this information via the transient form at www.FACTS.org.

Transient students are not required to provide official transcripts of their previous college coursework. However, if the documentation from their home institution does not indicate the HCC courses in which the students may enroll, applicants must provide unofficial transcripts to verify they meet HCC course prerequisites.

NOTE: HCC students who wish to attend another college as transient students must have a minimum cumulative grade point average of 2.0. Students attending a Florida postsecondary institution must submit this information via the transient form at www.FACTS.org.
International Students

HCC admits foreign students who meet the admission requirements for international students and follow the admission procedures specified below.

To be considered for admission as an international student intending to study at HCC on an F-1 student visa, a student must (1) demonstrate competency in the English language; (2) document sufficient funds to cover educational and living costs; (3) provide proof of graduation from a secondary school; and (4) apply at least three months prior to the term of entry.

Specifically, the student must complete or meet the following specific admissions criteria:

• Submit an HCC application for admission, along with the $50 international student application fee, at least three months prior to the term of entry.
• Provide a statement of financial responsibility, which documents funds to cover the cost of tuition, room and board, books, personal expenses, health insurance and travel for at least one year.
• Submit proof of health insurance coverage for one year.
• Provide proof of English proficiency: A score of 61 or higher on the internet-based TOEFL (Test of English as a Foreign Language); or a score of 173 or higher on the computerized version; or a score of 500 or higher on the paper version of the TOEFL; an overall band score of 5.5 on the IELTS (International English Language Testing System); proof of successful completion of the highest level of an accredited English language program, including INTO USF (Level 5) and English Language Centers (ESL Level 109); or an official transcript proving successful completion of ENC 1101 at a regionally accredited post-secondary institution.
• Documentation of high school graduation or an equivalent level of education.

Important information for students who have completed high school and/or postsecondary work outside the United States:

Transcript(s) in English (original document in the original language and a certified English translation) from high school and from all previously attended colleges and universities must be evaluated by an agency accredited by NACES (National Association of Credential Evaluation Services). A document-by-document evaluation is required for high school transcripts. A course-by-course evaluation is required for college and university transcripts. Students can obtain the names and addresses of approved providers of this service from the HCC website at www.hccfl.edu/international, or from any campus office of admissions, registration, and records.

NOTE: Students are responsible for all costs associated with obtaining translations and evaluations of their transcript(s).

Articulated Acceleration for High School Students

High school students may earn college credits through articulated acceleration (Florida Statute 1007.271). These acceleration options are dual enrollment and early admissions. Students who satisfy the following requirements may qualify for admission as a student in one of these categories:

Dual Enrolled High School Students
(Florida Statute 1007.27, Florida Statute 1007.271)

Students who enroll as a dual enrolled student can earn college credit by attending college-level courses taught by HCC instructors at an HCC campus before, during, or after high school and during the summer, or at an identified high school during the regular class day. Credits for the courses satisfactorily completed will apply toward both the high school diploma and toward an associate or baccalaureate degree. Dual enrollment courses will not count as excess hours in the 60-hour requirement of an associate in arts or an associate in science degree.

Application fees and tuition are waived and textbooks are provided for Hillsborough County public school students accepted through the dual enrollment program. Students attending college classes must be mindful that they will be in a learning environment that explores a diverse and open range of ideas that requires a mature understanding of multiple perspectives. All students, including dual enrolled students, must be able to engage in discussions in a mature and responsible manner.

To be eligible for consideration for admission as a dually enrolled high school student, one must meet the following requirements:

• Be in high school.
• Provide a high school transcript showing an unweighted cumulative grade point average of 3.0.
• Provide written authorization from the high school principal or his/her designee.
• Achieve appropriate placement scores on the SAT, ACT, or the written or computerized version of the PERT (Postsecondary Education Readiness Test).
• Submit a Special Category Student form.
• Submit an HCC application for admission.
• Submit all required paperwork to the district dual enrollment office no later than thirty working days prior to the start of the semester.
• Meet with an HCC counselor to complete the registration process.

No student will be permitted to participate in dual enrollment classes without having met eligibility and application requirements. Dual enrollment students are allowed one attempt per dual enrollment course.

To remain eligible as a dually enrolled high school student, one must maintain a 3.0 high school GPA and a 2.0 HCC GPA.
Early Admission

Early admission is a form of dual enrollment. Students are admitted through the early admission option of dual enrollment when they register at HCC as a full-time student (12 or more credits) during their senior year of high school.

Credits for the courses completed satisfactorily at HCC will apply toward the high school diploma and toward an associate or baccalaureate degree. Application fees are waived for students accepted through the early admission program. Tuition is waived for early admissions students for all courses taken through this program while they are still in high school.

NOTE: To be eligible for consideration for admission through the early admission program a student must meet the following requirements:

- Be a high school senior.
- Provide written authorization from the high school principal or designee.
- Provide a high school transcript showing an unweighted cumulative grade point average of 3.5.
- Achieve appropriate placement scores on the SAT, ACT, or the written or computerized version of the PERT (Postsecondary Education Readiness Test).
- Submit a Special Category Student Form.
- Submit an HCC application for admission.
- Submit all required paperwork to the district dual enrollment office no later than thirty working days prior to the start of the semester.
- If approved for early admission, meet with an HCC counselor to complete the registration process.

NOTE: Home-educated students may take advantage of the dual enrollment and early admissions acceleration options and must be in compliance with applicable Florida laws. In addition to the above requirements, a parent of home-educated students must submit a sworn Affidavit for Compliance in accordance with F.S. 1002.41. Home-educated students should submit an academic plan that identifies the courses they have taken through home school and the courses they intend to take at HCC as a dually enrolled student.

NOTE: Private schools must meet requirements for F.S. 1002.42 and 1003.43 and have an articulation agreement on file with HCC in order for their students to participate in dual enrollment and early admissions programs.

NOTE: Public and private high school students interested in participating in the dual enrollment program must contact their high school counselor for information and to determine eligibility. Students enrolled in home education programs may contact the HCC dual enrollment office for information.

NOTE: When calculating Satisfactory Academic Progress for Title IV, Student Financial Assistance and adherence to any state maximum-hour requirement(s) for an AA, AS or AAS degree, HCC will not include any courses students complete while they are dually enrolled.

Concurrent Admissions Program (ConAP)

HCC participates in the United States Army Concurrent Admissions Program (ConAP). As a ConAP member, HCC will admit eligible new soldiers upon their enlistment. Moreover, the college guarantees full admission during the soldier’s entire enlistment and for two years after the applicant completes active military service.

Soldiers enlisting in the Army Reserve are also eligible for consideration under the ConAP program. However, the admission guarantee for qualified Reservists is deferred until the Reservists complete their initial period of active duty training (about six months).

Admissions Procedures

Application

NOTE: HCC reserves the right to guide the enrollment of its students on the basis of placement tests, pre-registration interviews and past academic performance.

Applications for admission can be obtained and submitted on-line at www.hccfl.edu/ssem/admissions/apply-online.aspx.

Applicants must register for classes within one year of admission. Otherwise, a new application and transcripts will be required.

The following test scores are required for college-level courses:

<table>
<thead>
<tr>
<th>Test</th>
<th>ACT Enhanced</th>
<th>PERT</th>
<th>SAT I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>18</td>
<td>104</td>
<td>440 (Verbal)</td>
</tr>
<tr>
<td>English</td>
<td>17</td>
<td>99</td>
<td>n/a</td>
</tr>
<tr>
<td>Mathematics</td>
<td>19</td>
<td>113</td>
<td>440</td>
</tr>
</tbody>
</table>

NOTE: The minimum required scores on the PERT (Postsecondary Educational Readiness Test) are subject to change. Students testing into college preparatory course work are subject to certain regulations regarding registration.

Transcripts

HCC must have official transcripts on file from the high school attended and all colleges previously attended. Students admitted without transcripts, or whose transcripts do not arrive within 30 calendar days of the beginning of the regular term, will not be eligible for financial assistance, veterans, other benefits, or eligible for future registration.

Applicants are responsible for ensuring that official copies of the high school transcripts or GED scores and official copies of transcript(s) from all postsecondary schools attended are submitted to the college.

A first-time college student should request that all transcripts and GED scores be sent to the appropriate campus office of admissions, registration and records.
Applicants who completed a home education program must provide a signed affidavit affirming completion to the appropriate campus office of admissions, registration and records. Transfer students should request that transcripts from all postsecondary schools attended be sent to the appropriate campus admissions, registration and records office.

**NOTE:** A final, official high school transcript is one that includes the official graduation date.

**IMPORTANT:** If students have completed high school and postsecondary work outside of the United States, they must provide certified English translations, official transcripts, and evaluations of their high school and postsecondary transcripts from a service recognized by the National Association of Credential Evaluations Services (NACES). A course-by-course evaluation is required for all postsecondary transcripts. A document-by-document evaluation is required for high school transcripts. Students can obtain the names and addresses of approved providers of this service from the [www.naces.org](http://www.naces.org) or from any campus office of admissions, records and registration.

**NOTE:** Students are responsible for all costs associated with obtaining translations and evaluations of their transcript(s).

### Fraudulent Credentials

If a student knowingly:
- Makes a false statement,
- Conceals material information,
- Provides inaccurate information on any document submitted to the college,
- Alters a transcript or other academic credential
He or she may be denied admission, suspended or dismissed.

### Enrollment Restrictions

Under normal conditions, all students who meet the college’s entrance requirements will be admitted. At times, however, state enrollment and funding limitations may preclude enrollment of out-of-state and international students. At those times, students will be admitted according to the following priorities:

1. Returning students
2. New students who are Florida residents
   a. First-time-in-college students
   b. Transfer students
3. New out-of-state students
   a. First-time-in-college students
   b. Transfer students
4. International students

**NOTE:** HCC participates in priority registration. Depending on your situation, HCC will determine your registration dates. These dates are advertised on the web and the college calendar.

The college reserves the right to deny admission to applicants whose past actions were disruptive to or interfered with the orderly processes, functions, or programs of another postsecondary institution. In addition, HCC may deny admission to students who are ineligible, for any reason, to resume their studies at another postsecondary institution.

### Orientation Program

Students attending HCC for the first time must attend orientation and, if applicable, take a college placement test. Once the student has been admitted, the appropriate testing, admissions and records, or advising office will provide information about orientation and testing. The college will provide reasonable accommodations to disabled students taking the placement test.

Degree-seeking students must provide assessment/placement test scores from PERT, ACT, or SAT prior to registering for classes. Test scores may be no more than two years old. If the scores are older than two years or if the student has not previously taken one of the aforementioned placement tests, the student may take the test at the appropriate HCC testing office.

Students who have earned a postsecondary degree or completed college-level English and mathematics courses might be exempt from the testing requirement. The college strongly recommends that students who have completed postsecondary work at other institutions bring unofficial transcripts or grade slips with them for advising and registration purposes.

Students admitted as non-degree-seeking are exempt from the testing requirement until 12 credit hours have been attempted unless testing is required by specific course prerequisites.

### Residency Requirements

For the purpose of assessing registration fees in public community colleges and universities, students are classified as Florida residents or non-Florida residents per Florida Statute (F.S.) 1009.21 and State Board of Education Rule (SB) 6A-10.044.

According to Florida statute, in order to pay in-state tuition, students must complete a declaration of residency (included in the application for admission) prior to the drop and add period of the term for which Florida Residency is sought. To qualify for in-state tuition, a student must be a U.S. citizen, permanent resident alien or legal alien.

For other eligible non-citizen categories or for a list of exemptions from the residency process, refer to the Guidelines on Florida Residency for Tuition Purposes. Exempt students are required to provide documentation of exemption eligibility.

For current and detailed information about Florida residency for tuition purposes visit [www.FACTS.org](http://www.FACTS.org), click on Applying for College, click on Residency Guidelines or visit HCC’s student services website at [www.hccfl.edu/ssem.aspx](http://www.hccfl.edu/ssem.aspx). When applying through [www.FACTS.org](http://www.FACTS.org) documentation to support an application for in-state tuition on the basis of legal residence for statutory exemption is required.
Residency Criteria

The HCC application includes a Florida residency affidavit which must be completed. An applicant who does not complete the residency affidavit or provide incomplete documentation on or in conjunction with the residency affidavit will not be classified as a resident for tuition purposes, and will be required to supply information prior to the end of drop and add.

If a student indicates his or her status as non-resident, there is no requirement to prove such status or to submit supporting documentation. The student is automatically considered out-of-state for tuition purposes.

Independent Student

An applicant who provides evidence of any one of the following criteria shall be classified as an independent student for the determination of residency for tuition purposes.

- The student is 24 years of age or older by the first day of classes of the term for which residency status is sought as a Florida institution; or
- The student is married; or
- The student has children who receive more than one-half of their support from the student; or
- The student has other dependents who live with and receive more than one-half of their support from the student; or
- The student is a veteran of the United States Armed Forces or is currently serving on active duty in the United States Armed Forces for purposes other than training; or
- Both of the student’s parents are deceased or the student is or was until age 18 one of the following: a ward/dependent of the court or in foster care; or
- The student is determined an unaccompanied homeless by a school district homeless liaison, emergency shelter or transitional housing program; or
- The student is working on a master’s or doctoral degree during the term for which residency status is sought at a Florida institution.

Dependent Student

All students who do not meet the definition of an independent student shall be classified as dependent students for the determination of residency for tuition purposes.

Dependent students will be granted in-state residency for tuition purposes if the residency affidavit on the college application indicates that all of the following criteria are met. Further documentation will not be required for these students.

- The student is eligible to be claimed by his or her parent or legal guardian as a dependent under the federal income tax code;
- The student’s nation of citizenship is the United States;
- The student is under 24 years of age;
- The student’s mother, father or legal guardian is the person claiming Florida residence;
- The student’s mother, father or legal guardian claiming Florida residence has a Florida permanent legal address; and
- The student’s mother, father or legal guardian claiming Florida residence provides written or electronic verification that he or she has been issued two or more of the acceptable documents in the following Acceptable Documents for in-State Tuition Application section. Such documentation must demonstrate that the applicant has maintained legal residence in Florida for at least 12 consecutive months prior to his or her initial enrollment in a university or college.

Acceptable Documents for In-State Tuition Application

Applicants will have to submit documentation that they or a parent or legal guardian have been a Florida resident for at least 12 months prior to the first day of the classes for which they are enrolling. At least two of the following documents must be submitted with dates that evidence the 12-month qualifying period.

Documentation submitted after the drop/add period will not become effective until the following semester. There must be no information contradicting the applicant’s claim of residency.

At least one of the two documents submitted must be from the following:

- Florida driver's license;
- State of Florida identification card;
- Florida voter registration card;
- Florida vehicle registration;
- Proof of a permanent home in Florida occupied as the primary residence of the student or by the student’s parent if the student is a dependent child;
- Proof of homestead exemption in Florida;
- Transcripts from a Florida high school for multiple years if Florida high school diploma or GED was earned within last 12 months;
- Proof of permanent full-time employment in Florida (one or more jobs for at least 30- hours per week for a 12-month period).

The following documents may be used in conjunction with one of the documents listed above:

- A declaration of domicile in Florida;
- A Florida professional or occupational license;
- Florida incorporation;
- Documents evidencing family ties in Florida;
- Proof of membership in Florida-based charitable or professional organizations;
- Any other documentation that supports the student's request for resident status including but not limited to utility bills and proof of 12 consecutive months of payments, a lease agreement and proof of 12 consecutive months of payments, or official state, federal or court documents evidencing legal ties to Florida.

Unacceptable Documents for Proof of Residency

- Hunting/fishing license
- Library card
- Shopping club/rental card
• Birth certificate
• Passport

Information Resources
DHSMV Database - Access to the Division of Highway Safety and Motor Vehicle Database can be used exclusively for the purpose of verifying driver’s license, vehicle registration for students and their parents.

Requirements for Reclassification of Florida Residency for Tuition Purposes

Except as otherwise stated, a student who is classified as a non-resident for tuition purposes may become eligible for reclassification as a Florida resident for tuition purposes by presenting a minimum of three (3) documents, one of which must be from the first group of documents and two (2) documents can be from either of the two groups previously identified under “Acceptable Documents for In-State Tuition Application” that demonstrate the establishment of permanent legal residence in Florida other than for the sole purpose of pursuing a postsecondary education.

In addition, documentation must demonstrate that the independent student has, or the dependent student’s parents have, maintained legal residency in Florida for at least twelve (12) consecutive months prior to the student’s request for reclassification.

Students interested in pursuing residency reclassification or to appeal an initial residency classification decision may do so by contacting the dean of student services at any HCC campus. Requests for reclassification will be reviewed by HCC’s Residency Appeals Committee.

Transfer Credit

HCC will accept transfer credit from other institutions if they are accredited by one of the following regional accreditation agencies:

- MSA: Middle State Association of Colleges and Schools
- NEASC: New England Association of Schools and Colleges
- NCA: North Central Association of Colleges and Schools
- NASC: Northwest Association of Schools and Colleges
- SACS: Southern Association of Colleges and Schools
- WASC: Western Association of Schools and Colleges

HCC conducts transcript evaluations for all lower division credit course work even when a prior degree has been earned. Therefore, applicants must provide official transcripts from each postsecondary institution they have attended. Applicants should bring unofficial transcripts or grade slips with them for advising and registration purposes.

For courses taken at accredited institutions, transfer credit will be awarded for courses in which a grade of “D” or better has been earned. Failing grades will be included when calculating grade point averages.

Since certain HCC curricula and programs require that students earn a grade of “C” or better in specific courses required for degrees or certificates, transfer students should meet with advisors to determine if courses taken elsewhere meet degree requirements. Transfer students must complete 25 percent of their degree at HCC.

HCC reviews the content and objectives of courses completed at non-regionally accredited institutions on a course-by-course basis. The transcript office will notify applicants who submit transcripts from unaccredited institutions of the documentation the college needs to complete its review. Applicants must provide HCC with all required documents before the college will begin its review.

Academic committees conduct the reviews of courses completed at non-regionally accredited institutions. If the committees find that courses have academic merit and are relevant to applicants’ programs of study, applicants will be awarded the appropriate number of credits.

The transcript office notifies students when evaluations are complete.

U.S. citizens who have attended postsecondary institutions outside of the U.S. should review the information provided in the admissions procedures transcripts section for “International Students.”

Audit Registration

Students who have been admitted to HCC but who wish to take courses without receiving credit may register as audit students. The following guidelines apply:

- Students must make the choice to audit when they register.
- Students may change from audit to credit or credit to audit only during the drop/add period.
- Fees for audit and credit courses are the same.
- Students should confirm their audit status with the instructor on the first class date.
- Students auditing classes are not eligible to receive veterans’ benefits or financial aid for those classes.
- Students receiving senior citizen fee waivers are registered as auditing students.
- Students auditing classes must meet all course prerequisites including appropriate test scores.
- College preparatory courses follow state-mandated guidelines and requirements. Auditing these classes
Course Load and Enrollment Status

All courses carry a specified number of credits. The unit of credit is the semester hour. Courses requiring laboratory work or skill practice may meet for more minutes each week than the credits they confer.

The college strongly recommends that students enrolled for 12 or more credits limit their employment to a maximum of 20 hours per week.

Enrollment status can change during a term. For example, if a student initially registers as full-time and withdraws from a course during a term, the student’s course load might fall below 12 credits. The student’s enrollment status will be reduced to less than full-time from that point until the end of the term.

Registering as a full-time, three-quarter, or half-time student can affect eligibility for financial aid, veterans’ benefits, scholarships, insurance benefits and international student visas. Students receiving financial aid should speak with a financial aid specialist about the enrollment requirements for receiving aid.

If students request in writing to the office of admissions, registration, and records, they will provide verification of enrollment to employers, insurance agencies, and others. For courses that do not coincide with the Board of Trustees’ approved beginning and ending dates of a fall, spring or summer term, course load and enrollment verifications will be based upon the term in which the course begins, regardless of the actual meeting dates.

Enrollment status is based on the following course-load criteria:

- Full-time: taking 12 or more credit hours during a term.
- Three-quarter-time: taking nine to 11 credit hours during the term.
- Half-time: taking six to eight credit hours during the term.
- Less than half-time: taking five or less credit hours during the term.

Course Adjustment

Drop and Add

Schedule adjustments must be made during the drop/add period. Students should check their class schedule on WebAdvisor for the drop/add and withdrawal dates for each course.

IMPORTANT: If students stop attending a course but fail to officially drop or withdraw from the course, they will not be relieved of the financial obligation, and they might receive a failing grade.

Withdrawal Policy

Students may officially withdraw from one or all courses without academic penalty. There is an official withdrawal deadline date for each semester. The withdrawal deadlines are listed in the college’s operational calendar and the HCC website. For classes that meet on a non-traditional calendar/schedule, the deadline to withdraw is at sixty percent of the class. Students who officially withdraw are issued a “W” grade. See your AR&R department to complete this process.

IMPORTANT: Withdrawing from a course or courses may affect enrollment status and eligibility for athletics, financial assistance, veterans’ benefits, international student visas, and benefits received from other federal agencies.

If students do not officially withdraw by the deadline, the instructor must assign a letter grade other than “W” to the grade report. If students have serious extenuating circumstances, they may petition the appropriate campus dean of student services for a late withdrawal. Students who officially withdraw from a class may not continue attending that class.

Instructors report non-attendance to the office of admissions, registration, and records, and an administrative withdrawal is initiated. The college will notify students whom the faculty has recommended, and the students will be given an opportunity to appeal the instructor-initiated withdrawal.

Students may attempt a course only three times (including original grades, repeat grades, and withdrawals). Through the academic appeals process, students with significant extenuating circumstances may petition for a fourth attempt. To begin the academic appeals process, students must contact the appropriate campus dean of student services. All grades from the third and any subsequent attempts will be included in the grade point average calculation.

Students must pay the full cost of instruction (equal to out-of-state fees) for credit classes they attempt a third time and any additional times. If students have serious extenuating circumstances, they may petition the appropriate campus dean of student services for a one-time exemption from paying the full cost of instruction.

Acceleration Programs

Advanced Placement (AP)*

HCC awards college credit for scores of three, four, or five on the College Board Advanced Placement Program examinations given at high schools each May. Once credit is awarded, the student may not repeat the course for a letter grade. No credit will be awarded to students who have previously been awarded CLEP or regular college credit for the same course.

* NOTE: To see course equivalencies and related information, refer to www.FACTS.org.

Certified Professional Secretary

HCC will award 12 semester hours of credit to students who have passed the Certified Professional Secretary Examination and earned the designation “CPS.” (For further information, contact the appropriate campus academic dean or the Director of Technical Programs.)
College Level Examination Program (CLEP)*

CLEP provides an opportunity for those who have achieved a college level of education outside the classroom to demonstrate their achievement through testing and to earn college credit.

The advising and counseling staff can assist a student in determining which CLEP examination to attempt. CLEP tests are given at the Dale Mabry and Brandon Test Centers on the published dates. Applications are available at any HCC campus.

Students may earn up to 45 semester hours. The grade of satisfactory “S” is awarded for CLEP credit earned. Once credit is awarded, the student may not repeat the course for a letter grade.

NOTE: A student who is currently enrolled in a course or who has previously completed a course, even though the grade earned was an “F,” is not eligible for CLEP credit for that course. A student who has withdrawn or dropped a course is eligible for CLEP credit the following semester.

* NOTE: To see course equivalencies and related information, refer to www.FACTS.org.

Credit-by-Examination

Students may earn credit in approved courses by earning “C” or better on the appropriate HCC examination. Exams are given on dates published in the college’s annual calendar. Credit awarded by examination becomes part of the student’s permanent record, and the grade earned on the examination is used in calculating students’ cumulative GPAs.

A student must obtain approval from the appropriate campus academic dean to take credit-by-examination. In addition to a $20 non-refundable examination fee, a student who passes the examination will be required to pay a per-credit hour processing fee. A student may obtain the required forms and additional information through the appropriate campus academic dean. A student may not retake a credit-by-exam if a grade of “C” or better has been earned on a previous exam.

A student is not eligible to attempt credit-by-examination for any courses in which the student is currently enrolled. A student who has completed a course and earned a grade of “D” or “F” is eligible to repeat it through credit-by-examination. Grades for courses repeated through credit-by-examination are recorded in the same way as courses repeated through class attendance.

If a student has applied to graduate at the end of the term and intends to take one or more courses through credit-by-examination, that student must notify the graduation clerk in the campus office of admissions, registration, and records (AR&R). In order for credit earned through examination to be used in meeting graduation requirements, a student must submit documentation of the passing grade to the appropriate admissions, registration, and records office three weeks prior to the end of the academic term.

NOTE: Credit earned through credit-by-examination may not be counted toward the requirement that students complete at least 25% of the credit hours applicable to a degree in residence at the college.

DANTES*

A student may earn credits for State designated courses by successfully completing Defense Activity for Non-Traditional Education Support (DANTES) examinations. Once credit is awarded, the student may not repeat the course for a letter grade. No credit is awarded if credit for the same course has already been earned.

* NOTE: To see course equivalencies and related information, refer to www.FACTS.org.

Dual Enrollment*

HCC awards credits for in-state dual enrollment courses (courses which are granted simultaneous credit for both high school and college). These credits are awarded as general education, elective, and/or discipline credits. Dual enrollment courses taken out of state will be evaluated on a course-by-course basis. Dual enrollment courses will not count as excess hours in the 60-hour requirement of an AA or AS degree.

* NOTE: To see course equivalencies and related information, refer to www.FACTS.org.

Experiential Credit

The college provides for the award of experiential credit in a limited number of technical programs: Nursing LPN-RN transition option, Emergency Medical Services, Optical Management Technology, Radiography-ARRT option, and Industrial Management Technology. Students in these programs who provide documentation verifying licensure and/or certification within the appropriate field of study will be awarded credit. Students must obtain approval from the appropriate campus academic dean and pay a processing fee for each request.

HCC awards experiential credit in the following programs to students who meet the appropriate criteria:

Industrial Management Program Enrollees

Students who have successfully completed one of the following Tampa Electric Company training programs and have successfully completed a minimum of 15 credit hours of industrial management courses will be awarded 33 credit hours toward an associate in applied science degree in Industrial Management.

• Controls Analyst
• Lineman Training
• Field Engineering
• Substation Electrician
• Plant Electrician

Students should obtain the experiential credit form from the appropriate campus academic dean, who will assist in completing and processing the form.
International Baccalaureate*

The International Baccalaureate (IB) Diploma Program is a rigorous two-year, pre-university liberal arts program of study for highly motivated, academically oriented secondary students. The IB Diploma is awarded only to students who meet curricular, service, and thesis requirements and score at the prescribed level on internationally standardized subject examinations. Through the IB program, students may be awarded up to 30 credit hours. No grades will be assigned to credits awarded through the IB Program. Students will not receive credit for IB courses that duplicate credit awarded for courses attended at HCC or credit that was awarded through other accelerated programs, (i.e., AP, CLEP, credit by examination, etc.). To determine eligibility for IB credit, the student should contact any HCC campus advisor or counselor.

*NOTE: To see course equivalencies and related information, refer to www.FACTS.org.

Nursing Program Enrollees

Applicants for the LPN-RN transition program must have the following: a valid, current Florida LPN license; current CPR basic life support for health care providers; an official transcript from their LPN program; and 6 months full-time employment as an LPN during the past three years. Graduates from Erwin Vocational Technical Center are eligible for articulation credit in lieu of experiential credit. Applicants for the Paramedic transition option must have the following: a valid, current Florida paramedic license; current CPR advanced life support; and 6 months full-time employment as a paramedic during the last three years.

Optical Management Associate Degree Program Enrollees

Students who have earned at least 15 credit hours in optical management courses who provide the college with documentation verifying they hold opticianry licensure will be awarded 12 credit hours toward an associate in applied science degree in Optical Management Technology.

Radiography Program: ARRT Option Enrollees

Graduates of an approved hospital school of radiologic technology for the ARRT option must provide a copy of their certification as radiographers in good standing from the American Registry of Radiologic Technologists. Students will be awarded 53 credit hours of radiography courses.

Paramedic - Emergency Medical Services Associate Degree Program Enrollees

Students who have completed paramedic training at a CoAEMSP’s approved paramedic training center and who possess a valid Florida paramedic certification will be awarded up to 42 credits in EMS prefixed courses required for the College Credit Certificate in the Paramedic EMS program. These credits are also applicable to the Emergency Medical Services Associate Degree Program. No credit will be awarded for advanced cardiac life support (EMS 2551C).

Sign Language Interpretation Associate Degree Program Enrollees

A student who has earned and provides proof of National Certification from the National Registry of Interpreters for the Deaf (RID) and provides proof of current membership in good standing with RID is eligible to be awarded 18 credit hours towards the associate degree in Sign Language Interpretation. The eligible student can also earn 18 credit hours through credit-by-exam for specifically designated program courses to be applied to the Sign Language Interpretation associate degree.

Financial Information

TUITION AND FEES ARE SUBJECT TO CHANGE WITH THE APPROVAL OF THE BOARD OF TRUSTEES AND THE STATE LEGISLATURE.

Except for students who have HCC fee waivers, all students must pay the applicable fees.

All fees must be paid by the payment deadline or you risk being de-registered from all of your classes. All fees are due and payable in full by the payment due date as published in the student calendar of important dates. If you stop attending a course but fail to officially drop or withdraw from the course, you will not be relieved of the financial obligation. Payments can be made through WebAdvisor, HCC’s online web registration system, using a credit card. Payments may also be paid at any of the campus bursar’s office using cash, cashier check, money order, personal check, Visa or MasterCard.

Credit Courses:

Florida Residents (In-State)*

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition</td>
<td>$78.11</td>
</tr>
<tr>
<td>Access Fee</td>
<td>.54</td>
</tr>
<tr>
<td>Capital Improvement</td>
<td>7.23</td>
</tr>
<tr>
<td>Student Activity Fee</td>
<td>7.23</td>
</tr>
<tr>
<td>Student Financial Aid**</td>
<td>3.91</td>
</tr>
<tr>
<td>Technology</td>
<td>3.91</td>
</tr>
<tr>
<td>Total per Credit Hour</td>
<td>$100.93</td>
</tr>
</tbody>
</table>

Non-Florida Residents (Out-of-State)

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition</td>
<td>$78.11</td>
</tr>
<tr>
<td>Out-of-State Fees</td>
<td>234.50</td>
</tr>
<tr>
<td>Access Fee</td>
<td>.54</td>
</tr>
<tr>
<td>Capital Improvement</td>
<td>17.12</td>
</tr>
<tr>
<td>Student Activity Fee</td>
<td>7.23</td>
</tr>
<tr>
<td>Student Financial Aid**</td>
<td>15.63</td>
</tr>
<tr>
<td>Technology</td>
<td>15.63</td>
</tr>
<tr>
<td>Total per Credit Hour</td>
<td>$368.76</td>
</tr>
</tbody>
</table>

* See residency requirements in this section.

** Allocated to the HCC Scholarship Fund as approved by the state legislature.
Non-Credit Courses (Post Secondary Adult Vocational):

**Per Credit Hour Equivalent**

**Florida Residents (In-State)**

- Tuition .................................................. $69.43
- Access Fee ................................................. .43
- Capital Improvement .................................. 3.15
- Technology ................................................ 1.39

Total per Credit Hour ....................................... $76.48

**Non-Florida Resident (Out-of-State)**

- Tuition .................................................. $69.43
- Out-of-State Fees ......................................... 208.30
- Access Fee ................................................. .43
- Capital Improvement .................................. 13.89
- Technology ................................................ 13.89

Total per Credit Hour ....................................... $305.94

**Special Fees and Charges:**

Academic Systems Courses .................................. $60.00

Child Care:
- Full Day per Child .................................... $150.00 per week
- Half Day per Child ...................................... $80.00 per week
- Late Pick-up Fee ....................................... $1.00 per minute
- Late Payment Fee ...................................... $25.00 per day

College Placement Test Retake Fee .................. $10.00 per section

Credit-by-Examination Fee ............................. $20.00

Credits Earned by Examination ...................... $20.00 per cr. hr.

Experiential Credit Processing Fee .................. $15.00

Hawk Card Replacement Fee ......................... $20.00

HCC OneCard Replacement Fee ...................... $21.00

Health Science Application Fee ....................... $53.00

Application for Additional Health Science area .. $10.00

International Student Application Fee ............. $50.00

Laboratory Fee .............................................. various

Late Registration Fee*** ................................. $25.00

Law Enforcement Applicant Processing Fee ....... $170.00

Returned Check Fee ...................................... $25.00

Service Learning Course Fee .......................... $23.00

Test Proctoring Fee (non-HCC students) ......... $50.00

**Late Registration Fee**

***Students who register for 16-week regular classes on or after the first day of class will be assessed a $25.00 late registration fee. This also applies to students who re-register after being removed from classes for non-payment.

**Special Fees**

For some courses special fees may be required to cover supplies, materials, equipment, instruction of facilities.

**Recreation and Leisure Courses**

Fees for all recreation and leisure courses are set to recover 100 percent of the cost of the courses.

Fees may be adjusted when other community agencies contribute resources or when courses require special facilities, equipment and/or personnel.

**Notification of Social Security Number (SSN) Collection and Usage**

The HCC financial services office uses student social security numbers to report information to the Internal Revenue Service (IRS) via 1098T, the Florida Prepaid Tuition Plan, third parties paying for tuition and fees on behalf of the student, reporting information to collection agencies, and reports as required by the state and federal government.

**Online Payments Using Visa or MasterCard**

Students may pay fees online. Log onto www.hccfl.edu and click on Hawknet followed by Hawknet WebAdvisor.

**Payments by Check**

Personal checks will be accepted for the payment of tuition and fees. Checks must be payable to Hillsborough Community College and include the maker of the check’s full name, address, home and work phone, maker’s driver’s license number and state, and student ID number.

If a check is returned for any reason by the college’s bank
- the student will be charged a $25.00 fee,
- the student’s file will be placed in a hold status, and
- any returned check(s) will be referred to the State Attorney’s office or the college’s collection agency as appropriate. The student is responsible for any collection fees associated with returned checks.

**Tuition Installment Plan (TIPS)**

To help meet a student’s educational expenses, Hillsborough Community College provides the tuition payment plan, (TIPS). TIPS allows students to pay tuition monthly. The earlier you enroll in the TIPS plan, the more payment options are available. You may enroll in the TIPS plan or review the available payment plans online at www.hccfl.edu/ssem/tips.aspx. TIPS is administered for HCC by FACTS/Nelnet Business Solutions., Lincoln, NE.

**Payment by Third Party Sponsors**

If employers or other agencies are paying for student tuition and fees through direct payment to the college, students should present original letters of authorization signed by third party sponsors to the bursar office. HCC will not accept letters of authorization that are contingent upon students achieving a passing grade, completing courses or letters that state the employees will be reimbursed for their fees. Any fees that remain unpaid by third party sponsors will be the students’ responsibility.

**Unpaid Financial Obligations**

If students have an outstanding financial obligation to HCC, they may not be permitted to register for classes. In addition, transcripts and grades will be withheld until the obligation is satisfied. Payment may be made online through Hawknet or at any of the bursar offices until the account is referred to a collection agency.
If the unpaid obligation is referred to a collection agency, the student will be responsible for paying the resulting collection costs. Such outstanding balances owed to HCC may be referred to a collection agency where the student will be responsible for the amounts owed to the college and any collection fees assessed by the collection agency.

If an account has been referred to a collection agency, the student must contact the collection agency to make payment.

Title IV Federal Repayment Guidelines

Students receiving Federal Title IV financial aid such as Pell, FSEOG, Direct and Plus loans, must attend classes through at least 60 percent of the term. Failure to do so may require pay back of all or a portion of the Title IV funds received to the federal government and or HCC. This will result in delinquent student accounts and will be processed accordingly.

Refund of Fees

Tuition and fees are refunded to students who drop courses during the registration drop/add periods. The drop/add periods are located on HCC’s website published under “My HCC” and listed in the operational calendar for the current year.

Students enrolled in courses that do not follow a regular term calendar will find this information on their schedules listed on WebAdvisor.

Outstanding financial obligations to HCC are deducted from refunds.

No refunds will be made to students who:
• are administratively withdrawn for disciplinary reasons.
• are administratively withdrawn (WN) for non-attendance.
• withdraw from class after the designated drop/add refund deadline.

Student Refunds through HigherOne

Hillsborough Community College has partnered with HigherOne for managing refunds from HCC. Each registered student will be mailed a HigherOne card (debit card) to the current mailing address on file at the college.

Students must verify the accuracy of their address either online through WebAdvisor or at the admissions, records and registration window.

Students are responsible for the replacement cost of the card if the re-issuance is due to an incorrect address. The cost to replace a HigherOne card is $21.00.

Activate the HigherOne card as soon as you receive it at www.HCCOneCard.com. Although, a refund may not be currently expected, a refund may be issued in the future. During card activation, you will choose how to receive your refund.

If you want faster access to your funds, simply choose to have your refunds deposited directly into your Higher One Account. Activate your HCC Debit Card and make your refund selection online at www.HCCOneCard.com.

Senior Citizens Waiver

Florida residents age 60 and over are eligible to enroll in courses at HCC on the first day of class on a space-available basis. There are no registration, application or related fees. If the same course is taken more than twice, the student is responsible for paying an out-of-state fee as part of registration. No academic credit is given for these courses. If academic credit is sought, all applicable fees must be paid.

In order to register as a senior citizen using a fee waiver, an applicant must:
• Complete an HCC application for admission and present this form to the campus admissions office.
• Complete a registration form and present this form to the campus admissions office.
• Provide proof of age
• Complete a fee waiver form and present it to the campus bursar’s office.

For further information regarding tuition waivers for senior citizens, visit the HCC website at www.hccfl.edu and for residency information, log onto www.FACTS.org.

Financial Aid

Financial aid is any scholarship, grant, loan, or employment (or a combination thereof) designed to help students meet their college expenses. The amount and types of financial aid given are based on state, federal and HCC guidelines. To be eligible for financial aid, students must be degree seeking, meet enrollment requirements, submit official high school transcripts showing graduation dates or official GED test scores, and make satisfactory academic progress.

Grants and scholarships are considered gifts and need not be repaid. Low-interest loans are usually repaid over an extended period of time after the student leaves college. Employment refers to an hourly wage paid to the student for work performed.

Federal Financial Aid Requirements

To apply for Federal Financial Aid, students must meet the following qualifications:
• Be U.S. citizens or national, or resident of the Marshall Islands, the Federated States of Micronesia, Palau, or be eligible non-citizens.
• Have a valid high school diploma or GED.
• Be accepted for enrollment at HCC as a degree-seeking undergraduate student or a financial aid approved PSAV, or College Credit Certificate program.
• Demonstrate financial need.
• No previous four-year degrees (except for direct federal loans).
• Not have defaulted on any federal educational loan or owe a repayment to any Federal loan or grant program.
• Meet selective service requirements.
• Be enrolled for the minimum credit hours required based upon the type of financial aid awarded.
• Be in good academic standing and making satisfactory academic progress.

**Federal Financial Aid Programs**

**Federal Pell Grant**

This grant, based upon financial need, does not have to be repaid. Awards range from $301 to approximately $5,550 per year. A valid Student Aid Report (SAR) must be electronically received by the campus financial aid office. Appropriate income tax returns and other financial aid forms must be submitted if the SAR indicates that the student’s application has been selected for verification. Required enrollment credit hours are contingent upon Pell Grant eligibility.

**Federal Supplemental Educational Opportunity Grant (FSEOG)**

This grant, based upon exceptional financial need, does not have to be repaid. Amounts vary from $200 to $600 per year. A minimum of six credit hours is required.

**Federal Work-Study (FWS)**

Students are paid an hourly wage for working on campus for up to 20 hours per week at the approved Board of Trustees Salary Schedule. Students can use their earnings to help defray college costs. Students must complete an I-9 Form when employed. A minimum of six credit hours is required. Refer to the “Earn While You Learn” section for more details.

**Federal Work-Study (Community Service Assignments)**

Students may have opportunities to work on and off campus at community service designated locations. The assignments vary and are contingent upon the skill level of students. Refer to the “Earn While You Learn” section for more details.

**Direct Federal Subsidized Loan**

This is a long-term repayable loan. The interest rate for the Direct Federal Subsidized Loan disbursed on or after July 1, 2012 for new borrowers is fixed at 6.8 percent. First-year students can borrow up to $3,500 per year. Second-year students can borrow up to $4,500 per year. Second year students include those students who have completed 31 credit hours toward their degree, not including college preparatory credits. HCC will determine the amount for which a student is eligible. Payment of this loan does not begin until the student has been out of school for six months or drops below half-time status. A minimum enrollment of six credit hours per term is required.

**Direct Federal Unsubsidized Loan**

This is a long-term loan that can be awarded in addition to or as a substitute for the Direct Federal Subsidized Loan. Interest payment begins immediately; however, principal deferments are available. For all unsubsidized direct federal loans first disbursed on or after July 1, 2006, the interest rate is fixed at 6.8 percent. Dependent students who qualify may borrow up to $2,000. Independent students may borrow up to $9,500 (if fewer than 31 credit hours earned) or $10,500 (if over 31 credit hours earned). A minimum enrollment of six credit hours per term is required. For detailed information regarding loan amounts, students should contact a campus financial aid office.

**Direct Federal PLUS Loan**

This program enables parents who do not have an adverse credit history to borrow funds to pay for the education of dependent children. PLUS loans have an interest rate of 8.5 percent per year. Interest accrues while the student attends school. Repayment begins immediately. Parents can borrow up to the cost of education, minus any other financial aid. The student must enroll in a minimum of six credit hours per term.

Parents may process a Direct Federal PLUS loan application online at [www.studentloans.gov](http://www.studentloans.gov). Click on the “Borrower Log-In” link and follow the instructions as noted.

**Loan Entrance and Exit Counseling**

If students are borrowing for the first time at HCC or re-entering HCC after two years of non-attendance, they must complete an entrance counseling session prior to submitting the Loan Request Form. Students may complete this requirement by accessing HCC’s website and clicking on “Current Students; Financial Aid; and Entrance/Exit Loan Counseling.”

Students are required to complete the loan exit counseling session during the last semester of enrollment or at the point of no longer attending at least a half-time (six credit hours) basis. Students may fulfill this requirement by accessing HCC’s website and clicking on “Current Students; Financial Aid; and Entrance/Exit Loan Counseling.”

**Earn While You Learn**

**Federal College Work Study**

The Federal Work Study Program (FWS) offers excellent opportunities for students with financial need to gain meaningful work experience while earning money to help pay their educational expenses. FWS award recipients are granted a designated amount of money, based upon their individual need and the availability of funds. It is from that allocation that the student’s wages are paid bi-weekly at the hourly rate set by the college’s Board of Trustees. Students work up to 20 hours per week, around their class schedules, until they have earned the full amount of their FWS Grant awards.

Most job assignments are on-campus opportunities. Students may also work off-campus at “community service” locations. Community service jobs are assigned with federal, state, or local public agencies or organizations. These jobs are ones which provide literacy activities in a family literacy project for families with preschool age children services to students with disabilities, solutions to environmental concerns, and numerous other services designed to improve the quality of life for community.
residents, particularly low-income individuals. Community service positions afford FWS workers a bonus of the joy that comes from helping others.

**Florida Work Experience Program**

The Florida Work Experience Program (FWEP) provides students with the opportunity to work on or off campus at approved private businesses, educational and recreational facilities. FWEP is a need-based program that enables students to earn to the maximum unmet need.

The campus financial aid office has complete details on how students can earn while they learn. For more information refer to the state financial aid programs section.

**State Financial Aid Requirements**

To apply for state financial aid, students must:

- Be a permanent resident of Florida for at least one year.
- Be accepted at HCC as a degree-seeking undergraduate student. Students working towards a certificate are not eligible for state financial aid except for the Florida Vocational Gold Seal Endorsement Scholarship.
- Be enrolled for a minimum of six credit hours each semester.
- Be U.S. citizen, national, or eligible non-citizen.
- Have a valid high school diploma or GED.
- Demonstrate financial need.
- No previous bachelor’s degree.
- Not have defaulted on any educational loans or owe a repayment on any educational loans or grants.
- Meet selective service requirements.
- Be in good academic standing and make satisfactory progress.

**State Financial Aid Programs**

Listed below are some of the state financial aid programs. For information on these and other state financial aid programs, students should call any campus financial aid office.

**Florida Bright Futures Scholarship**

Florida Bright Futures is a state funded, merit based scholarship program. Eligible students must enroll for a minimum of 6 credit hours per term. The scholarship program does not pay for preparatory classes. The following changes are effective Fall 2012:

**Bright Futures Scholarship pays at a fixed per credit hour rate.**

- Florida Academic and Medallion scholarships pay $66.00 per credit hour.
- Florida Vocational Gold Seal pays $47.00 per credit hour.
- Hillsborough Community College’s Fall 12 tuition cost is $100.93 per credit hour.
- Florida Academic and Medallion Scholarship recipients or other sources of financial aid will have to pay $34.93 per credit hour.
- Students receiving the Florida Vocational Gold Seal Scholarship will need to pay or have other sources of financial aid pay $53.93 per credit hour toward the cost of tuition.
- Amounts are subject to change during the 2012 State of Florida legislative session. Students will be notified of any revisions.
- Complete the Free Application for Financial Aid if you need additional funds to help pay for college. Go to www.fafsa.ed.gov

**Bright Futures Scholarship will not pay for lab fees.**

- The student or other sources of financial aid will have to pay for lab fees assessed for classes enrolled.

**Florida Academic Scholars will not pay for college related expenses.**

- The State of Florida will no longer fund the payment of college related fees from the Florida Academic Scholarship program.

**Bright Futures Scholarship will not pay for Dropped or Withdrawn classes.**

- Students will be required to repay the cost for any course dropped or withdrawn.
- Repayment for the cost of dropped or withdrawn courses is required to renew a Bright Futures award for a subsequent academic year.
- Students with documented extenuating circumstances may seek an appeal to this payment requirement.
- Contact your campus Financial Aid Office to inquire about:
  · The amount you will owe if you drop or withdraw from a class; and
  · If you qualify for an appeal waiving your obligation to repay for funds owed.

**Renewal criteria revised.**

- Bright Futures students are required to complete the number of credit hours paid by the scholarship program. For example:
  · If you received a Bright Futures scholarship for the semester based upon full-time enrollment, you are required to complete at least 12 credit hours.
  · If your term enrollment is 9 - 11 credit hours, you must complete the minimum of 9 credit hours.
  · If your term enrollment is 6 – 8 credit hours, you must complete the minimum of 6 credit hours.

**Restoration options extended.**

- Students who do not meet the minimum renewal credit hours may regain their eligibility by completing the outstanding credit hours in the Summer 2012 term.
• Review the State of Florida’s website for additional information, www.floridastudentfinancialaid.org/SSFAD/bf

**Florida Student Assistance Grant**

Florida Student Assistant Grant (FSAG) is a grant of between $200 and $1,600 annually which is not repayable. Application priority deadline is June 1, 2012. To receive a grant, students must enroll for a minimum of six credit hours per term and have processed a FAFSA application.

**First Generation Matching Grant Program**

This is a need-based program that provides financial aid funds to Florida undergraduate students who demonstrate financial need and whose parents have not earned a baccalaureate degree.

To receive this grant, the student must complete the annual FAFSA application and indicate the last level of education completed by the parent as high school. Currently, distribution of this award is at $500 per term. The financial aid office implemented the following priorities for selecting students for this award:

• Students who have a cumulative grade point average of 3.0 or better.
• Students who are enrolled in college full-time.
• Students who have met all other state requirements for financial aid.

Students should contact their campus financial aid office for additional information.

**Chappie James Most Promising Teacher Scholarship/Loan and The Robert C. Byrd Honors Scholarship**

Students must apply through their high schools. Students who teach in the state for four years do not have to repay the award. Additional information can be obtained by visiting www.Floridastudentfinancialaid.org/SSFAD.

**Scholarships**

**HCC Scholarships**

HCC offers scholarships in a number of areas. Students may apply directly to the HCC department that has the responsibility for awarding the scholarship. Specific criteria are available in the campus offices of financial aid regarding the following scholarships:

• Art Scholarships
• Athletic Scholarships
• Board of Trustees Scholarships
• Child Care Award (off-campus)
• Child Care Award (on-campus)
• Dance Scholarships
• Drama Scholarships
• Florida Migrant Education Scholarships
• HCC Need Scholarships
• HOPE Scholarships
• Latin American Caribbean Basin Scholarships
• Minority Need & Incentive Scholarships  
  • African-Americans
  • Asian Americans
  • Hispanic Americans
  • American Indians
• Music Scholarships
• Presidential Scholarships
• Presidential Honors Scholarships
• Publications Scholarships
• Student Support Services Need & Incentive Scholarships
• Student with Disabilities

**Procedures for Applying**

Each HCC scholarship recipient must have processed a Free Application for Federal Student Aid (FAFSA) application. This requirement is set forth by the State of Florida Department of Education. Although students may qualify for a merit-based scholarship, the completion of the FAFSA is required. Students may complete the FAFSA application by following the instructions noted under the “How to Apply” section.

Each scholarship program has its own application procedures. The campus financial aid offices have information regarding each of HCC’s scholarship programs.

**Student Eligibility Standards**

• Demonstrate financial need or exhibit specific skills
• Enroll for the appropriate number of credit hours
• Maintain satisfactory academic progress

**Criteria for Selection**

Selection criteria for each scholarship program is established by HCC. Most HCC scholarships are awarded according to need or skills.

• Criteria for Determining the Amount of the Award
• Based on appropriate recommendation or
• Student’s unmet need

**HCC Foundation Scholarships**

Information regarding HCC Foundation Scholarships is available in any campus office of counseling and advising or online at www.hccfl.edu/gwsc/foundation.aspx

**Other Scholarships**

Information regarding other scholarships is available in the campus financial aid, counseling and advising offices and on the HCC website.

Students are urged to apply for external scholarships. A variety of local and national clubs and organizations offer financial aid to students meeting certain criteria.
How to Apply for Financial Assistance

Students seeking financial assistance must apply each academic year. To apply for the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, Federal Work-Study, Florida Student Assistance Grant and certain college scholarships, the following forms must be completed:

Free Application for Federal Student Aid (FAFSA): Students are strongly advised to complete the FAFSA application electronically by accessing the Department of Education’s financial aid website: www.fafsa.ed.gov. Students completing the FAFSA online may receive their results (Student Aid Report) within two weeks. If students do not have a computer at home, they may use computers at the following public locations: Hillsborough Community Libraries, HCC Computer Labs, and HCC Libraries. Students must list HCC’s school code, 007870, on their FAFSA application in order for the college to receive their results and Student Aid Report electronically.

- **Student Aid Report (SAR):** An official SAR is sent to all students who submit the Free Application for Federal Student Aid. This SAR contains information about a student’s Pell Grant eligibility as determined by the U.S. Department of Education. The college’s financial aid office reads the results of the application electronically as long as the student listed HCC’s school code on the FAFSA application.

- **Income Tax Transcript (IRS Transcript 4506T-EZ):** If so stated on the SAR, students must submit copies of their and their parents’ income tax transcripts for the most recent year, and students must complete institutional verification forms.

- **Student Agreement and Acknowledgement Form:** Students applying for the Federal Pell Grant, Direct Federal Loans, College Work-Study, and other need-based financial aid awards are required to complete the Student Agreement and Acknowledgement Form. The form is available at the campus financial aid office. Students may access the Student Agreement and Acknowledgement form also on the college’s website at www.hccfl.edu. The student will need to click on the Future Student menu and click on the Financial Aid page. The student should then click on the Forms listed in the menu located in the left margin.

- **Other HCC Financial Aid Forms:** If students receive notification from the financial aid office that other forms are needed, they may access HCC’s financial aid forms from the college’s website. Students must follow the website access instructions listed in the Student Agreement and Acknowledgement Form paragraph listed above. They may also pick up the form at their campus financial aid office.

- **Student Loan Request Form:** (optional) Students choosing to borrow a direct federal (subsidized and/or unsubsidized) loan must complete an Institutional Loan Request Form. They may access the Loan Request Form from the college’s website. They will need to follow the website access instructions listed in the Student Agreement and Acknowledgement Form paragraph listed above. They may also pick up the form at their campus financial aid office.

Application Deadline Dates:

Free Application for Federal Student Aid (FAFSA): The student should complete the FAFSA application as soon as possible after January 1 and no later than six weeks prior to the beginning of the term. The last day to complete the FAFSA application for the 2012-13 academic year is June 30, 2013.

Priority Awarding: Students whose financial aid files are complete by June 1 for the upcoming fall semester may qualify for additional need-based financial aid awards. Students whose financial aid files are complete by November 1 for the upcoming spring semester may qualify for additional need-based financial aid awards.

Because financial aid is not always available at the beginning of a semester for those who do not process by the suggested deadline date, students should budget their money to cover the cost of tuition, fees and books until they receive their funds. As an alternative, students may consider TIPS (Tuition Installment Plans) at www.hccfl.edu/tips/.

Students are required to complete a 2012-2013 FAFSA application and submit all requested financial aid forms by June 1, 2012 in order to have their financial aid awards processed by the first day of fall 2012 classes.

Students applying for financial aid or submitting financial aid forms after June 1, 2012 will be expected to pay for their classes or sign-up for TIPS (Tuition Installment Plans). Students that are eligible for financial aid should contact their campus financial aid office to inquire about a 60-day deferment for the payment of tuition and fees.

Students that are eligible for financial aid may receive a refund for the payment of tuition and fees once financial aid is awarded.

Students registering for classes during drop/add week must pay, sign up for the TIPS program or receive a deferment the same day of registration. Otherwise, you could be deregistered or pay out of pocket for your courses.

How Financial Aid is Awarded and Distributed

Students declared eligible for financial aid will receive an award notice from HCC’s financial aid office.

Students awarded Federal Pell Grants, Federal Supplemental Educational Opportunity Grants, Direct Federal subsidized or unsubsidized loans, Florida Bright Futures Scholarships or institutional scholarships may use them to pay for the cost of tuition and fees at registration. Prior to the last day of drop/add of the semester, Pell Grant and subsidized and unsubsidized Direct Federal loan recipi-
ents who qualify can go directly to any HCC campus bookstore and purchase books and supplies against their award balance. Maximum book charges are contingent upon the available balance and credit hours enrolled.

After deductions for tuition, fees and book charges are made by HCC, the remaining balance in the students’ account is forwarded to their HigherOne card or other delivery method as selected by the student. For students awarded on or before the semester’s drop/add date, the remaining balance will be available 14 days from the first day of classes. For students awarded after the semester’s drop/add date, the remaining balance will be available 14 days from the date the college credits their account.

Students who are employed under the Federal Work-Study Program will receive bi-weekly checks from the office in which they work.

Florida Student Assistance Grants cannot be used to pay for tuition and fees at registration. These funds are sent to students during the 4th week of the academic term.

Students with less than 30 hours and who have not borrowed previously will not receive funds until the 31st day of classes.

What are the required credit hours?

<table>
<thead>
<tr>
<th>Financial Aid Programs</th>
<th>Minimum Hours Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Pell Grant</td>
<td>Contingent upon eligibility (most students: 1-12)</td>
</tr>
<tr>
<td>FSEOG</td>
<td>6</td>
</tr>
<tr>
<td>Direct Federal Loans</td>
<td>6</td>
</tr>
<tr>
<td>Federal Work Study</td>
<td>6</td>
</tr>
<tr>
<td>First Generation Matching Grant</td>
<td>6-12</td>
</tr>
<tr>
<td>Florida Bright Futures</td>
<td>6</td>
</tr>
<tr>
<td>Florida Student Assistance Grant (FSAG)</td>
<td>6</td>
</tr>
<tr>
<td>HCC’s Presidential Scholarship</td>
<td>12</td>
</tr>
<tr>
<td>HCC’s Board of Trustees Scholarship</td>
<td>12</td>
</tr>
<tr>
<td>HCC’s Incentive &amp; Need Based Scholarship</td>
<td>6</td>
</tr>
<tr>
<td>HCC’s Athletic Scholarships</td>
<td>12</td>
</tr>
<tr>
<td>Florida Work Experience</td>
<td>6</td>
</tr>
</tbody>
</table>

How Will Students Know the Awarding Amount(s)?

Once the financial aid office receives the results of the student’s FAFSA, the completed Student Agreement and Acknowledgement Form, and other documents requested, the student will receive an official Award Notification. This document will specify the type and the amount of financial aid the student is qualified to receive.

Student may check their financial aid award status on WebAdvisor.

Attention:

Withdrawing or dropping courses may have an impact on financial aid. Students may have to repay a percentage of financial aid, and their continued eligibility may be impacted. Prior to dropping or withdrawing from any class, students should consult a campus financial aid office to discuss how this may affect their financial aid.

Return of Title IV Funds

If students receive Title IV, Federal Student Financial Assistance, and if they withdraw, drop out, take a leave of absence, or are expelled prior to completing 60 percent of a semester for which they have been charged, the college must recalculate their eligibility for Title IV funds.

The formula for recalculating eligibility utilizes the following concepts:

- percent of aid earned, and
- percent of aid unearned

A. The percent earned equals the days the student completed divided by the total days in the enrollment period.

B. The percent unearned equals 100 percent minus the percent earned.

C. The amount of Title IV Aid earned equals the percent earned (A) multiplied by the student’s Title IV Aid.

D. The amount of Title IV Aid unearned equals the percent unearned (B) multiplied by the student’s Title IV Aid.

E. The amount the college must return equals the total institutional charges multiplied by the percent unearned (B).

F. The amount the student must return to the federal programs equals the amount of Title IV Aid unearned - the amount returned by the college. However, the student is not obligated to return more than 50 percent of any Pell or FSEOG funds he or she received.

NOTE: Students are obligated to pay the college for any funds returned to the U.S. Department of Education. Students receiving financial aid are advised not to withdraw from any classes prior to discussing how this may impact financial aid. The financial aid office will notify the student with the amount owed and the payment due date.

Standards of Academic Progress

In order to remain eligible to receive Title IV, Student Financial Assistance (SFA) program funds while attending HCC, students must make steady progress toward their chosen academic goals. This requirement is known as the Satisfactory Academic Progress (SAP) requirement.
The SAP policy has three standards that a student must meet in order to remain eligible to receive Title IV, SFA - a qualitative standard, a quantitative standard, and a time standard. At HCC the qualitative standard requires recipients to maintain a cumulative GPA of 2.0. The quantitative standard requires recipients to satisfactorily complete 77 percent of all credit hours attempted. The time standard requires recipients to complete their academic program by the time they have attempted 150 percent of the credits required in their programs. Standards of progress evaluations occur at the end of fall and spring semesters.

Students who fail to meet the SAP standards will be placed on probation for one term. If after one probationary term students are not making satisfactory progress, they will lose their eligibility for financial assistance. Students over 150% of attempted credit hours are immediately placed on suspension. In order to regain eligibility, students must meet the satisfactory progress standards.

Financial aid pays tuition and fees for the following:

All associate in arts, associate in science, and associate in applied science programs.

College Credit Certificates
- Business Management
- Computer Programming
- Drafting
- Human Resource Management
- Information Technology Management
- Internet Services Technology Web Development Specialist - Designer
- Internet Services Technology Web Development Specialist - Developer
- Medical Information Coder/Biller: Medical Coder
- Medical Office Management
- Office Management
- Radiation Therapy Specialist
- Records Management
- Software Applications Management

Postsecondary Adult Vocational (PSAV)
- Advance Water Treatment
- Auto/Collision Repair and Refinishing
- Dental Assisting
- Law Enforcement
- Educator Preparation Institute (EPI)

Financial Aid Offices
Each HCC campus has a financial aid office. Information about financial aid can be obtained from any of them. Normal working hours are as follows: Monday and Tuesday from 8:00 a.m. until 7:00 p.m., Wednesday and Thursday from 8:00 a.m. until 4:30 p.m. and Friday from 8:00 a.m. until noon.

Veterans’ Benefits
Eligible veterans pursuing an associate in arts or an associate in science degrees may use veterans’ educational benefits at HCC. Eligible chapters are Chapter 30 (Montgomery Bill), Chapter 31 (Vocational), Chapter 32 (Post-Vietnam Veterans Education Assistance Program), Chapter 35 (Dependents Educational Assistance), and Chapter 106 (Selected Reserve), and Chapter 33 (Post 911 GI Bill).

To be eligible, veterans must have any discharge other than a dishonorable and must have served on active duty for a specified period. For additional information, veterans should contact any campus admissions, registration and records office or call the department of veterans’ affairs (DVA) toll free number 1-888-442-4551.

Deferments
In accordance with Florida law and college policy, any eligible veteran or dependent wishing to pursue an approved program within the meaning of VA Chapter 30, 35, or 106 will have, upon request, 60 days after the first day of classes to pay registration fees. One deferment per academic year is allowed.

General Requirements
Veteran students must declare their final educational goals and choose their desired educational program when they apply for benefits. Benefits are paid only for courses applying to the students chosen program.

Veteran students must comply with attendance requirements established by instructors. If veterans withdraw, their last day of attendance will be reported to the Department of Veterans Affairs (DVA). HCC will notify the DVA of any changes in a student’s enrollment status.

Benefits are not paid for courses when non-punitive grades such as “W,” “N,” or “U” are received. An “I” grade (incomplete grade) that has not been removed by the end of the semester after the grade was given (excluding Summer Session) will be reported as a non-punitive grade. Students who receive an FX (Failure-Stopped Attending) grade will be reported to the VA with their last date of attendance. The DVA requires repayment of benefits received for such courses unless students submit documentation of mitigating circumstances.

NOTE: An FX grade appears on the transcript as an “F” grade.

Attendance
Criminal Justice Institute, Firefighter Academy and Autobody Collision Programs
Veteran students participating in the college’s Law Enforcement and Correctional Officer programs and Autobody Collision programs are encouraged to attend all class sessions. Veterans whose absences total more than 10 percent of the scheduled class sessions will be required to participate in counseling to determine if it is possible to make up the required coursework within a reasonable time frame. If it is determined the work cannot be completed within the time constraints, the students’ benefits will be terminated.
Paramedic and Emergency Medical Technician Programs

The Veterans Administration will be notified of unsatisfactory attendance at the point of the term that a veteran student accumulates three unexcused absences. The veteran student may not be recertified for veteran’s benefits until 30 days of satisfactory attendance (no more than two unexcused absences in the 30-day period) have elapsed.

Repeating Courses

Veterans’ benefits are not paid for courses in which students have already earned satisfactory grades. A “D” is considered satisfactory except when program requirements mandate a “C.”

Transcripts

Veteran students must have transcripts sent to HCC from each college previously attended. Students will not be certified for a second term until all official transcripts are received.

Benefit Levels for Standard Terms

Standard sessions are 16 weeks. Credit hours for benefits are:

- Full-time: 12 hours
- Three-quarter-time: 9 hours
- Half-time: 6 hours

Students registered for less than half-time are eligible only for the direct cost of their courses. Students should see a VA Specialist about benefits for non-standard sessions.

Unsatisfactory Progress

Students receiving veterans’ benefits must maintain a cumulative GPA of 2.0. Veterans (except Paramedic and Emergency Medical Technician Programs) with less than a 2.0 GPA will be given two probationary terms to bring their GPA up to 2.0. Veteran students who fail to raise their GPA to 2.0 after two probationary terms will be reported to the DVA and benefits will be terminated. For those students in the Paramedic and Emergency Medical Technician Programs who fail to raise their GPA to 2.0 after one probationary term will be reported to the DVA and benefits will be terminated. These veterans will also be referred to an HCC counselor for reassessment of their academic goals.

Veterans who violate the student code of conduct will be reported to the DVA and their benefits will be terminated.

Veteran students who wish to seek reinstatement of benefits at HCC may see a counselor for assistance in petitioning the Department of Veterans’ Affairs. However, the DVA makes all decisions on reinstating benefits.

Academic Policies

Academic Year

HCC’s academic year consists of the Fall, Spring, and Summer terms.

Attendance

Students are required to attend class regularly and punctually. If students miss classes, regardless of the cause, their opportunities for learning and academic success will be adversely affected.

The syllabus for each course contains the instructor’s attendance and grading requirements. It is the student’s responsibility to read the syllabus, comply with the instructor’s policies, and arrange to make up work missed because of absence or lateness.

If students stop attending class, they will be assigned a letter grade unless they complete and submit a withdrawal form by the deadline published in the current catalog and credit course schedule. Students receiving financial aid are advised to discuss the impact of not attending classes on their financial aid or veterans benefits.

Grading Policies

Grade Reports

Students may ask instructors about their academic progress throughout a term. Final grades may be viewed via WebAdvisor at the end of each term (see calendar). Only the final grade appears on the student’s transcript which is posted on the www.FACT5.org website. Grades are not mailed. HCC may withhold the grades of students for the following reasons:

- Unpaid fees
- Overdue loans
- Overdue library books
- Overdue audiovisual or physical education materials and equipment
- Disciplinary action

Students whose grades are being withheld may appeal to the appropriate campus dean of student services or his/her designee.

Students called to active military duty will be permitted to drop their course(s) or make arrangements with faculty to complete academic requirements and receive final grades. To qualify, students must provide a copy of their active duty orders. Contact the campus advising or counseling office.
Grading

Students will be awarded letter grades for courses taken at HCC.

Grades used in computing GPA:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Interpretation</th>
<th>Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Poor</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Failure</td>
<td>0</td>
</tr>
<tr>
<td>FX</td>
<td>Failure – Stopped</td>
<td>0</td>
</tr>
</tbody>
</table>

NOTE: FX – Means stopped attending and will be treated like an “F” grade. The last date of attendance must be recorded whenever the FX is awarded. FX grade appears as an “F” grade on the transcript.

Grades not used in computing GPA:

- AU Audit
- AW Administrative withdrawal
- I Incomplete
- N No credit
- NR Grade not reported by instructor
- S Satisfactory
- U Unsatisfactory
- W Withdrawal
- WN Withdrawal, non-attendance

Grade Point Average

Each letter grade has a point value. To determine grade point average (GPA), one multiplies the number of points for each grade earned times the number of the course’s credits, adds the total grade-point values for all courses, then divides by the total number of credit hours.

A “B” (three points) in a three-credit course is worth nine points. An “A” (four points) in the same three-credit course is worth 12 points.

GPA Example:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade Interpretation</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>3 cr.</td>
<td>Grade A (4 points)</td>
<td>= 12</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>3 cr.</td>
<td>Grade C (2 points)</td>
<td>= 6</td>
</tr>
<tr>
<td>HUM 2210</td>
<td>3 cr.</td>
<td>Grade F (0 points)</td>
<td>= 0</td>
</tr>
<tr>
<td>PEM 1954</td>
<td>1 cr.</td>
<td>Grade B (3 points)</td>
<td>= 3</td>
</tr>
<tr>
<td>Total</td>
<td>10 cr.</td>
<td>Total Points</td>
<td>= 21</td>
</tr>
</tbody>
</table>

Divide 21 points by 10 credits = 2.100 grade point average. A degree GPA of 2.0 or higher is required to receive an associate degree from HCC.

The following letter grades have special requirements:

Audit — awarded to students who enroll in credit classes for enrichment but not for credit. A change in enrollment from credit to audit or audit to credit can be made only during the designated schedule adjustment (drop/add) period.

Administrative Withdrawal — awarded by the college for reasons such as non-attendance, non-payment of fees, non-compliance with rules, or extenuating circumstances.

Incomplete — awarded only when requested by the students, approved by instructors and confirmed by the appropriate academic deans. “I” grades are given only when unforeseen circumstances prevent students from completing course requirements during the regular term. An “I” contract is agreed upon and signed by both students and instructors. Contracts include a list of the course requirements students must complete and the deadline by which the work must be completed. To be eligible for an “I,” students must have satisfactorily completed at least two-thirds of the course requirements. “I” grades must be removed before the end of the eighth week of the following term (excluding summer term) or they will be changed to “F” grades on the students’ permanent records. Students should refer to the student services Important Calendar for Students.

No Credit (N) — “N” grades are awarded only in college preparatory courses. The “N” grade is awarded to students who attend class through the end of the term but who do not reach the level of skill or knowledge required to move on to the next course. Students who receive an “N” grade do not earn credits, and “N” grades are not included in calculating students’ cumulative GPAs. Students who receive “N” grades must repeat the courses during the following term.

Grade Not Reported — when instructors omit a grade, the notation “NR” is placed on transcripts.

Withdrawal — awarded to students who officially withdraw by the deadline.

WN — grades are initiated by faculty and awarded to students who have never attended class. The WN grade must be submitted no later than 9 calendar days after the end of the drop and add period associated with a 16-week regular term and 9 calendar days after the class begins for abbreviated class sessions. The student is financially responsible for cost of the course(s).

Forgiveness Policy

Courses in which a “C” or better is earned cannot be repeated. All course attempts will appear on the transcript. Courses in which a grade of “D” or “F” is earned may be repeated for credit, and only the most recent grade earned will be used to calculate the cumulative grade point average.

NOTE: Some courses may be repeated for credit, i.e., JOU 1949. This means the grade and quality points earned in each attempt for this course will be included in the GPA computation. Grade forgiveness does not apply to a course that may be taken more than one time for credit. Check the course description to determine if a course may be repeated for credit.
Students may attempt a course only three times - including the first attempt, repeat grades, and withdrawals. Permission for a fourth attempt will be granted only through the academic appeals process. Permission will be granted only to students who can document major extenuating circumstances. Students who wish to begin the academic appeals process should contact the appropriate campus dean of student services. Grades for the third and all subsequent attempts will be included in calculating grade point averages.

**NOTE:** Some colleges and universities may not accept grades earned for repeated courses; some might use only the grades originally earned. Students receiving financial assistance of any type should speak with a financial aid counselor to ensure that any repeat attempts will qualify for aid.

**Dean’s List**

To earn placement on the Dean’s List, a student must earn a 3.5 or higher term GPA for 12 or more semester hours in the term of attendance.

**Honors**

Students who graduate with the specified HCC cumulative grade point averages will be recognized as distinguished graduates.

- **Degree Grade Point Average**
  - 3.50 – 3.79 = Honors
  - 3.80 – 3.99 = High Honors
  - 4.00 = Highest Honors

An honors statement will be placed on the student’s transcripts and diploma.

**Academic Progress**

In order to have satisfactory academic standing, a student at Hillsborough Community College must maintain a cumulative grade point average of 2.0 “C.” Students may be required to take reduced hours per semester to improve their GPA. Insurance issues will not be a consideration.

**Academic Warning**

Students will be placed on academic warning if the students’ cumulative grade point averages (cumulative GPA) are less than 2.0, and the students have not been warned previously.

To regain satisfactory academic standing, students must raise their cumulative GPAs to 2.0 or better after their next period of enrollment.

**Academic Probation**

Students on academic warning who fail to regain satisfactory academic standing (cumulative GPA of 2.0) at the end of their next period of enrollment will be placed on academic probation. Students on academic probation must consult with and obtain the approval of a counselor or academic advisor before they may register. To regain satisfactory academic standing, students must raise their cumulative GPAs to 2.0 or better.

**Final Academic Probation**

Students on academic probation who fail to achieve a term GPA of 2.0 will be placed on final academic probation. Students on final academic probation must consult with and obtain the approval of a counselor or academic advisor before they may register.

In addition, students on final academic probation may enroll for no more than six credit hours per term. Students on final academic probation who earn a term GPA of at least 2.0 and who fail to regain satisfactory academic standing (cumulative GPA of 2.0) will remain on final academic probation.

**Academic Suspension**

Students on final academic probation who fail to attain a term GPA of 2.0 or better will be placed on academic suspension for one Fall or Spring term.

Students who have been academically suspended may not register for classes.

**Readmission of Students on Academic Suspension**

Students who have been academically suspended must petition the Academic Standards Committee for readmission. Students on academic suspension must see a counselor to begin the petition process.

**Lack of Progress by Students Readmitted after a One-Term Suspension**

Students readmitted from a one-term suspension will be suspended for one academic year if they fail to earn a term GPA of 2.0 in any period of enrollment before they regain satisfactory academic standing.

**Readmission of Students Suspended for One Year**

Students who are academically suspended from the college for a one-year period must petition for readmission and appear before the Academic Standards Committee. Students on academic suspension must see a counselor to begin the petition process. Those students readmitted by the committee will be readmitted with the status of final academic probation.

Students readmitted after a one-year suspension must meet regularly with a counselor to discuss their academic and career plans. In addition, students readmitted after a one-year suspension must earn a term GPA of 2.0 or higher during all periods of enrollment until they regain satisfactory academic standing.

**Academic Dismissal**

Students readmitted after one-year of suspension who fail to earn a term GPA of 2.0 or higher during all periods of enrollment, before they regain satisfactory academic standing will be academically dismissed from the college.

After a period of three years, students who have been academically dismissed may petition the Academic Standards Committee for readmission. They must appear in person before the committee and must present clear and
decisive evidence that past poor academic performance has been remedied.

Students readmitted by the Academic Standards Committee are readmitted with the status of final academic probation.

**Academic Grade Appeals**

Students must adhere to the standards of academic performance established in the course syllabi provided by their instructors. However, students are protected against prejudicial or capricious evaluation and may dispute an assigned grade by asking the instructor for reconsideration. If grades remain in dispute, students should contact the appropriate campus dean of student services. The dean of student services will direct students to the appropriate appeals procedure.

No grade will be changed without the approval of the instructor and the campus president.

**Application for Degree and Transcripts**

**Application for Degree**

Students must apply for a degree on-line at the HCC website upon nearing graduation and prior to the deadline published in the current catalog and credit course schedule. Students who wish to receive a diploma must pay a $10 fee at the time they apply for graduation. Students applying for multiple degrees must pay $10 for each diploma requested. This fee covers graduation costs for two consecutive semesters.

**Transcript Request**

Students may request that their HCC official transcripts be sent to another organization or individual by submitting a written request to any campus admissions, registration and records office. A fee of $5 is charged for each request.

Requests should include full name, student ID number, dates of attendance, and name and address of the institution or party to whom the transcript is to be sent. If their names have changed since their last period of enrollment, both their present and former names should be provided. The college will respond to transcript requests within 10 working days.

For students attending HCC after fall 1998, unofficial transcripts may be viewed and printed via the Internet on the FACTS website at www.FACTS.org.

**NOTE**: The college will not provide transcripts if the student has an outstanding financial obligation to HCC.

**Academic Support Services**

**Learning at Hillsborough Community College**

As an institution focused on student learning, Hillsborough Community College offers a variety of learning options to enhance its’ strong traditional college programs.

**Academic Support Centers**

Academic support is located at centers throughout the college. Tutorial centers offering a wide variety of tutorial services are available at each campus. Writing centers are available at the Dale Mabry and Brandon Campuses to assist students with all English and Gordon Rule assignments. The Plant City Campus’ Success Center provides academic support in several ways, including peer tutoring, access to an open computer lab, and study group areas. The Academic Success Center at the SouthShore Campus offers academic support as well as tutoring for reading, writing, and mathematics.

**Academic Technologies**

Hillsborough Community College is committed to providing academic technologies for its student population, and therefore, has developed a wide array of on-site and Internet-based technologies. These technologies include programs such as WebAdvisor for managing student business, the college portal for communication and supplemental learning, MyHCC for alternative coursework, Web-based library resources, and an online tutoring service called Smarthinking. As a student at Hillsborough Community College, you will be able to access these resources both on-campus and from your home or other locations away from the college.

It is the expectation that students will learn to utilize various technologies to communicate with the college and classmates. Students may also be required to use Web-based programs, such as those in MyHCC or other technologies to complete homework assignments, course assessments and testing, or other learning activities as assigned by instructors. In the event a computer and internet access is needed, each campus has technology available to use in the libraries and computer labs.

The college also provides helpdesk support for students with problems accessing their resources. You can call the helpdesk at 813-253-7000 ext. 4357 (HELP) to speak to a technician for assistance. The college helpdesk is limited to addressing only those problems associated with accessing web-based resources; i.e. MyHCC portal, Smarthinking, and WebAdvisor.

**Communities of Learning**

**Learning Communities**

Learning communities are formed with groups of students sharing both similar academic interests and academic schedules. Students and faculty work together to form a community of learners sharing a common academic experience. Cohort scheduling, student work and study groups, interdisciplinary assignments, and extracurricular activities combine to create a unique and challenging academic experience.
Service Learning

Service Learning is a teaching method that places a focus on learning through doing and thinking. While earning academic credit for the course, students perform a service in the community with an agency or program that has a partnership with the college. This applied approach to learning helps students gain a greater understanding of course content as well as an increased civic awareness.

Supplemental Instruction

Supplemental instruction utilizes the talents and skills of students to act as peer tutors for selected sections of a variety of courses. SI tutors actually retake the courses with the students in the SI sections and work directly with the faculty members instructing those sections to create tutorials and support materials for students presently in the courses.

Computer Enhanced Instruction

Computer enhanced instruction combines assignments and tutorials constructed for the computer to create a self-paced instructional format for students.

Fast-Track Scheduling

Fast-track scheduling, which offers courses in shorter, non-traditional formats is available for a large number of courses. Weekends and evenings are scheduled to meet the needs of today’s students, providing a wide variety of schedule formats.

Libraries/Learning Resources Centers (LRC)

Each campus has a Library/LRC that provides materials to support the college curriculum. The collections include circulating and reference books, current periodicals, archived publications, indexes, and audio-visual programs. An on-line catalog, LINCC, identifies both HCC and statewide library holdings. LINCC serves as the information gateway to indexes, specialty databases, and the Internet. In addition, many of LINCC’s services are available through the Internet to students with a valid HCC student identification card.

Each library/LRC maintains a reserve collection that includes materials identified by HCC instructors for students’ attention. Each library/LRC also houses an audio-visual laboratory, containing programs, compact discs, audio and videotapes, filmstrips and slides. Campus librarians provide reference assistance and one-on-one instruction on locating information. Library/LRC hours vary by campus and are posted at each site.

Student Services and Activities

Student Services

HCC offers a wide variety of services to help students reach their academic, career and personal goals.

Academic Advising

Advisors are available on each campus to help students select educational programs and choose appropriate courses. Advisors review transcripts, interpret placement test scores, explain degree requirements and provide information about transferring to four-year institutions. Students are encouraged to obtain an advising guide for their program from the HCC website and review it with an advisor early in their academic career so that they know which courses to register for each semester.

Admissions, Registration and Records

In order to provide students with prompt, efficient service, HCC must collect accurate information and maintain reliable student records. The college operates an admissions, registration and records office on each campus to answer questions about admissions, assist with registration, help complete HCC forms, receive and respond to requests for transcripts, and provide information required by outside individuals and organizations. In addition, the campus admissions, registration and records office will help students understand the policies and procedures in this catalog.

Bookstores

Each campus has a bookstore. The bookstores sell textbooks, general reading materials, books and periodicals, school supplies, art and engineering supplies, gifts, computers, computer software and other miscellaneous items.

Career Resource Center

The Career Resource Center provides students with information on careers and helps them make career decisions. Students can take career assessments and explore occupations with a campus Career Resource Center staff member through a variety of resources.

If students prefer working on their own, the college offers several automated career exploration options. CHOICES is a computerized career counseling and career exploration system designed to help students identify appropriate career options. The CHOICES database contains information on more than 700 occupations. Students can get more information about the career exploration system by visiting any campus Career Resource Center.

Employment opportunities are posted in the campus career centers and the online job boards. The Career Resource Center sponsors job fairs; schedules on-campus interviews with employers; and helps students with resume writing, interviewing techniques and other career related issues.

College Publications and Information

HCC provides members of the college community with current information by maintaining and supporting a variety of publications and media.

Counseling Services

Professional counselors are available to help students with career decision-making, academic planning, and personal growth. Counselors help provide direction to and
monitor the progress of students who are on academic probation and those who have been previously academically suspended or dismissed. All information students shared with counselors is treated with strict confidentiality.

In addition to short-term individual and group counseling, counselors offer seminars and workshops on study skills, time management, interpersonal skills, test anxiety reduction, and career exploration. All counseling services are free to students.

Students who would like to meet with a counselor may call or stop by an HCC counseling office. Students will either be seen on a walk-in basis or given an appointment.

Disability Services

HCC makes every effort to help students with disabilities get the most out of attending college by providing reasonable accommodations to ensure access to all academic programs, campus organizations, services and activities, in accordance with the Americans with Disabilities Act (ADA) of 1990.

All HCC activities, organizations, courses and academic and technical programs are open to students with disabling conditions.

HCC facilities are, as a whole, accessible to persons with physical disabilities via ramps, automatic entrances, and elevators. Accessible restroom facilities, parking spaces, telephones and water fountains are also available.

Who is Eligible?

The ADA defines a person with a disability as any person who has a physical or mental impairment that substantially limits one or more of such person’s major life activities; has a record of such impairment; or is regarded as having such an impairment. If students have one or more of the following disabilities, they may be eligible to receive services at HCC:

- Specific learning disability
- Hearing impairment
- Visual impairment
- Physical impairment
- ADD/ADHD
- Psychiatric disability
- Alcohol/drug abuse
- AIDS
- Speech/language impairment
- Other health impairment

Examples of Accommodations

HCC’s office of services for students with disabilities provides a wide range of free services to meet the needs of disabled students.

Depending upon documentation provided, available accommodations/services include, but are not limited to:

- College placement test and new student orientation accommodations
- Learning disability specialist
- Sign language interpreter
- Reader
- Notetaker
- Books on tape
- Assistive computer hardware and software on campus
- Visual magnifier
- Alternative testing arrangement

How to Apply

A student or future student wishing academic accommodations must self-identify and provide appropriate documentation of their disability to the office of services for students with disabilities. Students should contact an HCC coordinator of services for students with disabilities to discuss documentation guidelines.

Students are encouraged to begin this process at least one month prior to the start of the semester. Students may schedule an appointment or visit on a walk-in basis.

Contact

For additional information on services and eligibility requirements, or to request services, students should contact an HCC coordinator of services for students with disabilities.

Brandon  
BADM 217  
253-7914

Dale Mabry  
DSTU 208  
259-6035

Plant City, HCC  
Bldg. 5  
757-2209

MacDill Center,  
Room 101C

SouthShore  
SPMF 135  
253-7000 ext. 5734

Ybor City  
YPST 230  
253-7757

Telecommunications Devices for the Deaf (TDD)

TDDs are located at the district offices and on each campus so that individuals with hearing and/or speech impairments can obtain general information about the college, get information about activities, programs, and services for students with disabilities.

TDD Directory

Department/Campus  
TDD Number

Admissions/GWS DAC  
253-7174

Advising/BR  
253-7858

Advising/PC  
757-2166

Sign Language/DM  
253-7427

Library/YC  
253-7761

Human Resources/DAO  
253-7552

Switchboard/DAO  
253-7195

Disability Services/DM  
253-7035

Disability Services/YB  
253-7788

Substitution, Admission and Graduation Requirements for Disabled Students

Students with hearing impairments, visual impairments, or specific learning disabilities who have received a standard diploma from a regionally accredited secondary school or earned passing GED scores may be eligible for substitutions of HCC admission requirements, program admission requirements, or graduation requirements. Eligibility for specific substitutions is based on the documentation of the students’ disabilities.
If documentation of students’ disabilities substantiates that the disabilities can reasonably be expected to prevent the students from meeting HCC’s admission, program, course and/or graduation requirements, students might qualify for substitutions. Students must provide appropriate documentation to an HCC coordinator of services for students with disabilities.

**Food Services**

Cafeterias on the Dale Mabry, Ybor and Brandon campuses are open when classes are in session. The food facilities at the Plant City and SouthShore campuses are open during posted hours. Vending machines are located on all campuses.

**Housing**

The Hawks Landing Apartment Complex is available to HCC students for occupancy. The complex is located on the Dale Mabry Campus. For rental information, contact (813) 875-6000 or visit the Hawks Landing web page at www.hccfl.edu.

**College ID Card**

As of spring term 2010, the Hawk Card serves as the official HCC photo ID card for students, faculty, and staff. The Hawk Card does not replace the HigherOne card which will remain as the student financial reimbursement card.

The Hawk Card is available at the Dale Mabry, Ybor City, Brandon, and Plant City Campus bookstores and at the library at the SouthShore Campus. The first card is issued free of charge. A $21.00 card replacement fee will be charged for each additional card.

**Student Email**

Upon enrollment at HCC, all students are provided personalized email access through HawkNet, HCC’s web-based service delivery portal. HCC has adopted email as the official means of communications with students because of its speed and efficiency in delivering important college communications. For this reason, it is important for students to check their HawkNet email regularly.

During registration periods, students should check HCC email daily for registration confirmations, notices regarding fees, financial aid and other pertinent information. Log-in information for email and other electronic services available via HawkNet will be provided during new student orientation.

**Hawk Alert**

Hawk Alert is Hillsborough Community College’s new text messaging system. It is easy to sign up! To receive text messages about emergencies, including campus closures, financial aid notifications, registration, and payment deadlines go to www.hccfl.edu/alerts and sign up for this free service.* Stay connected by signing up today!

* NOTE: Some charges may apply based on your service provider.

**Information Centers**

Official bulletin boards are placed in at least one location in each building. Information about upcoming cultural events, job openings, student activities, financial aid and athletic events are posted on these bulletin boards.

**Lost and Found**

Students should turn in any articles found on campus to the campus security office. To claim lost articles, students must present proper identification.

**Student Support Services Program**

Student Support Services (SSS) is one of the federal TRIO Programs that provide a variety of academic support services to eligible disadvantaged students. Comprehensive support services enhance and improve the retention, graduation and transfer rates of the program’s participants from HCC. Additional transfer services are available to participants who qualify to transfer to 4-year colleges and universities.

All full-time and part-time disadvantaged students enrolled at any of the college’s campuses, learning centers or off-campus instructional sites, who qualify under the broad criteria, can apply for admission to the Student Support Services Program.

**Test Centers**

Test Centers, located on all campuses, administer faculty make-up, distance learning, placement, and counseling-related tests. Before being allowed to take tests, students must show picture identification, either a government-issued photo ID such as a driver’s license or an HCC student ID card.

Disabled students who require alternative testing arrangements must contact an HCC coordinator of services for students with disabilities.

Students using unauthorized or inappropriate materials and students who conduct themselves inappropriately in a test center will be denied future testing privileges in the center and may be subject to college disciplinary action.

**Transfer Centers**

Transfer centers are available in the student services office at each campus. Academic advisors are there to assist students research, investigate, and ultimately choose a four-year institution to pursue their baccalaureate.

**Vocational Rehabilitation Services**

The Division of Vocational Rehabilitation, the Division of Blind Services, the Veterans Administration, and government agencies fund academic and vocational (technical) training for individuals with disabilities. For
information about services and eligibility requirements and for referral to the appropriate agencies, students should contact an HCC coordinator of services for students with disabilities.

WINGS

The WINGS program is designed to promote the graduation of students pursuing AS, AAS, or college certificate programs. A variety of support services are offered to address short-term as well as lifelong goals. Students may qualify for partial tuition and textbook support, in addition to childcare assistance.

To qualify, students must be enrolled in a technical education program and be eligible to receive a Federal Pell Grant. To obtain further information, students should call (813)253-7234.

Student Activities

Student Government Association

The Student Government Association (SGA) provides opportunities for students to actively participate in programs and policy-making at HCC. The SGA serves as a major vehicle for communication between students and the administration. The Student Government Association represents all students.

Each campus has an SGA with a president, executive board and senate.

Student Union Facilities

Student union facilities are open to all students. These facilities usually house offices for the SGA and areas in which students can meet.

Student Publications

Student publications and the student press are valuable aids in establishing and maintaining an atmosphere of free and responsible discussion. The college requires that its student publications staff adhere to responsible journalistic practices. The Canons of Journalism, the Advertising Code, and the Advertising Standards of Acceptability serve as external standards for which the editors and staff of the student publications at HCC strive.

Newspaper

The Hawkeye is HCC’s student newspaper. Published regularly, the paper is staffed by students from all campuses and receives assistance from a faculty advisor. The newspaper is free.

Galeria

The Galeria, HCC’s literary-arts magazine, is published annually under the supervision of a faculty advisor. The Galeria has a staff of student volunteers, and students from all campuses contribute the material published. The magazine is free to all HCC students.

Triad

The Triad, HCC’s general magazine, is published annually under the supervision of a faculty advisor. Volunteer journalism students staff the Triad, and the magazine is free.

Cultural and Special Events

Art Shows

The HCC Art Gallery is located in the Performing Arts Building on the Ybor City Campus. Exhibits include works from collections on loan to the Gallery as well as works by students, faculty, and guest artists. The Gallery is open to the public without charge when classes are in session. The annual Student Award Exhibit is held late in the spring term and is an especially noteworthy event.

For more information, students should call the gallery office at (813) 253-7674. For information about exhibits on other campuses, students should call or write the campus student government activities advisor or a member of the campus art faculty.

Exhibits

The Exhibit Gallery, located on the second floor of the Dale Mabry Campus Library Building, houses selections from state agencies, local groups, artists and private collections. Admission is free. For more information, call (813) 253-7386.

Drama

During the academic year, theatrical presentations are held on the Ybor City Campus. The schedule and location of open auditions for upcoming productions are posted on the campus bulletin board and in the school newspaper. Drama department productions are held at the Ybor City Campus Performing Arts Building.

Music

Student, faculty and artist recitals are held in the Ybor Performing Arts Building. Vocal and instrumental recitals and concerts are scheduled primarily during the fall and spring terms and feature student, faculty and guest artists in solo and ensemble performances.

Films, Dances and Special Events

Each semester campus student government associations sponsor events such as films, dances, concerts, guest speakers, special forums and cookouts. All events are at no cost to current students with a valid HCC ID card.

Sports

Gymnasium, Weight Room and Outdoor Sports Complex

HCC’s outdoor sports complex, an innovative joint project between HCC, the City of Tampa, and Hillsborough County, is located at the northeast corner of the Dale Mabry Campus. Students, faculty, and staff may use the sports complex at no charge while participating in college credit courses. At other times, students pay a special rate when they present their HCC ID card or semester’s receipt. The public may rent the facilities according to a published fee schedule.
Tennis and racquetball courts are available for educational and recreational use by HCC students and the community. Hourly reservations are required and reservations for tennis and racquetball courts must be made 24 hours in advance. Further details are available by phoning (813) 348-1173.

The gymnasium, which serves as the home court of the Hawks basketball and volleyball teams, is located on the Dale Mabry Campus.

College weight training rooms and the gymnasium are available for student use free of charge at designated times. There are weight rooms located on the Brandon, Dale Mabry, Ybor City, and Plant City campuses. Hours of operation for the gym and weight room are posted and vary from term to term. Students are required to dress appropriately.

**Varsity Sports**

The varsity sports program consists of volleyball, basketball, tennis and softball (fast pitch) for women; and basketball and baseball for men.

The Hawks are members of the Florida Community College Activities Association, Suncoast Conference, and Region VIII of the National Junior College Athletic Association.

Financial aid is available to any full-time student who meets both athletic and academic qualifications. For details, students should contact the athletic office, Dale Mabry Campus, at (813) 253-7446. Upon request, the college will make available to current or future students the completion rates of student athletes.

**Student Clubs and Organizations**

Each campus has clubs and organizations that serve student needs. Student clubs and organizations provide students with the opportunity to participate in organized activities with others having similar interests. They offer students a way to make friends, expand horizons, and get involved in college life.

The HCC Student Handbook has a current list of clubs and organizations offered at each campus.

**Student Policies**

**Activities Calendar**

Each campus maintains a calendar listing the time and location of approved activities. Students must make arrangements for scheduling an event and reserving a location for a co-curricular activity with the appropriate student government activities advisor before the event can be placed on the activities calendar.

**ADA (Americans with Disabilities Act)**

HCC complies with, and fully supports, the 1990 Americans with Disabilities Act (ADA). The ADA prohibits discrimination on the basis of disability in the services, programs and activities provided and operated by the college. HCC also complies with, and fully supports, other federal, state and local laws that protect the rights of disabled persons, such as the Rehabilitation Act of 1973 and the Florida Educational Equity Act.

Unless the result will cause an undue hardship to the college or fundamentally alter a program or service provided by the college, HCC will provide reasonable accommodations and auxiliary aids to disabled applicants, employees, students and members of the college community.

**AIDS**

HCC recognizes that Acquired Immune Deficiency Syndrome (AIDS), AIDS Related Complex (ARC), or a positive test for HIV antibody represents a significant public health threat. It is HCC’s policy to balance the rights of AIDS victims to an education and employment at HCC against the rights of other students and employees to an environment in which they are protected from contracting the disease.

HCC will offer students with AIDS the same opportunities and benefits offered to other students. Generally, HCC will not impose any rules on students with AIDS that may have the effect of limiting their participation in the educational programs or activities at HCC. Students with AIDS will not be isolated by HCC or prevented from participating in college activities unless such participation has been scientifically shown to endanger the wider community. Risk determinations will be made by medical professionals in consultation with an office of services for students with disabilities.

A campus coordinator of services for students with disabilities is responsible for reviewing HCC’s procedures and ensuring they are both free of discrimination and pose no danger to the community at large. The coordinator will also meet, as needed, to consider and recommend appropriate action in individual occurrences of the disease. Any questions, concerns, consultation regarding AIDS, services or accommodations should be referred to an office of services for students with disabilities.

**Audio/Video Recordings**

A student shall not, without the faculty member’s express authorization make or receive any recording, including but not limited to audio and video recordings of any class, co-curricular meeting, organizational meeting or meeting with a faculty member. Further, the student does not have permission to post class lectures or course lectures on the web.

**Bulletin Boards**

Each campus has several large community bulletin boards on which students may post announcements such as want ads, for-sale notices, notices of meetings, etc. Prior to posting, all notices from students must have the stamped approval of the appropriate campus dean of student services, the dean’s designee, or the organization assigned authority and/or responsibility for the specific bulletin board.

**NOTE:** Most buildings also have information centers where official HCC notices and announcements are posted.
Campus Disturbances

State law prohibits the disruption of or interference with the administration, function or activities of an educational institution. In addition, the law prohibits individuals from encouraging students to disrupt the educational process or to interfere with the attendance of any student or employee.

Individuals who violate this law will be charged with a second-degree misdemeanor and, upon conviction, be fined up to $500, imprisoned for up to 60 days, or both. In addition, students who violate this law will be subject to college disciplinary procedures.

Campus Events

All on-campus meetings must be scheduled with the appropriate campus student activity advisor or through the office of the appropriate campus of dean of student services.

Children on Campus

For safety reasons, parents and others responsible for the care of minor children under the age of 17 should not bring them on campus while engaged in academic activities such as class, research, lab periods, or study groups. Minor children under the age of 17 should be on campus only when activities specifically allow for their involvement.

Disciplinary Action

The appropriate campus dean of student services, according to HCC administrative procedures, administers disciplinary action resulting from violations of the Student Code of Conduct. The Student Code of Conduct is located in the Student Handbook, which is available on the HCC Website at www.hccfl.edu.

Dress Code

HCC believes that students are mature enough to determine what constitutes appropriate dress. However, state law requires students to wear shirts and shoes while on HCC’s campuses.

Drugs & Alcohol

One of HCC’s goals is to maintain a drug-free workplace and educational setting. Therefore, the manufacture, distribution, dispensation, possession, or use of alcohol or controlled substances on HCC property is prohibited. However, upon prior authorization by the President, alcoholic beverages may be served on HCC property and at HCC functions.

Annually, each registered student is provided detailed information about HCC drug policies and the behavioral, social and legal consequences associated with drug use. Students charged with violating this policy will be referred for disciplinary action to the appropriate campus dean of student services. Students who violate the college’s drug and alcohol policy will be subject to severe disciplinary sanctions including suspension or expulsion. In addition, the college will refer violators to the appropriate law enforcement agencies for prosecution and will assist law enforcement agencies in investigating students who may be using or trafficking drugs.

For more details regarding HCC’s policy on alcohol and illicit drugs, see the HCC Safety Handbook, Student Handbook and Academic Planner or HCC Administrative Rule 6HX-10-2.05. Copies of the policies are in HCC libraries. A copy of this information is available on the HCC website at www.hccfl.edu.

Annually, each registered student is provided detailed information about HCC drug policies and the behavioral, social and legal consequences associated with drug use.

The college will also provide future students with a review of HCC’s alcohol and drug prevention and education programs.

Hazing

Officers, members, and others associated with HCC student organizations are prohibited from engaging in hazing and in participating in activities on or off campus that endanger students’ health or safety.

Ombudsman/Student Advocate

The vice president for student services and enrollment management is the college’s ombudsman/advocate for students. The vice president’s office is located on the third floor of the district administration center. Students may appeal decisions related to course access and credits granted toward degrees to the office of the ombudsman.

Religious Observances

HCC will reasonably accommodate the religious observances, practices, and beliefs of students in its admission, class attendance and the examination policies and in work assignments. Students must notify instructors at least one week prior to a religious observance.

Students may file a grievance if they believe they have unreasonably been denied an educational benefit due to their religious beliefs or practices.

Public Safety

The HCC public safety office is available to assist all students and employees. The public safety office patrols college property to detect and deter criminal activity, provide protection to those on campus, provide security for college property, and detect and document hazardous, unusual and suspicious behavior and conditions.

The public safety department provides information and assistance on a 24-hour basis. The department utilizes uniformed patrol officers with marked vehicles and officers on foot patrol to observe and detect criminal behavior and suspicious activities; enforce traffic and parking regulations; and assist students and employees. Students, employees, and members of the community are required to obey all local, state and federal laws, statutes and ordinances. In addition, members of the college community must observe all HCC administrative rules and procedures. The public safety department is responsible for monitoring compliance with these laws and many of the college’s rules and procedures.
Responsible Students and Employees Should:

- Inform the public safety department about suspicious conduct, criminal activities and hazardous situations.
- Refrain from leaving doors and windows open when rooms are vacant.
- Walk to cars and classes in groups or with a companion. (Call 253-7911 for an officer escort to the parking lots or garage.)
- Walk in well-lighted areas at night, even when in a group.
- Attend to their intuition. (If students feel they are being followed, they should change direction and walk toward a group of people or to a secure area.)
- Watch their belongings.
- Avoid strangers that appear suspicious or out of place.
- Freely contact Security to ask for assistance.

Students who notice situations that represent potential or real safety or security problems should notify the local campus security office by using the emergency telephones.

Upon request, the college will make available to future students its policies, procedures, statistics and other information about campus safety and security. The Safety Handbook is available at the student services webpage at www.hccfl.edu/ssem/safety-handbook.aspx

Sexual Harassment Policy

Hillsborough Community College will maintain a workplace and educational setting free from harassment of any kind and from any source including but not be limited to supervisors, co-workers, administrators, students, faculty, consultants and visitors to the college. Each administrator, faculty member, professional-managerial employee, classified employee and student should pursue assignments and responsibilities at the college with a total commitment to basic ethical principles and professional codes of conduct.

The college believes sexual relationships between teachers and students or superiors and subordinates are ill advised as they might adversely affect the academic or workplace environment or relationships. Such relationships between superiors and subordinates or between teachers and students are unethical because the consent of students or subordinates may not in fact be voluntary given the “power imbalance” in such relationships.

Smoking Policy

HCC complies with the Florida Indoor Clean Air Act. Smoking is not permitted in college buildings or classrooms, enclosed hallways, or adjacent to exit and entrance doors. Smoking is only permitted in outdoor unenclosed areas. Campuses have designated smoking areas.

The SouthShore Center is a “breathe easy” campus and does not allow smoking in its buildings or outdoor public areas.

Student Misconduct

Students must adhere to all published federal and state laws and ordinances and college administrative rules and procedures. Alleged violations of the Student Code of Conduct will be referred to the appropriate campus dean of student services. Following the guidelines in the Student Handbook and Academic Planner for student conduct and discipline, the dean will determine the appropriate college response.

HCC will cooperate with external police and judicial authorities investigating alleged violations of public laws or ordinances.

Telephones

Pay phones are located on each campus for student use. Office telephones are for official use only. If the college receives an emergency call for a student, every effort will be made to locate and inform the student. However, the college will not deliver personal messages of a non-emergency nature.

Textbook Refund Policy

HCC bookstores grant full refunds on textbooks (whether purchased new or used) during the first two weeks of the semester and during the first week of summer term. Books returned after those deadlines will be purchased at used book prices (55 percent of purchase price). In determining the amount to be refunded, the bookstores will follow these guidelines:

- All refund requests must be accompanied by sales receipts.
- If purchased new, books must be unmarked and must not be defaced in any manner. Marked books will be purchased at used book prices. The bookstore staff members are the sole judge of whether a book is in new or used condition.
- Each HCC bookstore will refund textbooks purchased at any other HCC bookstore.
- Books or merchandise that is defective should be exchanged as soon as the defect is discovered. Defective used books must be returned for exchange during the first two weeks of class.
- Students must provide a student ID and a government issued photo ID in order to receive refunds.
- Refunds are not given for merchandise other than textbooks.
- Refunds are not given for special-order books.
- When students’ petitions for late drops are approved, the deadline for refunds will be waived.

Buy Back Policy

If a textbook is in good, resalable condition and is a required textbook for the next semester (except when the bookstore’s current stock exceeds the anticipated demand), the bookstore may buy the book back at a price determined by the bookstore.

The buy-back period is the first two weeks and last week of each semester and on every Tuesday and Wednesday during the semester.
On each campus, bookstore hours are posted each term.

**Threats of Violence**

Threats by HCC students, staff or visitors to do bodily harm, damage property or disrupt the operation of the college are inimical with the goals of the college and will not be tolerated. Students or employees who make such threats, whether verbal or written, expressed or implied, will be disciplined according to the appropriate administrative procedures.

**Records Policies**

**Confidentiality of Student Records**

The Family Educational Rights and Privacy Act (FERPA) governs the confidentiality of student records. (Records are defined as all records, files and data directly related to students that are created, maintained, and used by HCC.)

**Notification of Social Security Number Collection and Usage**

Hillsborough Community College (HCC) will only use your social security number (SSN) as needed for lawful purposes within the business of HCC and for those specific purposes identified by the Social Security Administration, the Internal Revenue Service and other state and federal regulatory agencies. The SSN will not be used in any information system as the primary identification of individuals unless required by law. HCC is committed to provide security for our students, faculty and staff; and recognizes that the threat of identity theft is a growing problem. HCC departments that are authorized and required to collect, transmit, store or use a SSN will do so in a secure manner. Violations of this policy may result in disciplinary action up to and including discharge or dismissal in accordance with HCC rules and procedures.

In compliance with Section 119.071(5), Florida Statutes, this document serves to notify you of the purpose for the collection and usage of your SSN.

HCC collects and uses your SSN only for the following purposes in performance of the College’s duties and responsibilities. To protect your identity, HCC will protect your SSN from unauthorized access, never release your SSN to unauthorized parties, and assign you a unique student/employee identification number. This unique ID number is used for all associated employment and educational purposes at HCC.

For the student information system (Hawknet), the primary identifier for a student will be the student identification number, which will be used to access student education records, and for electronic and paper data systems that identify, track and service students. Faculty and staff will require students to provide their student identification number for all transactions and not SSNs for any transactions requiring access to student records.

Providing your SSN is a condition of employment at HCC. Your SSN is used for legitimate employment business purposes in compliance with:

- Completing an Employment Application/Packet
- Completing and processing background checks
- Completing and processing the Federal I-9 (Dept. of Homeland Security)
- Completing and processing Federal W4, W2, 1099 (Internal Revenue Service)
- Completing and processing Federal Social Security taxes (FICA)
- Processing and distributing Federal W2 (Internal Revenue Service)
- Completing and processing quarterly unemployment reports (FL Dept. of Revenue)
- Completing and processing Florida retirement contribution reports (FL Dept. of Revenue)
- Processing workers compensation claims Florida Community College Risk Management Consortium (FCCRMC) and Dept. of Labor
- Completing and processing direct deposit files
- Completing and processing 403b and 457b contribution and similar reports
- Completing and processing group health, life and dental coverage enrollment
- Completing and processing various supplemental insurance deduction reports
- The HCC Office of Financial Aid requires students to submit their SSN on various financial aid forms to coordinate institutional, state and federal financial aid programs.
- The HCC Admissions Department will collect student SSNs, which are needed for federal reporting requirements. However, students are assigned a student number which will be used for all college business of identification. All SSNs are protected by FERPA and are never released to unauthorized parties.
- The HCC Financial Services Office uses student SSN’s to report information to the Internal Revenue Service (IRS) via 1098T, the Florida Prepaid Tuition Plan, to third parties paying for tuition and fees on behalf of the student, for reporting information to collection agencies, and for reports required by the state and federal government.
- Student, faculty and staff SSNs will be used in the libraries’ patron database (LINCC) for online login authentication, patron verification and the elimination of duplicate records.
- The Upward Bound, Educational Talent Search and College Reach-Out Programs are youth outreach (intervention) projects funded by discretionary grants from the United States or Florida Department of Education (FDOE). As such, each project is required to exclusively serve eligible participants that are citizens or nationals of the United States; or, are permanent residents of the United States. In order to verify a participant’s project eligibility, SSNs are required and also later used when submitting information for the annual performance reports due to the United States or FDOE.
- Workforce programs, funded through the Agency for Workforce Innovation (AWI), use your SSN as an identifier for program enrollment and completion. Also, it is used for entering placement information into the
HCC students have the right to:

- Inspect and review their educational reports and records.
- Have privacy of their educational reports and records maintained.
- Require the college to obtain written consent prior to disclosing personally identifiable information except in those instances specifically noted in the statute.
- Challenge and request a hearing on requiring the college to amend any portion of the students’ records that are inaccurate, misleading or otherwise in violation of the students’ privacy.

Right of Access

Students and parents or guardians of dependent (per Section 152 of the Internal Revenue Code) students are entitled to these rights and to access to students’ records. Parents or guardians of students will not be given access to the students’ records without the written consent of the student or documentation that the student is dependent.

Students and eligible parents or guardians may request a list of the types of student records maintained by HCC. These records include but are not limited to:

- Academic records, i.e., application, transcripts, enrollment verifications, course records, grades, etc. (Direct requests to the appropriate campus admissions, registration and records office.)
- Disciplinary records. (Direct requests to the appropriate campus dean of student services.)
- Financial aid records. (Direct requests to the appropriate campus financial aid office.)
- Student account and fee records. (Direct requests to the college financial services department.)

Eligible individuals may inspect or review student records and reports and receive copies for the cost of producing such copies. College employees may review student records when the reason for their review serves a legitimate educational or administrative purpose. Unless conducting approved research, faculty members may review the records only of students currently enrolled in their classes.

Right of Waiver of Access to Confidential Letters or Statements

A student, eligible parent, or guardian may waive the right of access to evaluations, confidential letters, or letters of recommendation. When requested, HCC will provide the names of individuals who have submitted such letters and evaluations. Moreover, HCC will endeavor to ensure the recommendations and evaluations are used only for the purpose(s) intended.

Corrections

HCC maintains student records electronically, on paper, on microfilm and on microfiche. In order to provide students the opportunity to correct errors and appeal discrepancies, the college will maintain the original documents on which the records are based for one year. After one year, the source documents may no longer be available and documenting errors will become the students’ responsibility.

Right to Challenge and Hearing

Students and eligible parents or guardians have the right to challenge the content and request amendment of records and reports they believe to be inaccurate or misleading. To present such a challenge, students, eligible parents or guardians should contact the appropriate campus admissions, registration and records office.

Challenges may be settled informally by a written agreement. If challenges cannot be settled informally, either party may request, within a reasonable period of time, that a formal hearing be held to settle the dispute. If a request is made, the appropriate campus president will appoint an administrator, without an interest in the outcome, to serve as the hearing officer. Students, eligible parents or guardians, and college employees whose testimony is relevant to the issue may present evidence. After reviewing all available evidence and testimony the hearing officer will make a written recommendation to the appointing president. The campus president will issue a written decision.

Students and eligible parents or guardians have the right to appeal decisions of campus presidents’ rulings on FERPA challenges to the vice president for student services and enrollment management.

Right to Privacy

Students have the right to privacy with respect to the educational records maintained by the college. Personally identifiable student records or reports are confidential and will not be released without the written consent of students. HCC will release directory information on students unless students submit written requests to the appropriate campus admissions, registration and records office requesting that directory information be withheld. Directory information includes students’:

- Names, addresses and listed telephone numbers;
- Date of birth.
- Majors.
- Participation in officially recognized activities and sports.
- Weight and height (of members of athletic teams).
- Dates of attendance.
- Degrees and awards received.
- Most recent previous educational institution.
- Enrollment status.

Complaints

Individuals who believe their privacy rights have been violated may petition the Family Educational Rights and Privacy Acts Office at the Department of Health & Welfare in Washington, D.C. or file suit in Circuit Court to request enforcement of the rights they believe to have been violated.
Rule and Procedure

Students may obtain a copy of the administrative rule and procedure on student records, including the requirements of the federal and state laws, from their campus dean of student services or at the campus libraries.

Release of Information

Organizations requiring verification of student enrollment or graduation should contact the National Student Clearinghouse at www.studentclearinghouse.org. Unofficial verifications can be processed through the student’s WebAdvisor account.

Since the federal government requires educational institutions to take precautions to prevent the misuse of student data, HCC will release student information only upon receipt of a signed, written request by the student or other authorized requestor.

Parties requesting information should submit their requests, and any accompanying forms, to the campus admissions, registration and records office. The college will try to process requests for information within 10 working days.
College Preparatory Curriculum

The college preparatory curriculum is designed to improve students’ performance in reading, writing and mathematics. Students earning scores below the state-mandated minimum scores on the college placement test must enroll in college preparatory communication and computation instruction. Depending on the areas needing remediation, students will be placed into college preparatory writing, reading, and/or computation courses.

Students whose diagnostic tests indicate they need instruction in English for Academic Purposes (EAP) will be enrolled in the alternate EAP series of courses. See the EAP section for more information.

The bulleted items below refer to specific requirements related to the preparatory curriculum:

- Students who earn below the state-mandated scores on one or more sections of the college placement test must complete a) SLS 1501, OR b) SLS 1101 and REA 1605.
- Students who test into college preparatory reading must take REA 0007 before enrolling in any math course. Students whose diagnostic tests indicate they need instruction in English for Academic Purposes (EAP) are eligible to take MAT 0018 if they completed the following EAP course.

College Preparatory Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 0015</td>
<td>College Preparatory Writing Skills I</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ENC 0025</td>
<td>College Preparatory Writing Skills II</td>
<td>4 cr.</td>
</tr>
<tr>
<td>REA 0007</td>
<td>College Preparatory Reading Skills I</td>
<td>4 cr.</td>
</tr>
<tr>
<td>REA 0017</td>
<td>College Preparatory Reading Skills II</td>
<td>4 cr.</td>
</tr>
<tr>
<td>MAT 0018</td>
<td>Pre-Algebra</td>
<td>4 cr.</td>
</tr>
<tr>
<td>MAT 0028</td>
<td>Beginning Algebra</td>
<td>4 cr.</td>
</tr>
</tbody>
</table>

Additional Course Requirements for Students Taking College Preparatory Coursework (Choose one of two options)

Option 1

SLS 1501 College Success ................................................................. 3 cr.

Option 2

SLS 1101 Orientation ........................................................................ 1 cr.

AND

REA 1605 College Study Skills .......................................................... 2 cr.

Suggested electives to take with preparatory course work:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1500</td>
<td>Applied Word Processing</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CLP 1000</td>
<td>Psychology of Personal Growth</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FIN 1100</td>
<td>Personal Finance</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1142</td>
<td>Keyboarding I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 1143</td>
<td>Keyboarding II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 1741</td>
<td>Word Processing</td>
<td>1 cr.</td>
</tr>
<tr>
<td>*REA 1105</td>
<td>College Reading</td>
<td>3 cr.</td>
</tr>
<tr>
<td>*REA 2505</td>
<td>Vocabulary Improvement</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SLS 1301</td>
<td>Career Decision-Making</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

* Based on completion of College Preparatory Reading Skills
English for Academic Purposes (EAP)

Courses in English for Academic Purposes are offered at the Ybor City and Dale Mabry campuses. The six levels of instruction are designed to help non-native English speakers reach a level of proficiency that will prepare them for better employment or academic opportunities.

EAP courses are as follows:

### College Preparatory Level

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAP 0100</td>
<td>Speech/Listening I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 0120</td>
<td>Reading I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 0140</td>
<td>Writing I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 0160</td>
<td>Grammar I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 0200</td>
<td>Speech/Listening II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 0220</td>
<td>Reading II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 0240</td>
<td>Writing II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 0260</td>
<td>Grammar II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 0300</td>
<td>Speech/Listening III</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 0320</td>
<td>Reading III</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 0340</td>
<td>Writing III</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 0360</td>
<td>Grammar III</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 0400</td>
<td>Speech/Listening IV</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 0420</td>
<td>Reading IV</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 0440</td>
<td>Writing IV</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 0460</td>
<td>Grammar IV</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

### Associate in Arts Degree Elective Level (up to 12 cr. hrs.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAP 1500</td>
<td>Speech/Listening V</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 1500L</td>
<td>Speech/Listening Lab V</td>
<td>1 cr.</td>
</tr>
<tr>
<td>EAP 1520</td>
<td>Reading V</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 1520L</td>
<td>Reading Lab V</td>
<td>1 cr.</td>
</tr>
<tr>
<td>EAP 1540</td>
<td>Writing V</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 1540L</td>
<td>Writing Lab V</td>
<td>1 cr.</td>
</tr>
<tr>
<td>EAP 1560</td>
<td>Grammar V</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 1600</td>
<td>Speech/Listening VI</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 1600L</td>
<td>Speech/Listening VI Lab</td>
<td>1 cr.</td>
</tr>
<tr>
<td>EAP 1620</td>
<td>Reading VI</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 1620L</td>
<td>Reading Lab VI</td>
<td>1 cr.</td>
</tr>
<tr>
<td>EAP 1640</td>
<td>Writing VI</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EAP 1640L</td>
<td>Writing VI Lab</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

For more information about the EAP program, call 253-7744.
The Associate Degree

Hillsborough Community College offers associate in arts (AA), associate in science (AS), and associate in applied science (AAS) degrees.

The AA degree is awarded to students who complete university transfer curricula designed to prepare them to enter as juniors at a four-year college or university.

The AS degree is awarded to students who complete technical programs. The AS degree is designed to prepare students for the workforce. A number of these degrees are designed so that students who earn them may transfer their credits into specialized programs at four-year institutions. In addition, students who earn one AS degree may qualify for another. Students wishing to earn a second AS degree must complete at least 15 hours at HCC beyond the first degree. Moreover, they must meet all requirements for the second degree.

The AAS degree is also awarded to students who complete a technical program. However, the AAS degree is designed to be an entry-level, job-preparation degree. It is not designed for transfer to a four-year institution.

To ensure a well-rounded education, degree curricula include general education courses within communications, humanities, natural sciences, mathematics and social and behavioral sciences. Where options are available, they are noted.

Excess Hours Advisory Statement

Section 1009.086, Florida Statutes, establishes an “excess hour” surcharge for a student seeking a baccalaureate degree at a state university. It is critical that students, including those entering Florida colleges, are aware of the potential for additional course fees.

“Excess hours” are defined as hours that go beyond 120% of the hours required for a baccalaureate degree program. For example, if the length of the program is 120 credit hours, the student may be subject to an excess hour surcharge for any credits attempted beyond 144 credit hours (120 x 120%).

All students whose educational plan may include earning a bachelor’s degree should make every effort to enroll in and successfully complete those courses that are required for their intended major on their first attempt. Florida college students intending to transfer to a state university should identify a major or “transfer program” early and be advised of admission requirements for that program, including the approved common prerequisites. Course withdrawals and/or repeats, as well as enrollment in courses, non-essential to the intended major, may contribute to a potential excess hours surcharge.

Time to Degree and Common Prerequisites

Florida statutes require that associate in arts degrees require no more than 60 credit hours. Those statutes also mandate that the general education courses required for the associates in arts degrees be distributed within designated categories. Courses that comprise the 24 hours of electives may be designated for university program entry.

Graduation Requirements

To earn an AA, an AS degree, or an AAS students must:

• Complete the approved curriculum of not less than 60 credits including general education requirements, program requirements, and electives.

• Fulfill the degree requirements under the catalog in effect during the semester that begins the period of continuous enrollment immediately prior to the semester in which the student applies for graduation.

NOTE: Continuous enrollment is maintained by registering for at least one term each academic year. If a student’s enrollment is interrupted for more than an academic year, the student will be considered a former student returning. A former student returning must meet the graduation requirements of the catalog in effect during the semester they return.

• Earn at least 25 percent of the credit hours applicable to the degree in residence at HCC.

In addition:

• No more than four credit hours of physical education activity/skills courses may be applied toward a degree.

• Apply only 12 hours of EAP college-level credits.

• Have a 2.0 HCC cumulative GPA along with overall

NOTE: Credits from other colleges will be used in computing the GPA.

• Complete the capstone course for the AA degree. Prior to taking the course, students must have completed at least 45 hours of coursework towards the degree, including at least 24 hours of general education coursework with a minimum grade of “C.”

• Complete an application

• Fulfill all financial obligations before a release of transcripts or diploma.

Programs are subject to change.

Students are responsible for obtaining current and accurate information prior to registering for classes.
The Associate in Arts Degree

University Transfer Program

The associate in arts (AA) degree is designed primarily to meet the requirements for a student to transfer to the upper division level of a college or university to continue to work toward a bachelor’s degree.

Students should be aware of the specific requirements for the AA degree imposed by state regulations and law. For example, general education and elective credit requirements integrate requirements established by the Southern Association of Colleges and Schools and Florida’s Gordon Rule.

Meeting graduation requirements for an AA degree from a Florida community college is not synonymous with meeting the specific course requirements to enter a specific program at a state university or private college belonging to the Independent Colleges of Florida.

HCC prepares students for hundreds of possible transfer majors, each of which has a distinct listing of common prerequisite courses designated by the Florida University System. To ensure accuracy in selecting courses, students should refer to the student advising guides available online or in the counseling and advising offices. These guides can be adapted to a specific university major including, but not limited to the following:

- Agriculture
- Architecture
- Art
- Building Construction
- Business Administration
- Computer Information Systems
- Computer Science (Engineering)
- Dance
- Dramatic Arts
- Education and Teacher Preparation
- Engineering
- Graphic Design
- Hospitality Administration Management
- Liberal Arts and Sciences
- Mass Communications
- Medical Science
- Music
- Pharmacy

To earn an AA degree, students must complete a minimum of 60 credit hours with no less than 36 credits of specified general education courses and 24 credits in the university transfer program electives. Legislation may further affect the graduation requirement; therefore, students are advised to obtain more current information from the advising and transfer offices.

The articulation agreement between Florida community colleges and state universities specifies that students who have been certified as having satisfactorily completed the general education requirements in a university transfer program are exempt from any additional general education requirements after transferring to a state university or community college. However, to be eligible for admission into a limited access program at a state university, students may be required to take specific prerequisite courses (which may exceed the 60 credit hours) and meet other requirements such as a minimum GPA, minimum ACT/SAT test scores or audition/portfolio.

Students may pursue any combination of university transfer programs, but only one AA degree will be awarded.

Students are advised to contact the specific department of the institution where they plan to transfer as early as possible for information regarding courses to be taken at HCC. Courses required at transfer institutions may fulfill HCC general education requirements or electives.

General Education Requirements

General education provides a foundation upon which a student’s learning experience is built. It offers students the opportunity to acquire the skills and knowledge necessary to have a broad understanding of a changing world.

The HCC general education program is designed to provide students with the knowledge, skills, and vision necessary to allow them to become valued participants in a complex and culturally diverse world. The program encourages intellectual inquiry, helping students to develop an understanding of the human mind and spirit, as well as a sense of history and the dynamics of the society around them. As students plan for the world that is ahead of them, the general education program gives them an appreciation of the world that preceded them, as well as a frame of reference for the world in which they live.

Students who complete the HCC general education core curriculum should be able to demonstrate their:

- ability to think critically.
- ability to express themselves clearly in written and oral communication.
- ability to express themselves effectively in quantitative terms.
- understanding of and appreciation for the value and significance of culture.
- appreciation of the scientific method of inquiry and the historical and contemporary impact of science on daily life.
- understanding of global political, social, economic, and historical perspectives.
- ability to use technology to access, retrieve, process, and communicate information.

To earn an AA degree, students must complete 36 hours of general education courses.

Group I – Communications and Humanities: 15 credits required

Communications: 9 credits required

ENC 1101 English Composition I.......................... 3 cr.
ENC 1102 English Composition II......................... 3 cr.
SPC 1608 Public Speaking................................. 3 cr.
### Humanities: 6 credits required

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AML 2010</td>
<td>American Literature to 1885</td>
<td>3 cr.</td>
</tr>
<tr>
<td>AML 2020</td>
<td>American Literature: 1885 to Present</td>
<td>3 cr.</td>
</tr>
<tr>
<td>AML 2600</td>
<td>African-American Literature</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ARH 1000</td>
<td>Understanding Visual Art</td>
<td>3 cr.</td>
</tr>
<tr>
<td>DAN 2100</td>
<td>Introduction to Dance</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ENL 2120</td>
<td>British Literature to 1800</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ENL 2022</td>
<td>British Literature: 1800 to Present</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUM 2210</td>
<td>World Humanities: Prehistory to Early Modern Era</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUM 2230</td>
<td>World Humanities: Early Modern to Contemporary</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUM 2410</td>
<td>Asian Humanities</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUM 2420</td>
<td>African Humanities</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUM 2461</td>
<td>Latin-American Humanities</td>
<td>3 cr.</td>
</tr>
<tr>
<td>LIT 2110</td>
<td>World Literature to 1650</td>
<td>3 cr.</td>
</tr>
<tr>
<td>LIT 2120</td>
<td>World Literature: 1650 to Present</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MUL 1010</td>
<td>Introduction to Music</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHI 1010</td>
<td>Introduction to Philosophy</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHI 1100</td>
<td>Elementary Logic</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHI 1600</td>
<td>Ethics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>REL 2300</td>
<td>Introduction to Religion</td>
<td>3 cr.</td>
</tr>
<tr>
<td>THE 1000</td>
<td>Introduction to Theatre Arts</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

### Group II – Mathematics and Natural Science: 12 credits required

#### Math: 6 credits required*

Students may choose two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 1105</td>
<td>College Algebra</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAC 2241</td>
<td>Calculus for the Life Sciences</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MGF 1106</td>
<td>Topics in Mathematics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MGF 1107</td>
<td>Explorations in Mathematics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>STA 2023</td>
<td>Elementary Statistics</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

*(May take any courses of higher content to substitute)*

#### Science: 6-8 credits required

General education requirement in science may be met through any one of the following three options:

### Option I (7 credit hours total)

Students must select at least one course in biological science and one course in physical science from the following list of courses. The selection must include at least one lecture course with its co-requisite laboratory in biological science or physical science.

#### Biological Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1005</td>
<td>Biological Foundations (non-science majors)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1005L</td>
<td>Biological Foundations Lab.</td>
<td>1 cr.</td>
</tr>
<tr>
<td>BSC 1010</td>
<td>Biological Science I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1010L</td>
<td>Biological Science I Lab</td>
<td>1 cr.</td>
</tr>
<tr>
<td>BSC 1025C</td>
<td>Nutrition and Drugs</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1085</td>
<td>Human Anatomy and Physiology I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1085L</td>
<td>Human Anatomy and Physiology I Lab</td>
<td>1 cr.</td>
</tr>
<tr>
<td>BSC 1092</td>
<td>Human Biology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1092L</td>
<td>Human Biology Lab</td>
<td>1 cr.</td>
</tr>
<tr>
<td>IDS 1152C</td>
<td>Environmental Science</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OCB 2000</td>
<td>Marine Biology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OCB 2000L</td>
<td>Marine Biology Lab</td>
<td>1 cr.</td>
</tr>
<tr>
<td>PCB 1730C</td>
<td>Human Reproduction and Inheritance</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

#### Physical Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AST 1002C</td>
<td>Astronomy</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CHM 1020C</td>
<td>Chemistry and Society</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CHM 1032</td>
<td>Chemistry for Health Sciences</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CHM 1032L</td>
<td>Chemistry for Health Sciences Lab</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CHM1045</td>
<td>College Chemistry I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CHM 1045L</td>
<td>College Chemistry I Lab</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ESC1000</td>
<td>Earth Science</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ESC 1000L</td>
<td>Earth Science Lab</td>
<td>1 cr.</td>
</tr>
<tr>
<td>GLY 1010</td>
<td>Physical Geology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GLY 1010L</td>
<td>Physical Geology Lab</td>
<td>1 cr.</td>
</tr>
<tr>
<td>MET 2010C</td>
<td>Meteorology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHY 1053</td>
<td>General Physics I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHY 1053L</td>
<td>General Physics I Lab</td>
<td>1 cr.</td>
</tr>
<tr>
<td>PSC 1515</td>
<td>Energy and the Environment</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PSC 1515L</td>
<td>Energy and the Environment Lab</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

### Option II (8 credit hours total)

Students intending to pursue a major in the sciences, health care, or a related field, may wish to fulfill the general education requirement by selecting a biological science and a physical science with their corequisite laboratories from the following list of courses:

#### Biological Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1010</td>
<td>Biological Science I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1010L</td>
<td>Biological Science I Lab</td>
<td>1 cr.</td>
</tr>
<tr>
<td>BSC 1085</td>
<td>Human Anatomy and Physiology I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1085L</td>
<td>Human Anatomy and Physiology I Lab</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OCB 2000</td>
<td>Marine Biology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OCB 2000L</td>
<td>Marine Biology Lab</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

#### Physical Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 1045</td>
<td>College Chemistry I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CHM 1045L</td>
<td>College Chemistry I Lab</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CHM 1032</td>
<td>Chemistry for Health Sciences</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CHM 1032L</td>
<td>Chemistry for Health Sciences Lab</td>
<td>1 cr.</td>
</tr>
<tr>
<td>GLY 1010</td>
<td>Physical Geology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GLY 1010L</td>
<td>Physical Geology Lab</td>
<td>1 cr.</td>
</tr>
<tr>
<td>PHY 1053</td>
<td>General Physics I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHY 1053L</td>
<td>General Physics I Lab</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

### Option III (6 credit hours total)

Students who possess an interest in science but who do not intend to major in a science discipline may wish to fulfill the general education requirement by completing the two-part integrated natural science course sequence listed below. ISC 1004C and ISC 1005C both cover biological and physical science objectives. Due to the integrated approach of these courses, the student must successfully complete both courses with a grade of “C” or higher for either of the courses to count toward satisfaction of the general education requirement in science. Should the student successfully complete only one of the courses, that course will be considered an elective credit only.

#### Integrated Science Course Program

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISC 1004C</td>
<td>Integrated Natural Science I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ISC 1005C</td>
<td>Integrated Natural Science II</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
### Behavioral Science (3 credits required)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 2000</td>
<td>Introduction to Anthropology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PSY 2012</td>
<td>General Psychology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SYG 2000</td>
<td>Introduction to Sociology</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

### History (3 credits required)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMH 1010</td>
<td>Early American History</td>
<td>3 cr.</td>
</tr>
<tr>
<td>AMH 1020</td>
<td>Modern American History</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EUH 1000</td>
<td>The Western World: Origins to Early Europe</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EUH 1001</td>
<td>The Western World: Modern Europe</td>
<td>3 cr.</td>
</tr>
<tr>
<td>LAH 1020</td>
<td>Survey: Latin American History</td>
<td>3 cr.</td>
</tr>
<tr>
<td>POS 2041</td>
<td>American Government</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

### Behavioral Science, History, Political Science (3 credits required)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMH 1010</td>
<td>Early American History</td>
<td>3 cr.</td>
</tr>
<tr>
<td>AMH 1020</td>
<td>Modern American History</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ANT 2000</td>
<td>Introduction to Anthropology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EUH 1000</td>
<td>The Western World: Origins to Early Europe</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EUH 1001</td>
<td>The Western World: Modern Europe</td>
<td>3 cr.</td>
</tr>
<tr>
<td>LAH 1020</td>
<td>Survey: Latin American History</td>
<td>3 cr.</td>
</tr>
<tr>
<td>POS 2010</td>
<td>Introduction to Political Science</td>
<td>3 cr.</td>
</tr>
<tr>
<td>POS 2041</td>
<td>American Government</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PSY 2012</td>
<td>General Psychology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SYG 2000</td>
<td>Introduction to Sociology</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

### NOTE:
- ENC 1151, Technical English may substitute as the English requirement in the associate in applied science program.
- MGF 1119, Introductory Mathematics with Applications, may substitute as the math requirement in the associate in applied science degree.

### Computer Proficiency Requirement

Computer proficiency is a core requirement of the associate in arts degree general education curriculum. Students must demonstrate computer proficiency in one of the following ways:

1. Successfully complete the approved HCC computer course, CGS 1000 (3 Credits). Successful completion requires that the student earn a grade of “C” or better in the course.
2. Provide an official transcript demonstrating successful completion of a college/university course(s) equivalent to the approved HCC course(s).
3. Pass the proficiency test administered by the college.

Students should check with the counseling/advising office on their campus for specific information about fulfilling the requirement to demonstrate computer proficiency.

### Gordon Rule Requirements

State Board of Education Rule 6A-10.030 (the Gordon Rule) is a rule stipulating requirements of student performance in both the communications and mathematics areas. Satisfactory completion of this rule requires that a student earn a grade of “C” or better in each applicable course.

Students fulfill the Gordon Rule requirement upon successful completion of the general education curriculum. Within the communications area, the student is required to complete writing assignments as designated in the instructors’ syllabi in the areas of English, humanities, history, natural science, physical science, behavioral science, and history/political science. Within the mathematics area, completion of the general education mathematics courses fulfills the requirement. Prerequisite courses must be completed, or appropriate test scores attained, before enrolling in Gordon Rule courses.

### Capstone Course Requirement (IDS 2110, CONNECTIONS)

The capstone course (IDS 2110, Connections) is an interdisciplinary course that allows students to synthesize key components of their general education experience. Based on the selected topics approach, the course summarizes major points in the bodies of knowledge that were acquired while students participated in the general education curriculum, and it provides opportunities for students to use the knowledge and skills gained from their general education experience in an applied manner. Required for graduation by students enrolled in the associate in arts degree program, the course involves research skills, the application of theoretical models, and the use of learned skills. Prior to taking the course, students must have completed at least 45 hours of coursework towards the degree, including at least 24 hours of general education coursework with a minimum grade of “C.”

### State University Foreign Language Requirement

Although a student who has not earned two credits of sequential foreign language at the secondary level is not required to take a foreign language to graduate from HCC, a student must successfully complete 8 to 10 hours of one foreign language at the college level for undergraduate admission to a state university. Thus, if students intend to transfer to a four-year university, they should consider completing their foreign language requirement at HCC.

Two years of American Sign Language at the secondary level or 8 to 10 credits at the postsecondary level also satisfy the language admission requirement.
AA • Associate in Arts Degree

Students may pursue any combination of university transfer programs, but only one AA degree will be awarded. Any transferrable course may be included and used as an AA elective, unless program restrictions apply. The following information represents the most common majors students pursue upon transferring to a university. Consult an academic advisor for information on any majors not listed.

For a list of HCC approved general education courses and specific details regarding individual majors, consult the appropriate advising guide available from the HCC website at www.hccfl.edu or any campus advising office.

AA • Agriculture
AA.AGR (60 credit hours)

This pre-major is for students who want to pursue a four-year degree in agricultural fields such as agricultural-education, media, engineering, agronomy, animal science, forestry, plant science and food science.

Careers include teaching, writing, sales, manufacturing, farm management, extension services, animal breeding, other jobs working directly with plants and animals as well as a variety of positions in agricultural businesses and related industries.

General Education Requirements ..............................................................36 cr.
Recommended Courses/Electives ..............................................................24 cr.

NOTE 1: The list is a guideline. The following courses may be applied toward your degree at the institution where you plan to transfer. It is the student’s responsibility to contact the institution to ensure transferability. Consult an advisor or counselor for general education and recommended courses/electives for this pre-major, or consult the appropriate advising guide on the HCC website (www.hccfl.edu).

NOTE 2: IDS 2110, Connections is required for graduation.

Recommended Courses
BSC 1011 Biological Science II ................................................................................................................... 3 cr.
BSC 1011L Biological Science II Laboratory ................................................................. 1 cr.
CHM 1046 College Chemistry II ................................................................................................. 3 cr.
CHM 1046L College Chemistry II Laboratory ............................................................................................. 1 cr.
ECO 2013 Principles of Macroeconomics ......................................................................................... 3 cr.
ECO 2023 Principles of Microeconomics .................................................................................................. 3 cr.
PHY 1053 General Physics I .................................................................................................... 3 cr.
PHY 1053L General Physics I Laboratory ............................................................................................. 1 cr.
STA 2023 Elementary Statistics ................................................................................................ ................. 3 cr.

NOTE 3: The associate in arts degree may be awarded upon satisfactory completion of 60 credit hours. Students are advised to complete the above planned program in order to transfer into a similar program at senior institutions.

AA • Architecture
AA.ARC (72 credit hours)

This pre-major is for students who want to pursue a four-year degree in architectural design, interior design and landscape architecture.

Careers include interior and building design, furniture and lighting design, urban planning, industrial design and sales as well as jobs in the environmental field and construction industry.

General Education Requirements .............................................................................................................36 cr.
Recommended Courses/Electives ........................................................................................................ 24 cr.

NOTE 1: The list is a guideline. Consult an advisor or counselor for general education and recommended courses/electives for this pre-major, or consult the appropriate advising guide on the HCC website (www.hccfl.edu).

NOTE 2: IDS 2110, Connections is required for graduation.

Recommended Courses
ARC 1211 The Building Arts ................................................................................................................... 3 cr.
ARC* 1301 Architectural Design I .............................................................................................................. 4 cr.
ARC 1302 Architectural Design II ............................................................................................................. 4 cr.
ARC 1701 Survey of Architectural History I ............................................................................................. 3 cr.
NOTE 3: The associate in arts degree may be awarded upon satisfactory completion of 60 credit hours. Students are advised to complete the above planned program in order to transfer into a similar program at senior institutions.

AA • Art
AA.ART (60 credit hours)
This pre-major is for students who want to pursue a four-year college/university degree in such fields as fine arts, art education, art history, and design. The track offers foundation courses in studio skills and studio methods. Major studies include design, drawing, painting, sculpture, printmaking, ceramics, photography, and graphic art. Depending upon personal development, students may choose to work in a variety of art media or concentrate in a specialized area.

General Education Requirements ........................................................................................................................................... 36 cr.
Recommended Courses/Electives ........................................................................................................................................... 24 cr.

NOTE 1: The list is a guideline. Consult an advisor or counselor for general education and recommended courses/electives for this pre-major, or consult the appropriate advising guide on the HCC website (www.hccfl.edu).

NOTE 2: IDS 2110, Connections is required for graduation.

Recommended Courses
ART 1202C Design Foundations ........................................................................................................................................... 3 cr.
ART 1203C Three Dimensional Design ........................................................................................................................................... 3 cr.
ART 1300C Drawing I ........................................................................................................................................... 3 cr.
ART 2301C Drawing II ........................................................................................................................................... 3 cr.
ARH 1050 Art History I ........................................................................................................................................... 3 cr.
ARH 1051 Art History II ........................................................................................................................................... 3 cr.

Select 6 credit hours from the following media courses:
ART 2400C Printmaking I ........................................................................................................................................... 3 cr.
ART 2500C Painting I ........................................................................................................................................... 3 cr.
ART 2600C Introduction to Digital Art ........................................................................................................................................... 3 cr.
ART 2701C Sculpture I ........................................................................................................................................... 3 cr.
ART 2750C Ceramics I ........................................................................................................................................... 3 cr.
PGY 2401C Photography I ........................................................................................................................................... 3 cr.

NOTE 3: The associate in arts degree may be awarded upon satisfactory completion of 60 credit hours. Students are advised to complete the above planned program in order to transfer into a similar program at senior institutions.

AA • Building Construction
AA.BCN (60 credit hours)
This pre-major is for students who want to pursue a four-year degree in building construction, development, contracting or related industries.

Careers include construction manager, contractor, building inspector, owning or managing a construction firm as well as a variety of jobs within the construction industry and related fields.

General Education Requirements ........................................................................................................................................... 36 cr.
Recommended Courses/Electives ........................................................................................................................................... 24 cr.

NOTE 1: The list is a guideline. Consult an advisor or counselor for general education and recommended courses/electives for this pre-major, or consult the appropriate advising guide on the HCC website (www.hccfl.edu).

NOTE 2: IDS 2110, Connections is required for graduation.

Recommended Courses
ACG 2021 Financial Accounting ........................................................................................................................................... 3 cr.
NOTE 3: The associate in arts degree may be awarded upon satisfactory completion of 60 credit hours. Students are advised to complete the above planned track in order to transfer into a similar program at senior institutions.

AA • Business Administration

AA.BUS (60 credit hours)

This pre-major is for students who want to pursue a four-year degree in business, specializing in such fields as accounting, economics, finance, insurance, marketing and management.

Careers include various management positions in nearly every business and industry, such as sales, accountant, labor negotiator and business owner.

General Education Requirements ................................................................. 36 cr.
Recommended Courses/Electives .................................................................. 24 cr.

NOTE 1: The list is a guideline. Consult an advisor or counselor for general education and recommended courses/electives for this pre-major, or consult the appropriate advising guide on the HCC website (www.hccfl.edu).

NOTE 2: IDS 2110, Connections is required for graduation.

Recommended Courses

ACG 2021 Introduction to Financial Accounting ........................................... 3 cr.
ACG 2071 Managerial Accounting ................................................................. 3 cr.
CGS 1000 Introduction to Computers and Technology ................................. 3 cr.
ECO 2013 Principles of Macroeconomics ......... 3 cr.
ECO 2023 Principles of Microeconomics .................................................... 3 cr.
MAC 2233 Calculus for Business ................................................................. 3 cr.
STA 2023 Elementary Statistics ................................................................. 3 cr.

NOTE 3: The associate in arts degree may be awarded upon satisfactory completion of 60 credit hours. Students are advised to complete the above planned program in order to transfer into a similar program at senior institutions.

AA • Computer Information Systems

AA.CIS (60 credit hours)

This pre-major is for students who want to pursue a four-year degree in computer and information sciences and work in business or related fields.

Careers include finance analysts, actuaries, statisticians, economists, and positions in designing, testing and implementing computer programs in various segments of business and industry, management, operations and business planning.

General Education Requirements ................................................................. 36 cr.
Recommended Courses/Electives .................................................................. 24 cr.

NOTE 1: The list is a guideline. Consult an advisor or counselor for general education and recommended courses/electives for this pre-major, or consult the appropriate advising guide on the HCC website (www.hccfl.edu).

NOTE 2: IDS 2110, Connections is required for graduation.

Recommended Courses

ACG 2021 Introduction to Financial Accounting ........................................... 3 cr.
ACG 2071 Managerial Accounting ................................................................. 3 cr.
CGS 1000 Introduction to Computers and Technology ................................. 3 cr.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAA 1680L</td>
<td>Dance Ensemble</td>
<td>1 cr.</td>
</tr>
<tr>
<td>DAA 2206B</td>
<td>Ballét IV</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>DAA 2205B</td>
<td>Ballét III</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>DAN 2100</td>
<td>Introduction to Dance</td>
<td>3 cr.</td>
</tr>
<tr>
<td>DAA 1204</td>
<td>Ballét II</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>DAA 1200B</td>
<td>Ballét I</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>STA 2023</td>
<td>Elementary Statistics</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

NOTE 3: The associate in arts degree may be awarded upon satisfactory completion of 60 credit hours. Students are advised to complete the above planned program in order to transfer into a similar program at senior institutions.

### AA • Computer Science (Engineering)

**AA.COMP (65 credit hours)**

This pre-major is for students who want to pursue a four-year degree in computer and information engineering sciences. Careers are of a technical nature, including planning and developing new computer systems, computer programming, software development, systems analyst and technical writing.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 2048</td>
<td>General Physics with Calculus I</td>
<td>4 cr.</td>
</tr>
<tr>
<td>PHY 2049</td>
<td>General Physics with Calculus II</td>
<td>4 cr.</td>
</tr>
<tr>
<td>MAC 2311</td>
<td>Calculus and Analytic Geometry I</td>
<td>5 cr.</td>
</tr>
<tr>
<td>MAC 2312</td>
<td>Calculus and Analytic Geometry II</td>
<td>5 cr.</td>
</tr>
<tr>
<td>MAC 2313</td>
<td>Calculus and Analytical Geometry</td>
<td>5 cr.</td>
</tr>
</tbody>
</table>

**Recommended Courses/Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COP 1120</td>
<td>COBOL, Beginning</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ECO 2013</td>
<td>Principles of Macroeconomics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ECO 2023</td>
<td>Principles of Microeconomics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAC 2233</td>
<td>Calculus for Business</td>
<td>3 cr.</td>
</tr>
<tr>
<td>STA 2023</td>
<td>Elementary Statistics</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

NOTE 1: The list is a guideline. Consult an advisor or counselor for general education and recommended courses/electives for this pre-major, or consult the appropriate advising guide on the HCC website (www.hccfl.edu).

NOTE 2: IDS 2110, Connections is required for graduation.

### Recommended Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 2311</td>
<td>Calculus and Analytic Geometry I</td>
<td>5 cr.</td>
</tr>
<tr>
<td>MAC 2312</td>
<td>Calculus and Analytic Geometry II</td>
<td>5 cr.</td>
</tr>
<tr>
<td>MAC 2313</td>
<td>Calculus and Analytical Geometry</td>
<td>5 cr.</td>
</tr>
<tr>
<td>PHY 2048L</td>
<td>General Physics with Calculus I Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>PHY 2049L</td>
<td>General Physics with Calculus II Laboratory</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

NOTE 3: The associate in arts degree may be awarded upon satisfactory completion of 60 credit hours. Students are advised to complete the above planned track in order to transfer into a similar program at senior institutions.

### AA • Dance

**AA.DAN (63 credit hours)**

This pre-major is for students who wish to pursue a four-year degree in dance. Careers include performing, teaching, and choreographing.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAA 1101</td>
<td>Modern Dance I</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>DAA 1104</td>
<td>Modern Dance II</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>DAA 2105</td>
<td>Modern Dance III</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>DAA 2106</td>
<td>Modern Dance IV</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>DAA 1200</td>
<td>Ballet I</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>DAA 1204</td>
<td>Ballet II</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>DAA 2205</td>
<td>Ballet III</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>DAA 2206</td>
<td>Ballet IV</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>DAA 1610L</td>
<td>Dance Composition I</td>
<td>2 cr.</td>
</tr>
<tr>
<td>DAA 1680L</td>
<td>Dance Ensemble</td>
<td>1 cr.</td>
</tr>
<tr>
<td>DAN 1600C</td>
<td>Music for Dance</td>
<td>2 cr.</td>
</tr>
<tr>
<td>DAN 2100</td>
<td>Introduction to Dance</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**Recommended Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAA 1101</td>
<td>Modern Dance I</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>DAA 1104</td>
<td>Modern Dance II</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>DAA 2105</td>
<td>Modern Dance III</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>DAA 2106</td>
<td>Modern Dance IV</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>DAA 1200</td>
<td>Ballet I</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>DAA 1204</td>
<td>Ballet II</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>DAA 2205</td>
<td>Ballet III</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>DAA 2206</td>
<td>Ballet IV</td>
<td>2-4 cr.*</td>
</tr>
<tr>
<td>DAA 1610L</td>
<td>Dance Composition I</td>
<td>2 cr.</td>
</tr>
<tr>
<td>DAA 1680L</td>
<td>Dance Ensemble</td>
<td>1 cr.</td>
</tr>
<tr>
<td>DAN 1600C</td>
<td>Music for Dance</td>
<td>2 cr.</td>
</tr>
<tr>
<td>DAN 2100</td>
<td>Introduction to Dance</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Specified Elective

HILLSBOROUGH COMMUNITY COLLEGE CATALOG 2012-2013

www.hccfl.edu 48
Select 1 specified elective from the following:

DAA 1680L Dance Ensemble .................................................................................................................. 1 cr.
DAA 1900 Dance Practicum ................................................................................................................. 1 cr.
DAA 2500L Jazz Dance ......................................................................................................................... 1 cr.

* Students must enroll in a level of ballet or modern dance each semester. A specific level of ballet (I-IV) and modern dance (I-IV) may be taken twice for credit (eight hours of any level).

NOTE 3: Although students receive an associate in arts degree after 60 credit hours are earned, it is recommended that students take additional program electives, and participate in ballet, modern dance and dance ensemble each semester. This proficiency level is important for acceptance at state universities.

AA • Dramatic Arts

AA.THE (60 credit hours)

This pre-major is for students who wish to pursue a four-year degree in drama or theatre. Careers include performing, teaching, writing, and directing.

General Education Requirements ........................................................................................................ 36 cr.
Recommended Courses/Electives ........................................................................................................ 24 cr.

NOTE 1: The list is a guideline. Consult an advisor or counselor for general education and recommended courses/electives for this pre-major, or consult the appropriate advising guide on the HCC website (www.hccfl.edu).

NOTE 2: IDS 2110, Connections is required for graduation.

Recommended Courses

THE 1000 Introduction to Theatre ........................................................................................................ 3 cr.
TPP 1110 Acting I .................................................................................................................................. 3 cr.
TPP 1111 Acting II .................................................................................................................................. 3 cr.
TPA 1290 Performance Workshop ......................................................................................................... 3 cr.
TPA 1200 Stagecraft ............................................................................................................................... 3 cr.
TPA 1248 Make-up for the Stage .............................................................................................................. 3 cr.
THE 1304 Script Analysis ...................................................................................................................... 3 cr.
TPP 1160 Voice and Movement Techniques ........................................................................................... 3 cr.

NOTE 3: The associate in arts degree may be awarded upon satisfactory completion of 60 credit hours. Students are advised to complete the above planned program in order to transfer into a similar program at senior institutions.

AA • Education/Teacher Preparation

AA.EDU (60 credit hours)

This pre-major is for students who want to pursue a four-year degree in education. Consult the appropriate advising guide on the HCC website at www.hccfl.edu.

General Education Requirements ....................................................................................................... 36 cr.
Specified Electives ............................................................................................................................... 9 cr.
Electives* ............................................................................................................................................... 9 cr.

Diversity/International Focused Electives** .......................................................................................... 6 cr.

Students planning to become classroom teachers must have a standard high school diploma or a GED.

NOTE 1: The list is a guideline. Consult an advisor or counselor for general education and recommended courses/electives for this pre-major, or consult the appropriate advising guide on the HCC website (www.hccfl.edu).

NOTE 2: IDS 2110, Connections is required for graduation.

Specified Electives

EDF 1005 Introduction to the Teaching Profession .............................................................................. 3 cr.
EDF 2085 Introduction to Diversity for Educators .............................................................................. 3 cr.
EME 2040 Introduction to Technology for Educators ........................................................................ 3 cr.
Electives* ............................................................................................................................................... 9 cr.

Select 6 credit hours from the following international or diversity focused courses:**

AFA 1000 Introduction to Black Studies .............................................................................................. 3 cr.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 2000</td>
<td>Introduction to Anthropology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ARH 1000</td>
<td>Understanding Visual Art</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ANT 2410</td>
<td>Cultural Anthropology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ARH 1050</td>
<td>Art History I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ARH 1051</td>
<td>Art History II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>DAN 2100</td>
<td>Introduction to Dance</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUM 2210</td>
<td>World Humanities: Prehistory to Early Modern Era</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUM 2230</td>
<td>World Humanities: Early Modern to Contemporary</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUM 2410</td>
<td>Asian Humanities</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUM 2420</td>
<td>African Humanities</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUM 2461</td>
<td>Latin-American Humanities</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHI 1600</td>
<td>Ethics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHI 1100</td>
<td>Elementary Logic</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHI 1010</td>
<td>Introduction to Music</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MUL 1010</td>
<td>Introduction to Music</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ARH 1050</td>
<td>Introduction to Religion</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PSY 2012</td>
<td>General Psychology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SYG 2000</td>
<td>Introduction to Sociology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>THE 1000</td>
<td>Introduction to Theatre Arts</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**NOTE 3:** The associate in arts degree may be awarded upon satisfactory completion of 60 credit hours. Students are advised to complete the above planned program in order to transfer into a similar program at senior institutions.

**Students should select these electives based on common program prerequisites for the intended upper division major.**

**Any approved general education course previously listed, but not used to satisfy another general education requirement may be used to fulfill this area.**

### AA • Engineering

#### AA.ENG (60 credit hours)

This pre-major is for students who want to pursue a four-year degree in electrical, mechanical, civil, computer science, aerospace, nuclear, agricultural, industrial and environmental engineering. Options in surveying and mapping and materials design and testing are also available.

Careers include positions in the areas of design, testing, research, architecture, electronics, robotics, manufacturing, sales, construction management and technical writing.

#### General Education Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 2311</td>
<td>Calculus and Analytic Geometry I</td>
<td>5 cr.</td>
</tr>
<tr>
<td>MAC 2312</td>
<td>Calculus and Analytic Geometry II</td>
<td>5 cr.</td>
</tr>
<tr>
<td>MAC 2313</td>
<td>Calculus and Analytic Geometry III</td>
<td>5 cr.</td>
</tr>
<tr>
<td>MAP 2302</td>
<td>Differential Equations</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHY 2048</td>
<td>General Physics with Calculus I</td>
<td>4 cr.</td>
</tr>
<tr>
<td>PHY 2048L</td>
<td>General Physics with Calculus I Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>PHY 2049</td>
<td>General Physics with Calculus II</td>
<td>4 cr.</td>
</tr>
<tr>
<td>PHY 2049L</td>
<td>General Physics with Calculus II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CHM 1045</td>
<td>College Chemistry I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CHM 1045L</td>
<td>College Chemistry I Laboratory</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

**NOTE 1:** The list is a guideline. Consult an advisor or counselor for general education and recommended courses/electives for this pre-major, or consult the appropriate advising guide on the HCC website (www.hccfl.edu).

**NOTE 2:** IDS 2110, Connections is required for graduation.

#### Recommended Courses/Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 2311</td>
<td>Calculus and Analytic Geometry I</td>
<td>5 cr.</td>
</tr>
<tr>
<td>MAC 2312</td>
<td>Calculus and Analytic Geometry II</td>
<td>5 cr.</td>
</tr>
<tr>
<td>MAC 2313</td>
<td>Calculus and Analytic Geometry III</td>
<td>5 cr.</td>
</tr>
<tr>
<td>MAP 2302</td>
<td>Differential Equations</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHY 2048</td>
<td>General Physics with Calculus I</td>
<td>4 cr.</td>
</tr>
<tr>
<td>PHY 2048L</td>
<td>General Physics with Calculus I Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>PHY 2049</td>
<td>General Physics with Calculus II</td>
<td>4 cr.</td>
</tr>
<tr>
<td>PHY 2049L</td>
<td>General Physics with Calculus II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CHM 1045</td>
<td>College Chemistry I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CHM 1045L</td>
<td>College Chemistry I Laboratory</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

**NOTE 3:** The associate in arts degree may be awarded upon satisfactory completion of 60 credit hours. Students are advised to complete the above planned program in order to transfer into a similar program at senior institutions.
AA • Graphic Design

AA.GRA (60 credit hours)
This pre-major is for students who wish to pursue a four-year degree in graphic arts or commercial arts. Careers include creating graphics for newspapers, television, web pages, magazines or any media format.

General Education Requirements .................................................................................................................. 36 cr.
Recommended Courses/Electives ................................................................................................................. 24 cr.

NOTE 1: The list is a guideline. Consult an advisor or counselor for general education and recommended courses/electives for this pre-major, or consult the appropriate advising guide on the HCC website (www.hccfl.edu).

NOTE 2: IDS 2110, Connections is required for graduation.

Recommended Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARH 1051</td>
<td>Art History I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ART 1202C</td>
<td>Design Foundations</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ART 1300C</td>
<td>Drawing I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GRA 2111C</td>
<td>Graphic Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PGY 2401C</td>
<td>Photography I</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Select 9 credit hours from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARH 1050</td>
<td>Art History I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ART 1203C</td>
<td>Three Dimensional Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ART 2301C</td>
<td>Drawing II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GRA 2156C</td>
<td>Digital Illustration</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PGY 2801C</td>
<td>Digital Photography I</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

NOTE 3: The associate in arts degree may be awarded upon satisfactory completion of 60 credit hours. Students are advised to complete the above planned program in order to transfer into a similar program at senior institutions.

AA • Hospitality Administration Management

AA.HOS.ADMIN.MGMT (60 credit hours)
This pre-major is for students who want to pursue a four-year degree in hospitality administration management. It allows a student the ability to complete the 36 hours of general education while meeting the common prerequisite requirements for university admission into the hospitality administration program.

General Education Requirements .................................................................................................................. 36 cr.
Recommended Courses/Electives ................................................................................................................. 24 cr.

NOTE 1: The list is a guideline. Consult an advisor or counselor for general education and recommended courses/electives for this pre-major, or consult the appropriate advising guide on the HCC website (www.hccfl.edu).

NOTE 2: IDS 2110, Connections is required for graduation.

Recommended Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2021</td>
<td>Financial Accounting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ACG 2071</td>
<td>Managerial Accounting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers &amp; Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ECO 2013</td>
<td>Principles of Macroeconomics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ECO 2023</td>
<td>Principles of Microeconomics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HFT 1000</td>
<td>Introduction to Hospitality Industry Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAC 2233</td>
<td>Calculus for Business</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Electives .................................................................................................................................................. 3 cr.

NOTE 3: The associate in arts degree may be awarded upon satisfactory completion of 60 credit hours. Students are advised to complete the above planned program in order to transfer into a similar program at senior institutions.

AA • Liberal Arts and Sciences

AA.LA (60 credit hours)
This pre-major is for students who want to pursue a four-year degree in liberal arts or a variety of fields. Depending upon the focus of study, careers are available in such fields as linguistics, criminal justice, history, ethnic studies, foreign language, social sciences, journalism and computer science.

General Education Requirements .................................................................................................................. 36 cr.
Recommended Courses/Electives ............................................................................................................ 24 cr.

NOTE 1: Consult an advisor or counselor for general education and recommended courses/electives for this pre-major, or consult the appropriate advising guide on the HCC website (www.hccfl.edu).

NOTE 2: IDS 2110, Connections is required for graduation.

NOTE 3: The associate in arts degree may be awarded upon satisfactory completion of 60 credit hours. Students are advised to complete the above planned program in order to transfer into a similar program at senior institutions.

AA • Mass Communications
AA.MMC (60 credit hours)
This pre-major is for students who want to pursue a four-year degree in mass communications, journalism, advertising, public relations, education and telecommunications.

Careers include writing for various media, broadcasting, corporate communications, spokesperson for governmental agencies, various jobs such as copy writing within the advertising and public relations fields, video and audio-visual production and sales and political lobbyist.

General Education Requirements ........................................................................................... 36 cr.

Specified General Education Requirements:
AMH 1010 Early American History
POS 2041 American Government

Recommended General Education Course:
STA 2023 Elementary Statistics

Recommended Courses/Electives ............................................................................................................ 24 cr.

NOTE 1: The list is a guideline. Consult an advisor or counselor for general education and recommended courses/electives for this pre-major, or consult the appropriate advising guide on the HCC website (www.hccfl.edu).

NOTE 2: IDS 2110, Connections is required for graduation.

Recommended Courses
AMH 1020 Modern American History....................................................................................................... 3 cr.
ECO 2013 Principles of Macroeconomics or ECO 2023, Principles of Microeconomics..................... 3 cr.
ENC 2341 Magazine Writing and Design ................................................................................................. 3 cr.
JOU 2100C Journalistic Writing and Reporting ......................................................................................... 3 cr.
MMC 2000 Introduction to Mass Communication ................................................................................... 3 cr.
MMC 2100C Writing for Mass Communication ....................................................................................... 3 cr.
POS 2112 State and Local Government .................................................................................................... 3 cr.
PUR 2003 Introduction to Public Relations................................................................................................. 3 cr.

NOTE 3: The associate in arts degree may be awarded upon satisfactory completion of 60 credit hours. Students are advised to complete the above planned program in order to transfer into a similar program at senior institutions.

AA • Medical Sciences: Dental, Medical and Veterinary
AA.DENT, AA.MED, AA.VET (60 credit hours)
This pre-major is for students who want to pursue a four-year degree and/or professional programs in these fields. Depending upon the chosen degree, careers include dentist, physician, chiropractor, pharmacist, veterinarian and teacher, plus a variety of other jobs in related fields such as physical or occupational therapist, researcher and salesperson.

General Education Requirements ........................................................................................... 36 cr.

Recommended Courses/Electives ............................................................................................................ 24 cr.

NOTE 1: The list is a guideline. Consult an advisor or counselor for general education and recommended courses/electives for this pre-major, or consult the appropriate advising guide on the HCC website (www.hccfl.edu).

NOTE 2: IDS 2110, Connections is required for graduation.

Recommended Courses
BSC 1011 Biological Science II................................................................................................................... 3 cr.
BSC 1011L Biological Science II Laboratory ................................................................................................. 1 cr.
CHM 1046 College Chemistry II .................................................................................................................. 3 cr.
CHM 1046L College Chemistry II Laboratory ................................................................................................. 1 cr.
### AA • Music

**AA.MUSIC (65 credit hours)**

This pre-major is for students who want to pursue a four-year degree in music, music education, therapy, publishing, or music history. Careers include performing, composing, teaching, music therapy, music critic, booking agent, concert manager, publishing, sales, music storeowner, instrument repair, audio and sound technician.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 2210</td>
<td>Organic Chemistry I</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CHM 2210L</td>
<td>Organic Chemistry I Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CHM 2211</td>
<td>Organic Chemistry II</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CHM 2211L</td>
<td>Organic Chemistry II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>MAC 2311</td>
<td>Calculus and Analytic Geometry I or MAC 2241</td>
<td>5 cr.*</td>
</tr>
<tr>
<td>PHY 1054</td>
<td>General Physics II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHY 1054L</td>
<td>General Physics II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>STA 2023</td>
<td>Elementary Statistics</td>
<td>3 cr.*</td>
</tr>
</tbody>
</table>

**NOTE 1:** The list is a guideline. Consult an advisor or counselor for general education and recommended courses/electives for this pre-major, or consult the appropriate advising guide on the HCC website (www.hccfl.edu).

**NOTE 2:** IDS 2110, Connections is required for graduation.

**Recommended Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>*MUN _____</td>
<td>Performance Courses (1 cr. hr. ea.)</td>
<td>4 cr.</td>
</tr>
<tr>
<td>*MUT 1111</td>
<td>Theory I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MUT 1112</td>
<td>Theory II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MUT 2116</td>
<td>Theory III</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MUT 2117</td>
<td>Theory IV</td>
<td>3 cr.</td>
</tr>
<tr>
<td>*MUT 1241L</td>
<td>Sight Singing and Ear Training I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>MUT 1242L</td>
<td>Sight Singing and Ear Training II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>MUT 2246L</td>
<td>Sight Singing and Ear Training III</td>
<td>1 cr.</td>
</tr>
<tr>
<td>MUT 2247L</td>
<td>Sight Singing and Ear Training IV</td>
<td>1 cr.</td>
</tr>
<tr>
<td>**MUS 1010</td>
<td>Recital Attendance Courses</td>
<td>0 cr.</td>
</tr>
<tr>
<td>*MV _____</td>
<td>Applied Music Courses</td>
<td>8 cr.</td>
</tr>
</tbody>
</table>

**NOTE:** Specific performance and applied music course numbers vary by student based on their instrument and level. Consult the schedule for the current course number.

* Recommended course(s) for the first semester.

**Required of all students enrolled in applied music courses.

**NOTE 3:** The associate in arts degree may be awarded upon satisfactory completion of 60 credit hours. Students are advised to complete the above planned track in order to transfer into a similar program at senior institutions.

### AA • Pharmacy

**AA.PHAR (66 credit hours)**

This pre-major is for students who want to pursue a degree in pharmacy.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
</table>

**Recommended Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1011</td>
<td>Biological Science II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1011L</td>
<td>Biological Science II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CHM 1046</td>
<td>College Chemistry I</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**NOTE 1:** The list is a guideline. Consult an advisor or counselor for general education and recommended courses/electives for this pre-major, or consult the appropriate advising guide on the HCC website (www.hccfl.edu).

**NOTE 2:** IDS 2110, Connections is required for graduation.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 1046L</td>
<td>College Chemistry II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CHM 2210</td>
<td>Organic Chemistry I</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CHM 2210L</td>
<td>Organic Chemistry I Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CHM 2211</td>
<td>Organic Chemistry II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CHM 2211L</td>
<td>Organic Chemistry II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>MAC 2311</td>
<td>Calculus and Analytic Geometry I or MAC 2241, Calculus for Life Sciences</td>
<td>5 cr.</td>
</tr>
<tr>
<td>PHY 1053</td>
<td>General Physics I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHY 1053L</td>
<td>General Physics I Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>PHY 1054</td>
<td>General Physics II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHY 1054L</td>
<td>General Physics II Laboratory</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

**NOTE 3:** The associate in arts degree may be awarded upon satisfactory completion of 60 credit hours. Students are advised to complete the above planned track in order to transfer into a similar program at senior institutions.
Associate in Science Degree/
Associate in Applied Science Degree

Hillsborough Community College will award an associate in science (AS) degree if students complete a minimum of 60 credit hours in a curriculum designed to prepare students for employment. If students are interested in a specialized college program to prepare them for a job in business or industry, one of these degrees may be the right choice. If students decide to get a four-year degree, they may be able to transfer some or all of the courses taken here to a senior institution. Public universities in Florida now accept seven AS degrees to transfer to programs in their institutions. The AS degrees in this articulation agreement are Hospitality and Tourism Management, Computer Engineering, Electronics Engineering Technology, Nursing, Business Administration, Radiography and Criminal Justice Technology.

Other AS degrees may be transferred to a variety of four-year colleges and universities under individual agreements. Consult an academic advisor for details.

General Education Requirements for the AS and the AAS Degree

NOTE: Students must complete a minimum of 15 credit hours.

NOTE: Students within an AS/AAS degree program must earn a grade of “C” or better in each applicable course in order to fulfill the college’s general education requirements. A grade of “D” in a general education course can only be applied as elective credit.

Humanities/Fine Arts: 6 credits required
(3 credit hours must be in Humanities)

Mathematics/Natural Science: 3 credits required

Social/Behavioral Sciences: 3 credits required

Program Specified General Education Requirements: 3 credits required

General education courses are listed in the General Education section of this catalog. Consult an advisor or counselor for specific program requirements or consult the appropriate advising guide on the HCC website (www.hccfl.edu).

Terms/Definitions:

College Credit Certificate (CCC)

College credit programs are offered for those who seek to learn new skills or to refresh or upgrade their present skills.

Advanced Technical Certificate (ATC)

This short-term certificate provides students with advanced training above the associate in science degree.

Applied Technology Diploma (ATD)

The ATD is a college-credit certificate, job preparatory program.

Postsecondary Adult Vocational (PSAV) Certificate

The PSAV Certificate is a non-college-credit job preparatory program.

Occupational Programs

Associate in Science Degrees

Accounting Technology
Aquaculture
Architectural Design/Construction Technology
Biotechnology
Business Administration
Computer Engineering Technology
Computer Information Administrator
Computer Programming
Construction Management Technology
Counseling and Human Services
Criminal Justice Technology
Culinary Management
Database Technology
Dental Hygiene
Diagnostic Medical Sonography Technology
Dietetic Technician
Digital Media/Multimedia Technology
Digital Television and Media Production
Early Childhood Management
Electronics Engineering Technology
Emergency Medical Services
Engineering Technology
Environmental Science Technology
Fire Science Technology
Hospitality and Tourism Management
Industrial Management Technology
Information Technology Security
Internet Services Technology
Network Administrator
Nuclear Medicine Technology
Nursing
Office Administration
Optical Management Technology
Opticianry
Paralegal Studies (Legal Assisting)
Radiation Therapy
Radiography
Respiratory Care
Restaurant Management
Sign Language Interpretation
Veterinary Technology
College Credit Certificates
Accounting Applications
Aquaculture Technology
AutoCAD Foundations
Automation
Biotechnology Specialist
Broadcast Production
Business Development and Entrepreneurship
Business Management
Business Operations
Business Specialist
Cable Installation
Chef’s Apprentice
Cisco CCNA
Computer Programming
Computer Programming Specialist
Crime Scene
Culinary Arts
Database Administrator
Digital Media/Multimedia Instructional Technology
Digital Media/Multimedia Production
Digital Media/Multimedia Video Production
Digital Media/Multimedia Web Production
Digital Video Production
Drafting
Electronics Technician
Emergency Medical Technician
Engineering Technology Support Specialist
Event Planning Management
Eye Care Technician
Food and Beverage Management
Food and Beverage Operations
Game Authoring
Human Resource Management
Information Technology Analysis
Information Technology Management
Information Technology Support Specialist
Information Technology Technician
Information Technology Security
Internet Services Technology - Web Development Specialist - Designer
Internet Services Technology - Web Development Specialist - Developer
Irrigation Technology
Landscape and Horticulture Professional
Landscape and Horticulture Specialist
Landscape and Horticulture Technician
Lean Manufacturing
Medical Information Coder/Biller - Medical Biller
Medical Information Coder/Biller - Medical Coder
Medical Office Management
Medical Office Specialist
Microcomputer Repairer/Installer
Network Communications - LAN
Office Management
Office Software Applications Specialist
Office Software Applications Support
Office Specialist
Office Support
Ophthalmic Lab Technician
Paramedic
Pneumatics, Hydraulics and Motors
Radiation Therapy Specialist
Records Management
Records Management Specialist
Records Management Support
Software Applications Management
Television Production
Unix/Linux System Administration
Video Editing and Post Production
Water Quality Technician
Wireless and IP Communications

Advanced Technical Certificates
Executive Fire Officer
Paralegal/Legal Assisting
Visual Assessment

Applied Technology Diplomas
Family Health and Support Worker
Pest Control Operations

Postsecondary Adult Vocational Certificates
Autobody Collision Repair and Refinishing
Automotive Service Technology
Bail Bonding
Bus Transit Technician
Correctional Officer
Dental Assisting
Early Childhood Education
Field Service Engineer Apprenticeship
Fire Fighting
Geriatric Care Assistant
Law Enforcement
Law Enforcement Auxiliary
Private Investigation
Public Safety Telecommunications
Recreational Vehicle Service Technician
Sheet Metal Fabrication Technology
Welding Technology
Health Sciences

General Information

HCC offers associate degrees in the following health sciences areas: Counseling and Human Services; Dental Hygiene; Diagnostic Medical Sonography Technology; Emergency Medical Services; Maternal and Child Services; Nuclear Medicine Technology; Nursing; Opticianry; Optical Management Technology; Radiation Therapy; Respiratory Care; Radiography and Sign Language Interpretation. In addition to the degree programs, the College offers college credit certificate programs in Emergency Medical Technician, Eye Care Technician, Ophthalmic Laboratory Technician, Paramedic, and Radiation Therapy Specialist, and Visual Assessment; an Applied Technology diploma in Family Health and Support Worker; and a Postsecondary Adult Vocational certificate in Dental Assisting. The college credit certificate programs are one-year programs for individuals who are pre-certified or licensed in a health science profession. Most health sciences and nursing programs are limited access programs with competitive application procedures because of the limited number of clinical placements the College has available for students to gain practical experience.

For more information about health science program admissions, contact the student services office at the Dale Mabry Campus at (813) 253-7364 or at www.hccfl.edu/depts/healthsci.

Hillsborough Community College and its health science programs reserve the right to make changes in the regulations, offerings; prerequisites, requirements and any provision announced in this catalog at any time, as circumstances require.

Students who hold prior degrees and are taking preparatory coursework necessary for enrollment in an eligible program are eligible for loans for one consecutive 12-month period.

AS/AAS • Counseling and Human Services

AS.HUS/AS.HUS.MCS/AAS.HUS/AAS.HUS.AAS (65 Credit Hours)

This program prepares the student to work in the fields of counseling, social work and rehabilitation. Counseling and human services practitioners may, under supervision, provide individual and group counseling, lead workshops, provide training in daily living skills, assist with vocational planning, organize group activities, provide case management services, and complete records and reports. Further, they may act as mediators between clients and service agencies, direct clients to appropriate community facilities, and represent their clients before local service providers and government agencies.

Counseling and human services professionals serve clients of all ages and backgrounds in hospitals, halfway houses, detoxification and drug treatment centers, mental health clinics, residential facilities, outpatient programs, nursing homes, adult and adolescent criminal justice facilities, adoption agencies and schools. The counseling and human service practitioner usually functions as a member of a treatment team comprised of professionals from many disciplines, in order to provide effective and comprehensive care for individuals in need.

The class work in this program includes courses in counseling theory and applied therapeutic techniques, crisis intervention, psychology, sociology, human development, group counseling, multicultural issues, professionalism and ethics.

Supervised internships in community facilities and programs are a major component of the program. Students learn to translate theory into actual practice under the guidance of highly trained and experienced faculty members and community professionals. This “hands-on” experience helps the graduate of this program to easily find employment in the profession.

The Counseling and Human Services program is primarily an evening program in order to accommodate students who are working during the day. The curriculum provides a strong foundation for securing employment and for pursuing advanced studies. Many of the graduates of the program continue their studies to earn their bachelors and masters degrees, often while employed in the profession.

The Counseling and Human Services program is nationally accredited by the Council for Standards in Human Service Education (CSHSE), PMB 703, 1050 Larrabee Avenue, Suite 104, Bellingham, WA 98225-7367, (360) 650-3531 or www.csbse.org. It is the only nationally accredited Counseling and Human Services program in the state of Florida.

NOTE: All graduates of this AS degree program shall be granted admission into the Social Work baccalaureate degree program at St. Leo University.

General Education Requirements for AS/AAS Counseling and Human Services, and AS/AAS Maternal and Child Services

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1025</td>
<td>Nutrition and Drugs</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1025L</td>
<td>Nutrition and Drugs Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>BSC 1085</td>
<td>Human Anatomy and Physiology I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1085L</td>
<td>Human Anatomy and Physiology I Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>PCB 1730</td>
<td>Human Reproduction and Inheritance</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PCB 1730L</td>
<td>Human Reproduction and Inheritance Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MGF 1119</td>
<td>Introductory Mathematics w/Applications (non-transfer) or General Education Mathematics (transfer)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PSY 2012</td>
<td>General Psychology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SYG 2000</td>
<td>Introduction to Sociology</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Humanities General Education</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**NOTE:** Selected either the Counseling and Human Services program required courses or the Maternal and Child Services program required courses to complete the AS or AAS degree.

### AS/AAS • Counseling and Human Services  
**AS.HUS/AAS.HUS**

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GEY 1000</td>
<td>Issues of Aging</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 1001</td>
<td>Introduction to Human Services</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 1024</td>
<td>Abnormal Behavior: Etiology and Treatment</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 1111</td>
<td>Interpersonal Skills in Human Services</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 1200</td>
<td>Introduction to Group Process</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 1320</td>
<td>Crisis Intervention</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 1406</td>
<td>Etiology and Treatment of Substance Use Disorders</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 1540</td>
<td>Principles for Understanding and Working with Families</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 1550</td>
<td>Multicultural Perspective in Human Services</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 1820</td>
<td>Counseling and Human Services Practicum I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 2008</td>
<td>Psychotherapy: Theory and Practice</td>
<td>4 cr.</td>
</tr>
<tr>
<td>HUS 2311</td>
<td>Strategies of Behavior Modification</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 2821</td>
<td>Counseling and Human Services Practicum II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 2822</td>
<td>Counseling and Human Services Practicum III</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

### AS/AAS • Maternal and Child Services  
**AS.HUS.MCS/AAS.HUS.MCS**

This curriculum track provides students with the knowledge and skills required to be a human services professional and with the specialized training needed to help families and young children who are at risk for behavioral and psychological problems.

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 1001</td>
<td>Introduction to Human Services</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 1024</td>
<td>Abnormal Behavior: Etiology and Treatment</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 1111</td>
<td>Interpersonal Skills in Human Services</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 1200</td>
<td>Introduction to Group Process</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 1406</td>
<td>Etiology and Treatment of Substance Use Disorders</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 1540</td>
<td>Principles for Understanding and Working w/Families</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 1550</td>
<td>Multicultural Perspective in Human Services</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 2008</td>
<td>Psychotherapy: Theory and Practice</td>
<td>4 cr.</td>
</tr>
<tr>
<td>HUS 2311</td>
<td>Strategies of Behavior Modification</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 2542</td>
<td>Working w/Families in the Perinatal Period: Impact on Mother, Child and Family</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 2821</td>
<td>Human Services Practicum II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 2822</td>
<td>Human Services Practicum III</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 2840</td>
<td>Field Placement in Maternal and Child Services</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

### ATD • Family Health and Support Worker  
**ATD.HUS.FHSW (21 Credit Hours)**

This 21-credit hour applied technology diploma is designed to provide training for non-degree, front-line community health workers (CHWs) who are currently employed as home visitors, family support workers, case managers, resource workers, peer counselors, or public health aides. The purpose of the program is to increase the occupational competence and job performance of CHWs who work in public health, child development, and family service agencies and who provide outreach and support services to childbearing families and their children.
Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUS 1001</td>
<td>Introduction to Human Services</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 1111</td>
<td>Interpersonal Skills in Human Services</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 1540</td>
<td>Principles for Understanding and Working with Families</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 1550</td>
<td>Multicultural Perspective in Human Services</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 2541</td>
<td>Working w/Families in the Perinatal Period: Impact on Mother, Child and Family</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUS 2840</td>
<td>Field Placement in Maternal and Child Services</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

NOTE: Students who complete the Family Health and Support Worker ATD are eligible to transfer the 21 credits to the AAS degree in Counseling and Human Services, and Maternal and Child Services programs.

AS • Dental Hygiene

AS.DENT (88 Credit Hours)

The Dental Hygiene Program leads to an associate in science degree and provides students with the skills and knowledge needed to complete national and state or regional board examinations to become licensed dental hygienists. A dental hygienist is a vital member of the dental team who performs preventive dental procedures that include scaling, polishing and root planing procedures, exposing and processing radiographs, fluoride and dental sealant applications, and oral hygiene education. The graduate dental hygienist also becomes certified to perform expanded duties that are permitted by Florida Statute Title XXII for dental auxiliaries. The dental hygiene curriculum includes five consecutive semesters of courses and requires a time commitment of 35-40 hours weekly. The program is offered on the Dale Mabry Campus only.

The Dental Hygiene program is accredited by the American Dental Association Commission on Dental Accreditation (ADA CODA), 211 E. Chicago Avenue, Chicago, IL 60611-2678, (312) 440-2500.

NOTE: Graduates must pass both the National Dental Hygiene Board examination and the Florida Dental Hygiene Board examination to become a registered dental hygienist.

Prerequisite Courses for Admission

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1085</td>
<td>Human Anatomy and Physiology I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1085L</td>
<td>Human Anatomy and Physiology I Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAC 1105</td>
<td>College Algebra or MGF 1106 Topics in Mathematics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1086</td>
<td>Human Anatomy and Physiology II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1086L</td>
<td>Human Anatomy and Physiology II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CHM 1032</td>
<td>Chemistry for Health Sciences</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CHM 1032L</td>
<td>Chemistry for Health Sciences Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>MCB 1000</td>
<td>Microbiology and Human Disease</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MCB 1000L</td>
<td>Microbiology and Human Disease Laboratory</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

General Education Requirements

*PSY 2012 General Psychology ................................................. 3 cr.
*SPC 1608 Public Speaking ...................................................... 3 cr.
*SYG 2000 Introduction to Sociology ........................................ 3 cr.

*NOTE: May be taken in advance or after admission to the dental hygiene program and must be completed with a grade of “C” or higher prior to graduation.

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEH 1002</td>
<td>Dental Hygiene Instrumentation</td>
<td>1 cr.</td>
</tr>
<tr>
<td>DEH 1002L</td>
<td>Dental Hygiene Instrumentation Laboratory</td>
<td>2 cr.</td>
</tr>
<tr>
<td>DEH 1130</td>
<td>Oral Embryology and Histology</td>
<td>1 cr.</td>
</tr>
<tr>
<td>DEH 1720</td>
<td>Preventive Dentistry</td>
<td>1 cr.</td>
</tr>
<tr>
<td>DEH 1800C</td>
<td>Clinical Dental Hygiene I</td>
<td>5 cr.</td>
</tr>
<tr>
<td>DEH 1802C</td>
<td>Clinical Dental Hygiene II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>DEH 1811</td>
<td>Dental Ethics, Jurisprudence</td>
<td>1 cr.</td>
</tr>
<tr>
<td>DEH 2300</td>
<td>Pharmacology and Oral Medicine</td>
<td>2 cr.</td>
</tr>
<tr>
<td>DEH 2400</td>
<td>General and Oral Pathology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>DEH 2602</td>
<td>Periodontology</td>
<td>2 cr.</td>
</tr>
<tr>
<td>DEH 2604</td>
<td>Periodontology II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>DEH 2702</td>
<td>Community Dental Health</td>
<td>2 cr.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>DEH 2702L</td>
<td>Community Dental Health Practicum</td>
<td>1 cr.</td>
</tr>
<tr>
<td>DEH 2804C</td>
<td>Clinical Dental Hygiene III</td>
<td>5 cr.</td>
</tr>
<tr>
<td>DEH 2806C</td>
<td>Clinical Dental Hygiene IV</td>
<td>6 cr.</td>
</tr>
<tr>
<td>DES 1020C</td>
<td>Oral, Head and Neck Anatomy</td>
<td>2 cr.</td>
</tr>
<tr>
<td>DES 1100</td>
<td>Dental Materials</td>
<td>2 cr.</td>
</tr>
<tr>
<td>DES 1100L</td>
<td>Dental Materials Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>DES 1200</td>
<td>Dental Radiology</td>
<td>2 cr.</td>
</tr>
<tr>
<td>DES 1200L</td>
<td>Dental Radiology Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>DES 1800</td>
<td>Introduction to Clinical Procedures</td>
<td>2 cr.</td>
</tr>
<tr>
<td>DES 1800L</td>
<td>Introduction to Clinical Procedures Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>DES 1830C</td>
<td>Expanded Duties for Dental Hygienists</td>
<td>2 cr.</td>
</tr>
<tr>
<td>DES 2502</td>
<td>Office Management</td>
<td>1 cr.</td>
</tr>
<tr>
<td>DES 2934</td>
<td>Advanced Clinical Procedures</td>
<td>1 cr.</td>
</tr>
<tr>
<td>HUN 2201**</td>
<td>Fundamentals of Human Nutrition</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**NOTE:** HUN 2201 must be taken in the fall or spring term of the student's first year.

---

**AS/AAS • Diagnostic Medical Sonography Technology**

**AS.SON/AAS.SON (72 Credit Hours)**

Sonography is a medical specialty, which uses high-frequency sound waves to create images of the human body. These images are then analyzed, aiding in physician diagnosis. The sonographer is a skilled health care provider who provides imaging services under the supervision of a physician who is responsible for the use and interpretation of ultrasound procedures.

Upon completion of this program in abdomen, obstetrics and gynecology, and ultrasound physics and instrumentation, the graduate will be eligible to take the national registry examinations to become a certified sonographer. The examination is administered by the American Registry of Diagnostic Medical Sonographers.

The Diagnostic Medical Sonography program is accredited by the Joint Review Committee on Education in Diagnostic Medical Sonography in cooperation with the Commission of Allied Health Education Programs (CAAHEP), 2025 Woodlane Drive, St. Paul, MN 55125.

**NOTE:** All graduates of this AS degree program shall be granted admission into the Health Sciences baccalaureate degree program at the University of North Florida.

**Prerequisite Courses for Admission**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1085</td>
<td>Anatomy and Physiology I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1085L</td>
<td>Anatomy and Physiology I Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>PHY 1025</td>
<td>Fundamentals of Physics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHY 1025L</td>
<td>Fundamentals of Physics Laboratory</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 2012</td>
<td>General Psychology</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Humanities General Education</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1086</td>
<td>Human Anatomy and Physiology II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1086L</td>
<td>Human Anatomy and Physiology II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>RTE 1782</td>
<td>Pathology of Medical and Surgical Diseases</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SON 1000</td>
<td>Basic Sonography</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SON 1053</td>
<td>Sonographic Imaging of Medical/Surgical Diseases</td>
<td>1 cr.</td>
</tr>
<tr>
<td>SON 1100</td>
<td>Sonographic Scanning Protocol I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>SON 1101</td>
<td>Sonographic Scanning Protocol II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>SON 1210</td>
<td>Introduction to Sonographic Physics and Instrument</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SON 1311</td>
<td>Introduction to Sonographic Cross Sectional Anatomy I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>SON 1312</td>
<td>Introduction to Sonographic Cross Sectional Anatomy II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>SON 1313</td>
<td>Introduction to Cross Sectional Anatomy III</td>
<td>1 cr.</td>
</tr>
<tr>
<td>SON 1804C</td>
<td>Introduction to Practicum I</td>
<td>2 cr.</td>
</tr>
<tr>
<td>SON 1840</td>
<td>Introduction of Practicum II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>SON 1850</td>
<td>Introduction to Practicum III</td>
<td>1 cr.</td>
</tr>
<tr>
<td>SON 2061</td>
<td>Seminar in Sonography</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SON 2111</td>
<td>Abdominal Sonography I</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
SON 2112 Abdominal Sonography II ................................................................. 3 cr.
SON 2121 Obstetric and Gynecology in Sonography I .................................. 4 cr.
SON 2122 Obstetric and Gynecology in Sonography II ............................... 3 cr.
SON 2211 Sonographic Physics and Instrumentation ................................. 3 cr.
SON 2211L Sonographic Physics and Instrumentation Laboratory ............ 1 cr.
SON 2814 Sonographic Clinical Practicum I ................................................ 3 cr.
SON 2824 Sonographic Clinical Practicum II ............................................. 3 cr.
SON 2834 Sonographic Clinical Practicum III .......................................... 3 cr.

AS/AAS • Emergency Medical Services

AS.EMST.TECH/AAS.EMST.TECH (73 Credit Hours)

If the student wants to become certified as an emergency medical technician or as a paramedic, the student will earn a college credit certificate.

All three levels are fully approved by the Florida Department of Health, and the student will be eligible to take the Florida or National Registry examination for EMT or paramedic upon completion of this program.

The Paramedic program is accredited by the Commission on Accreditation of Allied Health Education Programs (CoAEMSP) at 1361 Park Street, Clearwater, FL 33756, (727)-210-2350 or www.caahep.org upon recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP) 4101 W Green Oaks Blvd., Suite 305-599, Arlington, TX 76016, (817) 330-0080, FAX (817) 330-0089 or www.coaemsp.org.

This program provides paramedics with an opportunity to further their education by earning an associate in science or associate in applied science degree. To be enrolled into the paramedic program the student must be currently certified an EMT in the State of Florida.

Statewide curriculum guidelines allow students who complete an ATD (Advanced Technical Diploma) at a vocational technical center to be awarded 11 college credits upon enrolling at HCC. These credit hours will be applied toward an associate in science or associate in applied science degree in Emergency Medical Services.

General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1085</td>
<td>Human Anatomy and Physiology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1085L</td>
<td>Human Anatomy and Physiology Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PSY 2012</td>
<td>General Psychology</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Humanities General Education</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Mathematics General Education</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1086</td>
<td>Anatomy and Physiology II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1086L</td>
<td>Anatomy and Physiology II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td></td>
<td>Completion of EMT College Credit Certificate</td>
<td>11 cr.</td>
</tr>
<tr>
<td></td>
<td>Completion of Paramedic College Credit Certificate</td>
<td>42 cr.</td>
</tr>
</tbody>
</table>

CCC • Emergency Medical Technician

CCC.EMT (11 Credit Hours)

EMT training is a one-semester program designed to prepare students to provide basic life support measures, as a member of an ambulance crew, at the scene of an accident, during transport to a hospital or medical facility, and in the medical facility. Course work combines classroom lecture, practical skills laboratory and actual patient clinical experiences.

The lecture portion (seven credit hours) covers the United States Department of Transportation National Standard Curriculum for the Emergency Medical Technician-Basic as well as skills required by the state.

The practical skills laboratory portion (two credit hours) includes application practice and performance testing in simulated patient care situations. The clinical portion (one credit hour) provides actual patient care during transport to a hospital and in the hospital setting. EMT is currently offered at the Dale Mabry, Plant City, and SouthShore campuses.

NOTE: An additional cost for a criminal background check is required. Drug testing is required.

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS 1119</td>
<td>Emergency Medical Technician</td>
<td>7 cr.</td>
</tr>
<tr>
<td>EMS 1119L</td>
<td>Emergency Medical Technician Practicum</td>
<td>2 cr.</td>
</tr>
<tr>
<td>EMS 1431</td>
<td>Emergency Medical Technician (EMT) Clinical</td>
<td>1 cr.</td>
</tr>
<tr>
<td>HSC 1220</td>
<td>Introduction to Health Sciences</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>
EMT Re-tracking

EMT Technician-Basic (EMT-B) students have one year to successfully complete all course work and one year from course completion to obtain state certification. Students who do not successfully complete the EMT-B program within one year or who do not obtain state certification within one year after course completion must retake all courses of the EMT-B program.

CCC • Paramedic

CCC.PARA (42 Credit Hours)

In addition to performing the skills of an EMT-Basic, paramedics are trained in advanced life support techniques, including endotracheal intubation, electrocardiogram monitoring and interpretation, DC electrical counter shock and administration of intravenous fluids and medications.

The program is offered on different schedules with three admission dates per year (see the allied health admissions criteria and procedure section of this catalog).

Class work includes the most current courses required by the United States Department of Transportation as well as anatomy, physiology and advanced cardiac life support courses. Paramedic is currently offered at the Dale Mabry and SouthShore campuses.

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS 2617C</td>
<td>Assessment - Based Management Proficiency</td>
<td>2 cr.</td>
</tr>
<tr>
<td>EMS 2621</td>
<td>Paramedic Phase I</td>
<td>7 cr.</td>
</tr>
<tr>
<td>EMS 2621L</td>
<td>Paramedic Phase I Practicum</td>
<td>4 cr.</td>
</tr>
<tr>
<td>EMS 2622</td>
<td>Paramedic Phase II</td>
<td>8 cr.</td>
</tr>
<tr>
<td>EMS 2622L</td>
<td>Paramedic Phase II Practicum</td>
<td>4 cr.</td>
</tr>
<tr>
<td>EMS 2623</td>
<td>Paramedic Phase III</td>
<td>6 cr.</td>
</tr>
<tr>
<td>EMS 2623L</td>
<td>Paramedic Phase III Practicum</td>
<td>2 cr.</td>
</tr>
<tr>
<td>EMS 2666</td>
<td>Paramedic Clinical I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EMS 2667</td>
<td>Paramedic Clinical II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EMS 2668</td>
<td>Paramedic Clinical III</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

AAS • Nuclear Medicine Technology

AAS.NMT (75 Credit Hours)

Nuclear medicine uses radioactive materials in the diagnosis and treatment of disease. Nuclear medicine technologists prepare and administer radiopharmaceutical materials, operate nuclear instruments, position patients for “imaging” procedures, perform lab tests and work up diagnostic data for physicians. Graduates of this program are eligible to take national registry examinations and Florida licensure for nuclear medicine technologists.

The Nuclear Medicine Technology program is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology, 2000 W. Danforth Road, Suite 130 #203, Edmond, OK 73003, (405) 285-0546.

Clinical evaluations are used to assess a student’s performance in the clinical environment.

Prerequisite Courses for Admission*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1085</td>
<td>Anatomy and Physiology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1085L</td>
<td>Anatomy and Physiology Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CHM 1025</td>
<td>Modern Chemistry and CHM 1025L, Modern Chemistry Laboratory or any higher level four credit hour chemistry with laboratory</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MGF 1119</td>
<td>Introductory Mathematics with Applications or Mathematics General Education</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

* NOTE: Additional prerequisite changes have been approved to be effective fall term 2013. Consult with an advisor or counselor regarding these changes.

General Education Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 2012</td>
<td>General Psychology</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1086</td>
<td>Human Anatomy and Physiology II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1086L</td>
<td>Human Anatomy and Physiology II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>NMT 1002</td>
<td>Introduction to Nuclear Medicine Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>NMT 1051</td>
<td>Nuclear Medicine Data Analysis</td>
<td>3 cr.</td>
</tr>
<tr>
<td>NMT 1103</td>
<td>Introduction to Patient Care</td>
<td>2 cr.</td>
</tr>
<tr>
<td>NMT 1312</td>
<td>Radiation Safety and Health Physics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>NMT 1534</td>
<td>Nuclear Instrumentation</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
AS • Nursing

AS.NUR.NURB/AS. NUR.NURT (72 Credit Hours)

Graduates of this program are eligible to take the nursing licensing examination administered by the National Council of State Boards of Nursing and, upon successful completion, receive the Registered Nursing (RN) license. The HCC Nursing program is approved by the Florida State Board of Nursing and accredited by the National League for Nursing Accrediting Commission. The Commission is located at 3343 Peachtree Road NE, Suite 850, Atlanta, Georgia 30326, telephone (404) 975-5000 or fax (404) 975-5020. Graduates of the associate in science degree nursing program are able to provide direct patient care to patients in hospitals and comparable health agencies.

The HCC Nursing program is offered at the Dale Mabry, Plant City, and SouthShore campuses.

The duration of the program is four terms for the basic option and three terms for the transition option. The program requires a full-time attendance commitment from the student. The program is offered in a day and evening/Saturday format with both day and evening clinical experiences utilized.

Students, under the careful supervision of the nursing faculty, are provided valuable patient care experiences in participating hospitals and community health agencies.

Enrollment in the nursing program is limited because of the availability of clinical placements for students to develop competence in their practical skills. Therefore, individuals must make application for consideration for admission to the nursing program. The associate in science degree program has two options: one for the basic student and another for the transition student. Individuals interested in applying to the program should obtain a Nursing Packet from Student Services on the Dale Mabry Campus, telephone (813) 253-7364.

The basic option is for the individual who does not have prior nursing background. For this option, individuals are selected for admission to the Fall and Spring semesters of each academic year.

Individuals who are already licensed practical nurses or licensed paramedics may make application to and be selected for the transition option. This option admits students only during the summer term of each academic year. The Statewide Articulation Agreement allows for individuals who have completed a practical nursing program in Florida within the last 5 years and who hold a current Florida licensure as a practical nurse to be awarded 10 credit hours toward the Nursing Transition AS degree. Students admitted to the LPN to RN program who do not meet these guidelines must have a valid, current Florida LPN license and must also provide documentation of 6 months of full-time employment as an LPN within the past three years. Ten credit hours of experiential credit will be awarded with the payment of a $15 processing fee. The articulated or experiential credits are awarded upon successful completion of 15 credit hours of program coursework toward the Nursing AS degree.

Students will be required to take nationally normed tests throughout the curriculum and to make a satisfactory score on such tests. In the last semester of the curriculum, students will be required to take a comprehensive exam and to make a satisfactory score on such an exam prior to graduation/taking the licensing exam.

Minimum Progress Requirements

Basic Student

All non-nursing courses must be completed with a minimum grade of “C” before entering into the final semester of the nursing program.

Transition Student: LPN and Paramedic

All non-nursing courses must be completed with a minimum grade of “C” before entering into the final semester of the nursing program.

Clinical Performance

A student who is determined to be unsafe in the clinical component of any nursing course may, at the discretion of the nursing faculty, be immediately barred from continuing in the program.

NOTE: Beginning Fall Term 2000, all graduates of this program shall articulate into a Nursing baccalaureate degree in the designated university program under the provision of Rule 6A-10.024, Articulation Between Universities, Community Colleges, and School Districts.
Prerequisites for Admission

The following prerequisites for admission apply to the AS Nursing Basic and the AS Nursing ADN Transition:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1085</td>
<td>Human Anatomy and Physiology I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1085L</td>
<td>Human Anatomy and Physiology I Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>BSC 1086</td>
<td>Human Anatomy and Physiology II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1086L</td>
<td>Human Anatomy and Physiology II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAC 1105</td>
<td>College Algebra</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MCB 1000</td>
<td>Microbiology and Human Disease</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MCB 1000L</td>
<td>Microbiology and Human Disease Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>SYG 2000</td>
<td>Introduction to Sociology</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

General Education Requirements

The following general education requirements apply to the AS Nursing Basic and the AS Nursing ADN Transition

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1102</td>
<td>English Composition II</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Humanities General Education</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

AS • Nursing - Basic Option

AS.NUR.NURB

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR 1213C</td>
<td>Nursing Process I</td>
<td>10 cr.</td>
</tr>
<tr>
<td>NUR 1260C</td>
<td>Nursing Process II</td>
<td>10 cr.</td>
</tr>
<tr>
<td>NUR 2243C</td>
<td>Nursing Process IV</td>
<td>10 cr.</td>
</tr>
<tr>
<td>NUR 2412C</td>
<td>Nursing Process III</td>
<td>10 cr.</td>
</tr>
<tr>
<td>NUR 2521C</td>
<td>Mental Health Nursing</td>
<td>2 cr.</td>
</tr>
</tbody>
</table>

Select 3 specified elective credits from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1025</td>
<td>Nutrition and Drugs</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1025L</td>
<td>Nutrition and Drugs Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CHM 1032</td>
<td>Chemistry for Health Sciences</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CHM 1032L</td>
<td>Chemistry for Health Sciences Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>DEP 1004</td>
<td>Developmental Psychology of Life Span</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUN 2201</td>
<td>Fundamentals of Human Nutrition</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHI 1600</td>
<td>Ethics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PSY 2012</td>
<td>General Psychology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>NUR 1060</td>
<td>Health Assessment</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

AS • Nursing - ADN Transition Option

AS.NUR.NURT

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR 1000</td>
<td>Introduction to Basic Healthcare Concepts</td>
<td>1 cr.</td>
</tr>
<tr>
<td>NUR 1213C</td>
<td>Nursing Process I</td>
<td>10 cr.</td>
</tr>
<tr>
<td>NUR 1260C</td>
<td>Nursing Process II</td>
<td>10 cr.</td>
</tr>
<tr>
<td>NUR 2243C</td>
<td>Nursing Process IV</td>
<td>10 cr.</td>
</tr>
<tr>
<td>NUR 2413C</td>
<td>Nursing Process III for Transition Option</td>
<td>9 cr.</td>
</tr>
<tr>
<td>NUR 2521C</td>
<td>Mental Health Nursing</td>
<td>2 cr.</td>
</tr>
</tbody>
</table>

Select 3 specified elective credits from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1025</td>
<td>Nutrition and Drugs</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1025L</td>
<td>Nutrition and Drugs Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CHM 1032</td>
<td>Chemistry for Health Sciences</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CHM 1032L</td>
<td>Chemistry for Health Sciences Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>DEP 1004</td>
<td>Developmental Psychology of Life Span</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUN 2201</td>
<td>Fundamentals of Human Nutrition</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHI 1600</td>
<td>Ethics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PSY 2012</td>
<td>General Psychology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>NUR 1060</td>
<td>Health Assessment</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
NOTE: 10 credit hours of articulated credit or experiential credit may be awarded to individuals who are licensed practical nurses.

**AS/AAS • Optical Management Technology**  
**AS.OPT.MAN/AAS.OPT.MAN (60 Credit Hours)**

The primary goal of this program is to prepare the student for a supervisory or a management position in the ophthalmic industry. Students will learn about such topics as safety and sports, vision, customer service and merchandising.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MGF 1119</td>
<td>Introductory Mathematics w/Applications (non-transfer) or Mathematics General Education (transfer)</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Social Science General Education</td>
<td>6 cr.</td>
</tr>
<tr>
<td></td>
<td>Humanities General Education</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**Program Required Courses**

**Option 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1107</td>
<td>Introduction to Computers</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ECO 2013</td>
<td>Principles of Macroeconomics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FIN 1100</td>
<td>Personal Finance</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GEB 1011</td>
<td>Introduction Business</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAN 1021</td>
<td>Principles of Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAR 1011</td>
<td>Principles of Marketing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 1666</td>
<td>Safety and Sports Vision</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 2204</td>
<td>Anatomy and Physiology of the Eye</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 2375</td>
<td>Refractometry</td>
<td>2 cr.</td>
</tr>
<tr>
<td>OPT 2375L</td>
<td>Refractometry I Laboratory</td>
<td>2 cr.</td>
</tr>
<tr>
<td>OPT 2376L</td>
<td>Refractometry II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OPT 2910</td>
<td>Directed Research</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**Option 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ECO 2013</td>
<td>Principles of Macroeconomics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ECO 2023</td>
<td>Principles of Microeconomics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FIN 1100</td>
<td>Personal Finance</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GEB 1011</td>
<td>Introduction Business</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAN 1021</td>
<td>Principles of Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAR 1011</td>
<td>Principles of Marketing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 1666</td>
<td>Safety and Sports Vision</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 2204</td>
<td>Anatomy and Physiology of the Eye</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 2800L</td>
<td>Vision Care Clinical I</td>
<td>2 cr.</td>
</tr>
<tr>
<td>OPT 2910</td>
<td>Directed Research</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SPC 1006</td>
<td>Speech Improvement</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

**Optical Management Associate in Science Degree Enrollees**

*Students who provide the college with documentation verifying Opticianry licensure and have completed a minimum of 15 credit hours of Optical Management courses will be awarded 12 credit hours toward an associate in applied science degree in Optical Management.

**Experiential Credit for Opticianry License**

**Credit Awarded toward Optical Management Technology Options**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPT 1155</td>
<td>Ophthalmic Lens I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 1156</td>
<td>Ophthalmic Lens II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 1460</td>
<td>Ophthalmic Dispensing I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 2461</td>
<td>Ophthalmic Dispensing II</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
AS/AAS • Opticianry

AS.OPT/AAS.OPT (72 Credit Hours)

As an essential part of the “eye care delivery system,” opticians measure, fit and adapt eyeglasses and contact lenses to people with vision problems. Coursework covers basic ocular science including: optics, anatomy, contact lenses, and refractometry. It also allows the students to gain specific skills in professional management, eyewear fabrications, and dispensing. Clinical experience is gained in a state-of-the-art on-campus dispensary and at affiliate sites. Graduates of the program are eligible to take state and national certification and/or licensure exams for opticians. Campus based or Internet based programs available. The Opticianry Program is accredited by the Commission on Opticianry Accreditation, P.O. Box 592, Canton, NY 13617. For further information contact the Director of Accreditation (703) 468-0566.

General Education Requirements

ENC 1101 English Composition I ................................................................. 3 cr.
MGF 1119 Introductory Mathematics w/ Applications (non-transfer) or Mathematics General Education (transfer) .......... 3 cr.
Humanities General Education .................................................................. 3 cr.
Social Science General Education ............................................................. 6 cr.

Program Required Courses

OPT 1000 Ophthalmic Orientation ............................................................. 1 cr.
OPT 1155 Ophthalmic Lens I ................................................................. 3 cr.
OPT 1156 Ophthalmic Lens II ................................................................. 3 cr.
OPT 1400L Ophthalmic Laboratory I ..................................................... 3 cr.
OPT 1430L Ophthalmic Laboratory II .................................................... 3 cr.
OPT 1460 Ophthalmic Dispensing ......................................................... 3 cr.
OPT 1460L Ophthalmic Dispensing I Laboratory ................................. 3 cr.
OPT 2030 Ophthalmic Board Review .................................................... 1 cr.
OPT 2204 Anatomy and Physiology of the Eye ........................................ 3 cr.
OPT 2375 Refractometry ........................................................................ 2 cr.
OPT 2375L Refractometry I Laboratory .................................................. 2 cr.
OPT 2376L Refractometry II Laboratory ................................................ 2 cr.
OPT 2461 Ophthalmic Dispensing II ....................................................... 3 cr.
OPT 2461L Ophthalmic Dispensing Laboratory II ................................. 3 cr.
OPT 2463L Ophthalmic Skills Laboratory I ............................................. 3 cr.
OPT 2500 Contact Lens Theory I ............................................................ 3 cr.
OPT 2500L Contact Lens I Laboratory .................................................... 3 cr.
OPT 2501 Contact Lens Theory II .......................................................... 2 cr.
OPT 2501L Contact Lens II Laboratory .................................................. 2 cr.
OPT 2502L Contact Lens III Laboratory ................................................ 2 cr.
OPT 2502L Contact Lens III Laboratory ................................................ 2 cr.
OPT 2910 Directed Research .................................................................. 3 cr.
OPT 2800L Vision Care Clinical I ......................................................... 2 cr.
OPT 2801L Vision Care Clinical II .......................................................... 2 cr.
OPT 2802L Vision Care Clinical III ........................................................ 2 cr.
OPT 2803L Vision Care Clinical IV ........................................................ 2 cr.

ATC • Visual Assessment

ATC.OPT (11 Credit Hours)

This 11 credit hour program provides training in safety and sports vision, low vision and refraction for students who have already earned an associate in applied science degree in Opticianry.

Program Required Courses

OPT 1225 Low Vision ............................................................................. 3 cr.
OPT 1666 Safety and Sports Vision .......................................................... 3 cr.
OPT 2375 Refractometry ........................................................................ 2 cr.
OPT 2375L Refractometry Laboratory I ................................................. 2 cr.
OPT 2376L Refractometry Laboratory II ................................................ 1 cr.

CCC • Eye Care Technician

CCC.EYE.TECH (48 Credit Hours)

This program will prepare the student to perform visual assessment, contact lens fitting and spectacle dispensing while working closely with ophthalmologists and optometrists. All credits may be applied to the Opticianry degree.
Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPT 1000</td>
<td>Ophthalmic Orientation</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OPT 1155</td>
<td>Ophthalmic Lens I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 1156</td>
<td>Ophthalmic Lens II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 1225</td>
<td>Low Vision</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 1400L</td>
<td>Ophthalmic Laboratory I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 1460</td>
<td>Ophthalmic Dispensing I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 1460L</td>
<td>Ophthalmic Dispensing I Laboratory</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 2204</td>
<td>Anatomy and Physiology of the Eye</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 2375</td>
<td>Refractometry</td>
<td>2 cr.</td>
</tr>
<tr>
<td>OPT 2375L</td>
<td>Refractometry I Laboratory</td>
<td>2 cr.</td>
</tr>
<tr>
<td>OPT 2376L</td>
<td>Refractometry II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OPT 2461</td>
<td>Ophthalmic Dispensing II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 2461L</td>
<td>Ophthalmic Dispensing Laboratory II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 2463L</td>
<td>Ophthalmic Skills Laboratory I</td>
<td>2 cr.</td>
</tr>
<tr>
<td>OPT 2500</td>
<td>Contact Lens Theory I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 2500L</td>
<td>Contact Lens I Laboratory</td>
<td>2 cr.</td>
</tr>
<tr>
<td>OPT 2501</td>
<td>Contact Lens Theory II</td>
<td>2 cr.</td>
</tr>
<tr>
<td>OPT 2501L</td>
<td>Contact Lens Lab II</td>
<td>2 cr.</td>
</tr>
<tr>
<td>OPT 2800L</td>
<td>Vision Care Clinical I</td>
<td>2 cr.</td>
</tr>
<tr>
<td>OPT 2801L</td>
<td>Vision Care Clinical II</td>
<td>2 cr.</td>
</tr>
</tbody>
</table>

CCC • Ophthalmic Laboratory Technician

CCC.OPT.LAB.TECH (24 Credit Hours)

This program teaches surfacing, finishing and other related tasks necessary to fabricate prescription eyewear. It will prepare you to work in a wholesale or retail optical laboratory. All credits from this certificate may be applied to the Opticianry degree.

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPT 1000</td>
<td>Ophthalmic Orientation</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OPT 1155</td>
<td>Ophthalmic Lens I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 1156</td>
<td>Ophthalmic Lens II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 1400L</td>
<td>Ophthalmic Laboratory I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 1460</td>
<td>Ophthalmic Dispensing I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 1460L</td>
<td>Ophthalmic Dispensing I Laboratory</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 2204</td>
<td>Anatomy and Physiology of the Eye</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 2375</td>
<td>Refractometry</td>
<td>2 cr.</td>
</tr>
<tr>
<td>OPT 2375L</td>
<td>Refractometry I Laboratory</td>
<td>2 cr.</td>
</tr>
<tr>
<td>OPT 2376L</td>
<td>Refractometry II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OPT 2461</td>
<td>Ophthalmic Dispensing II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 2461L</td>
<td>Ophthalmic Dispensing Laboratory II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 2463L</td>
<td>Ophthalmic Skills Laboratory I</td>
<td>2 cr.</td>
</tr>
<tr>
<td>OPT 2500</td>
<td>Contact Lens Theory I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OPT 2500L</td>
<td>Contact Lens I Laboratory</td>
<td>2 cr.</td>
</tr>
<tr>
<td>OPT 2501</td>
<td>Contact Lens Theory II</td>
<td>2 cr.</td>
</tr>
<tr>
<td>OPT 2501L</td>
<td>Contact Lens Lab II</td>
<td>2 cr.</td>
</tr>
<tr>
<td>OPT 2800L</td>
<td>Vision Care Clinical I</td>
<td>2 cr.</td>
</tr>
<tr>
<td>OPT 2801L</td>
<td>Vision Care Clinical II</td>
<td>2 cr.</td>
</tr>
</tbody>
</table>

AS • Radiation Therapy

AS.RAT.GEN (77 Credit Hours)

This program is designed for students who want to work directly with patients receiving high-energy treatments using state-of-the-art and cutting-edge technology. Students will work as a vital member of the health care team directly administering patient care and treatment.

Upon successful completion of the program, students are eligible to apply for the national radiation therapy examination administered by the American Registry of Radiologic Technologists.

The program is accredited by the Joint Review Committee on Education in Radiologic Technology, 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3182 (312) 704-5300.

Students’ performance will be based on didactic and clinical competencies.

NOTE: All graduates of this program who take the general education math will be eligible for admission into the University of South Florida bachelors of science in applied science (BSAS) degree program.

Prerequisite Courses for Admission

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1085</td>
<td>Anatomy and Physiology I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1085L</td>
<td>Anatomy and Physiology I Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAC 1105</td>
<td>College Algebra or higher mathematics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PSY 2012</td>
<td>General Psychology</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

General Education Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1102</td>
<td>English Composition II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>Humanities General Education</td>
<td>3 cr.</td>
<td></td>
</tr>
</tbody>
</table>
Program Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC</td>
<td>1086</td>
<td>Anatomy and Physiology II</td>
</tr>
<tr>
<td>BSC</td>
<td>1086L</td>
<td>Anatomy and Physiology II Laboratory</td>
</tr>
<tr>
<td>RAT</td>
<td>1614</td>
<td>Radiation Therapy Physics I</td>
</tr>
<tr>
<td>RAT</td>
<td>1618</td>
<td>Radiation Therapy Physics II</td>
</tr>
<tr>
<td>RAT</td>
<td>1800</td>
<td>Introduction to Radiation Therapy Clinic I</td>
</tr>
<tr>
<td>RAT</td>
<td>1810</td>
<td>Introduction to Radiation Therapy Clinic II</td>
</tr>
<tr>
<td>RAT</td>
<td>2001C</td>
<td>Introduction to Radiation Therapy</td>
</tr>
<tr>
<td>RAT</td>
<td>2021</td>
<td>Radiation Therapy Treatment Planning</td>
</tr>
<tr>
<td>RAT</td>
<td>2023</td>
<td>Principles and Practices of Radiation Therapy I</td>
</tr>
<tr>
<td>RAT</td>
<td>2061</td>
<td>Radiation Therapy Seminar</td>
</tr>
<tr>
<td>RAT</td>
<td>2242</td>
<td>Principles and Practices of Radiation Therapy II</td>
</tr>
<tr>
<td>RAT</td>
<td>2303</td>
<td>Psychosocial Aspects of Oncology</td>
</tr>
<tr>
<td>RAT</td>
<td>2619L</td>
<td>Computer Applications in Treatment Planning</td>
</tr>
<tr>
<td>RAT</td>
<td>2620</td>
<td>Radiation Therapy Physics III</td>
</tr>
<tr>
<td>RAT</td>
<td>2621C</td>
<td>Radiation Therapy Physics IV</td>
</tr>
<tr>
<td>RAT</td>
<td>2804</td>
<td>Radiation Therapy Clinic I</td>
</tr>
<tr>
<td>RAT</td>
<td>2814</td>
<td>Radiation Therapy Clinic II</td>
</tr>
<tr>
<td>RAT</td>
<td>2824</td>
<td>Radiation Therapy Clinic III</td>
</tr>
<tr>
<td>RAT</td>
<td>2901</td>
<td>Simulation Lecture I</td>
</tr>
<tr>
<td>RAT</td>
<td>2901L</td>
<td>Simulation I Laboratory</td>
</tr>
<tr>
<td>RAT</td>
<td>2902</td>
<td>Simulation Lecture II</td>
</tr>
<tr>
<td>RAT</td>
<td>2902L</td>
<td>Simulation II Laboratory</td>
</tr>
<tr>
<td>RTE</td>
<td>1157</td>
<td>Medical Imaging of Human Structures</td>
</tr>
<tr>
<td>RTE</td>
<td>1782</td>
<td>Pathology of Medical/Surgical Diseases</td>
</tr>
<tr>
<td>RTE</td>
<td>2385</td>
<td>Radiation Biology</td>
</tr>
<tr>
<td>RTE</td>
<td>2473L</td>
<td>Quality Assurance in Radiation Therapy</td>
</tr>
</tbody>
</table>

**CCC • Radiation Therapy Specialist**

**CCC.RAT.SPEC (43 Credit Hours)**

This program is designed for students who have successfully completed a program in Radiography and are eligible or certified by the American Registry of Radiologic Technologists. This program is designed for students who want to work directly with patients receiving high-energy treatments using state-of-the-art and cutting-edge technology. Students will work with a physician to administer patient treatment.

Upon successful completion of the program, students are eligible to apply for the national radiation therapy examination administered by the American Registry of Radiologic Technologists.

The program is accredited by the Joint Review Committee on Education in Radiologic Technology, 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3182 (312) 704-5300.

Students’ performance will be based on didactic and clinical competencies.

**Prerequisite for Admission**

Applicants must be ARRT certified or eligible and must be ARRT certified by the first day of class.

Program Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS</td>
<td>1107</td>
<td>Introduction to Computers</td>
</tr>
<tr>
<td>LIS</td>
<td>1004</td>
<td>Introduction to Internet Research</td>
</tr>
<tr>
<td>RAT</td>
<td>1810</td>
<td>Introduction to Radiation Therapy Clinic II</td>
</tr>
<tr>
<td>RAT</td>
<td>2021</td>
<td>Radiation Therapy Treatment Planning</td>
</tr>
<tr>
<td>RAT</td>
<td>2023</td>
<td>Principles and Practices of Radiation Therapy I</td>
</tr>
<tr>
<td>RAT</td>
<td>2061</td>
<td>Radiation Therapy Seminar</td>
</tr>
<tr>
<td>RAT</td>
<td>2242</td>
<td>Principles and Practices of Radiation Therapy II</td>
</tr>
<tr>
<td>RAT</td>
<td>2303</td>
<td>Psychosocial Aspects of Oncology</td>
</tr>
<tr>
<td>RTE</td>
<td>2385</td>
<td>Radiation Biology</td>
</tr>
<tr>
<td>RTE</td>
<td>2473L</td>
<td>Quality Assurance in Radiation Therapy</td>
</tr>
<tr>
<td>RAT</td>
<td>2619L</td>
<td>Computer Applications in Treatment Planning</td>
</tr>
<tr>
<td>RAT</td>
<td>2620</td>
<td>Radiation Therapy Physics III</td>
</tr>
<tr>
<td>RAT</td>
<td>2621C</td>
<td>Radiation Therapy Physics IV</td>
</tr>
<tr>
<td>RAT</td>
<td>2804</td>
<td>Radiation Therapy Clinic I</td>
</tr>
<tr>
<td>RAT</td>
<td>2814</td>
<td>Radiation Therapy Clinic II</td>
</tr>
<tr>
<td>RAT</td>
<td>2824</td>
<td>Radiation Therapy Clinic III</td>
</tr>
<tr>
<td>RAT</td>
<td>2901</td>
<td>Simulation Lecture I</td>
</tr>
</tbody>
</table>
RAT 2901L Simulation I Laboratory ................................................................. 1 cr.
RAT 2902 Simulation Lecture II ................................................................. 1 cr.
RAT 2902L Simulation II Laboratory ................................................................. 1 cr.

AS • Radiography
AS.RTE (77 Credit Hours)

Radiographers perform diagnostic radiographic (X-ray) procedures under the direct supervision of a physician.

This program includes course work and practical experiences in area clinical educational settings. Graduates are eligible to take the American Registry of Radiologic Technologists certification examination and will also be eligible for a Florida Radiographer license. The State of Florida has established the AS degree in radiography as a transfer degree to any Florida public university with a Baccalaureate degree in Radiologic Science under the provisions of Rule 6A-10.024. HCC has changed this program to meet the requirements of this rule. If you would like an AS Radiology degree that will transfer to a Florida public university Baccalaureate degree in Radiography, please see an HCC counselor for current course and program information.

The Radiography program is accredited by the Joint Review Committee on Education in Radiologic Technology, 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3182 (312) 704-5300.

Radiography courses include strenuous physical activities, such as lifting and carrying. Clinical evaluations will be used to evaluate student performance in the clinical environment. Students will be placed on probation for an unsatisfactory clinical performance evaluation.

NOTE: Beginning Fall Term 2000, all graduates of this program shall articulate into a Radiologic Technology baccalaureate degree in the designated university program under the provision of Rule 6A-10.024, Articulation Between Universities, Community Colleges, and School Districts.

Prerequisite Courses for Admission

BSC 1085 Anatomy and Physiology I ................................................................. 3 cr.
BSC 1085L Anatomy and Physiology I Laboratory ................................................................. 1 cr.
ENC 1101 English Composition I ................................................................................. 3 cr.
MAC 1105 College Algebra or higher level math ................................................................. 3 cr.
PSY 2012 General Psychology ................................................................................. 3 cr.

General Education Requirements

Humanities General Education ................................................................................. 3 cr.

Program Required Courses

BSC 1086 Human Anatomy and Physiology II ................................................................. 3 cr.
BSC 1086L Human Anatomy and Physiology II Laboratory ................................................................. 1 cr.
CGS 1000 Introduction to Computers and Technology ................................................................. 3 cr.
HSC 1220 Introduction to Health Sciences ................................................................................. 1 cr.
RTE 1000 Introduction to Radiology ................................................................................. 1.5 cr.
RTE 1111 Introduction to Radiography Patient Care ................................................................. 1.5 cr.
RTE 1308 Radiation Protection and Safety ................................................................................. 2 cr.
RTE 1418 Principles of Radiographic Exposure I ................................................................. 3 cr.
RTE 1418L Principles of Radiographic Exposure I Laboratory ................................................................. 1 cr.
RTE 1457 Principles of Radiographic Exposure II ................................................................. 1 cr.
RTE 1503 Radiographic Positioning I ................................................................................. 3 cr.
RTE 1503L Radiographic Positioning I Laboratory ................................................................. 1 cr.
RTE 1513 Radiographic Positioning II ................................................................................. 3 cr.
RTE 1513L Radiographic Positioning II Laboratory ................................................................. 1 cr.
RTE 1523 Radiographic Positioning III ................................................................................. 3 cr.
RTE 1523L Radiographic Positioning III Laboratory ................................................................. 1 cr.
RTE 1607 Radiographic Science Principles ................................................................................. 1 cr.
RTE 1613 Radiographic Physics I ................................................................................. 3 cr.
RTE 1782 Pathology of Medical/Surgical Disease ................................................................................. 3 cr.
RTE 1800 Introduction to Radiography Practicum ................................................................. 2 cr.
RTE 1804 Radiography Practicum I ................................................................................. 3 cr.
RTE 1814 Radiography Practicum II ................................................................................. 3 cr.
RTE 1824 Radiography Practicum III ................................................................................. 3 cr.
RTE 2061 Radiographic Seminar ................................................................................. 2 cr.
RTE 2385 Radiation Biology ................................................................................. 3 cr.
RTE 2473L Quality Assurance ................................................................................. 1 cr.
RTE 2563 Special Radiographic Procedures ................................................................................. 2.5 cr.
RTE 2834 Radiography Practicum IV ................................................................................. 3 cr.
RTE 2844 Radiography Practicum V ................................................................................. 1.5 cr.
### AS • American Registry of Radiologic Technologists Option

**AS.RTE.ARRT (76 Credit Hours)**

Graduates of an approved hospital school of radiologic technology may earn an associate in science degree in this special program for registered radiologic technologists.

Students who present evidence of their graduation and proof of their current registration with the American Registry of Radiologic Technologists (A.R.R.T.) will be granted 53 credit hours and will be able to earn an AS degree by completing an additional 23 credit hours as listed here.

**NOTE:** All graduates of this program who take the general education math will be eligible for admission into the University of South Florida Bachelor of Science in Applied Science (BSAS) degree program.

**NOTE:** Applicants must be ARRT registered or eligible and licensed by the State of Florida.

#### General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>English Composition II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PSY 2012</td>
<td>General Psychology</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Humanities General Education</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Mathematics General Education</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

#### Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1107</td>
<td>Introduction to Computers</td>
<td>1 cr.</td>
</tr>
<tr>
<td>PHY 1025</td>
<td>Fundamentals of Physics <strong>and</strong> PHY 1025L, Fundamentals of Physics Laboratory <strong>or</strong> higher level physics w/laboratory</td>
<td>4 cr.</td>
</tr>
<tr>
<td>SPC 1006</td>
<td>Speech Improvement</td>
<td>1 cr.</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>2 cr.</td>
</tr>
</tbody>
</table>

#### ARRT Option Transfer Credits (53 cr.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTE 1000</td>
<td>Introduction to Radiology</td>
<td>1.5 cr.</td>
</tr>
<tr>
<td>RTE 1111</td>
<td>Introduction to Radiography Patient Care</td>
<td>1.5 cr.</td>
</tr>
<tr>
<td>RTE 1308C</td>
<td>Radiation Protection and Safety</td>
<td>2 cr.</td>
</tr>
<tr>
<td>RTE 1418</td>
<td>Principles of Radiographic Exposure I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTE 1418L</td>
<td>Principles of Radiographic Exposure I Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>RTE 1457</td>
<td>Principles of Radiographic Exposure II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>RTE 1503</td>
<td>Radiographic Positioning I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTE 1503L</td>
<td>Radiographic Positioning I Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>RTE 1513</td>
<td>Radiographic Positioning II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTE 1513L</td>
<td>Radiographic Positioning II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>RTE 1523</td>
<td>Radiographic Positioning III</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTE 1523L</td>
<td>Radiographic Positioning III Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>RTE 1607</td>
<td>Radiographic Science Principles</td>
<td>1 cr.</td>
</tr>
<tr>
<td>RTE 1613</td>
<td>Radiographic Physics I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTE 1782</td>
<td>Pathology of Medical/Surgical Disease</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTE 1800</td>
<td>Introduction to Radiography Practicum</td>
<td>2 cr.</td>
</tr>
<tr>
<td>RTE 1804</td>
<td>Radiography Practicum I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTE 1814</td>
<td>Radiography Practicum II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTE 1824</td>
<td>Radiography Practicum III</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTE 2061</td>
<td>Radiographic Seminar</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTE 2385</td>
<td>Radiation Biology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTE 2473L</td>
<td>Quality Assurance</td>
<td>1 cr.</td>
</tr>
<tr>
<td>RTE 2563</td>
<td>Special Radiographic Procedures</td>
<td>2.5 cr.</td>
</tr>
<tr>
<td>RTE 2834</td>
<td>Radiography Practicum IV</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTE 2844</td>
<td>Radiography Practicum V</td>
<td>1.5 cr.</td>
</tr>
</tbody>
</table>
### AAS • Respiratory Care

**AAS.RET (76 Credit Hours)**

Respiratory care is an allied health discipline operating with medical direction in the treatment, management, control, diagnostic evaluation and rehabilitation of patients with abnormalities of the cardiopulmonary system.

Respiratory care includes the therapeutic use of the following: medical gases and administration devices, environmental control systems, humidification, aerosols, medications, ventilatory support, bronchopulmonary drainage, pulmonary rehabilitation, cardiopulmonary resuscitation, and airway management. Specific testing techniques are employed in respiratory care to assist in diagnosis, monitoring, treatment and research.

Students who complete this program will be eligible to take the national certification and registry exams administered by the National Board for Respiratory Care (NBRC). Upon completion of the exams, students will be a Registered Respiratory Therapist (RRT). Most states require a license to practice.

The Respiratory Care program is accredited by the Committee on Accreditation for Respiratory Care, 1248 Harwood Road, Bedford, Texas, 76021-4244, (800-874-5615). Clinical evaluations will be used to evaluate performance in the clinical environment.

### Prerequisite Courses for Admission

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC</td>
<td>Anatomy and Physiology I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC</td>
<td>Anatomy and Physiology I Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>BSC</td>
<td>Anatomy and Physiology II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC</td>
<td>Anatomy and Physiology II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ENC</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAC</td>
<td>College Algebra</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MCB</td>
<td>Microbiology and Human Disease</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MCB</td>
<td>Microbiology Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>PSY</td>
<td>General Psychology</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

### General Education Requirements

- Humanities General Education ........................................... 3 cr.

### Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS</td>
<td>Advanced Cardio Life Support</td>
<td>2 cr.</td>
</tr>
<tr>
<td>RET</td>
<td>Introduction to Respiratory Care</td>
<td>8 cr.</td>
</tr>
<tr>
<td>RET</td>
<td>Basic Respiratory Care</td>
<td>6 cr.</td>
</tr>
<tr>
<td>RET</td>
<td>Pharmacology for Respiratory Care</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RET</td>
<td>Cardiopulmonary Pathophysiology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RET</td>
<td>Respiratory Care Clinic I</td>
<td>2 cr.</td>
</tr>
<tr>
<td>RET</td>
<td>Respiratory Care Clinic II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>RET</td>
<td>Principles of Mechanical Ventilation</td>
<td>5 cr.</td>
</tr>
<tr>
<td>RET</td>
<td>Respiratory Intensive Care</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RET</td>
<td>Pulmonary Diagnostics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RET</td>
<td>Advanced Respiratory Care</td>
<td>2 cr.</td>
</tr>
<tr>
<td>RET</td>
<td>Pediatric and Neonatal Respiratory Care</td>
<td>6 cr.</td>
</tr>
<tr>
<td>RET</td>
<td>Respiratory Care Clinic III</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RET</td>
<td>Respiratory Care Clinic IV</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RET</td>
<td>Respiratory Care Clinic V</td>
<td>2 cr.</td>
</tr>
<tr>
<td>RET</td>
<td>Respiratory Care Seminar</td>
<td>2 cr.</td>
</tr>
</tbody>
</table>

### AAS • Respiratory Care - Transition

**AAS.RET.TRAN**

An individual who has earned the Certified Respiratory Therapist credential from the National Board for Respiratory Care (NBRC) is eligible to receive 23 hours of college credit toward the associate in applied science degree in Respiratory Care.

### Prerequisites for Admission

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC</td>
<td>Anatomy and Physiology I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC</td>
<td>Anatomy and Physiology I Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>BSC</td>
<td>Anatomy and Physiology II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC</td>
<td>Anatomy and Physiology II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ENC</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MCB</td>
<td>Microbiology and Human Disease</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MCB</td>
<td>Microbiology Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>MAC</td>
<td>College Algebra</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
PSY 2012 General Psychology ................................................................................................................................. 3 cr.
Humanities General Education............................................................................................................................... 3 cr.

Program Required Courses

EMS 2551C Advanced Cardiac Life Support ........................................................................................................... 2 cr.
RET 2264C Principles of Mechanical Ventilation ................................................................................................... 5 cr.
RET 2283 Respiratory Intensive Care ....................................................................................................................... 3 cr.
RET 2413C Pulmonary Diagnostics .......................................................................................................................... 2 cr.
RET 2533C Advanced Respiratory Care .................................................................................................................. 6 cr.
RET 2714C Pediatric and Neonatal Respiratory Care ............................................................................................... 3 cr.
RET 2834 Respiratory Care Clinic III ...................................................................................................................... 2 cr.
RET 2835 Respiratory Care Clinic IV ....................................................................................................................... 2 cr.
RET 2836 Respiratory Care Clinic V ......................................................................................................................... 1 cr.
RET 2930 Respiratory Care Seminar ....................................................................................................................... 3 cr.

Experiential Credit Awarded

RET 1024C Introduction to Respiratory Care ............................................................................................................ 8 cr.
RET 1274C Basic Respiratory Care .......................................................................................................................... 6 cr.
RET 1350 Pharmacology for Respiratory Care ......................................................................................................... 3 cr.
RET 1503 Cardiopulmonary Pathophysiology ......................................................................................................... 3 cr.
RET 1832 Respiratory Care Clinic I ........................................................................................................................ 2 cr.
RET 1833 Respiratory Care Clinic II ........................................................................................................................ 1 cr.

Cardiovascular Technology

The Cardiovascular Technology Program allows students to obtain an associate in science degree in Cardiovascular Technology. The courses are offered and taught jointly by Hillsborough Community College and Edison College. HCC offers the general education portion of the degree and assists in the teaching of the cardiovascular courses. The degree is granted by Edison College. The program is delivered via distance learning technology; that is, there is a two-way audio/video interaction with one or more remote sites located in classrooms geographically distant from the Edison College campus. Some travel to Edison College will be required.

The cardiovascular technologist performs diagnostic studies on patients in order to quantify cardiac disease including coronary arteriography, hemodynamic monitoring and analysis, and electrophysiology studies. They also assist the cardiologist in interventional therapeutic procedures including coronary angioplasty, rotoblator procedures, intra-coronary stenting, pacemaker insertion, and radio frequency ablation. For further information, contact Jeff Davis at Edison Community College (239) 489-9430 or jdavis@edison.edu.
Associate in Science Degree/Technical Programs

AAS • Accounting Technology
AAS.ACG.TECH (64 Credit Hours)
This program will prepare students for a position as an accountant or as an accounting paraprofessional in advanced professional accounting occupations requiring analysis, evaluation, theory and design.
The course work focuses on basic accounting functions as well as skills common to several fields of business, including finance, business law and general business topics.

General Education Requirements
ENC 1101 English Composition I .................................................................3 cr.
MGF 1119 Introductory Mathematics w/ Applications (non-transfer) or Mathematics General Education (transfer) .................................................................3 cr.
PSY 2012 General Psychology ........................................................................3 cr.
SYG 2000 Introduction to Sociology .................................................................3 cr.
Humanities General Education ........................................................................3 cr.

Program Required Courses
ACG 2021* Financial Accounting ..................................................................3 cr.
ACG 2071 Managerial Accounting .................................................................3 cr.
ACG 2100 Intermediate Accounting I .............................................................3 cr.
ACG 2110 Intermediate Accounting II ............................................................3 cr.
ACG 2340 Cost Accounting I ..........................................................................3 cr.
ACG 2350 Cost Accounting II .........................................................................3 cr.
ACG 2450 Microcomputers in Accounting ........................................................3 cr.
CGS 1000 Introduction to Computers and Technology .................................3 cr.
CGS 2301 Management Information Systems ................................................3 cr.
COP 1000 Programming Logic .........................................................................3 cr.
ECO 2023 Principles of Microeconomics .........................................................3 cr.
FIN 2001 Principles of Finance ........................................................................3 cr.
MAN 1021 Principles of Management .............................................................3 cr.
OST 1335 Business Communications ............................................................3 cr.
SPC 1006 Speech Improvement ......................................................................1 cr.
TAX 2000 Federal Tax Accounting I ...............................................................3 cr.
TAX 2010 Federal Tax Accounting II ..............................................................3 cr.

* Recommended course(s) for the first semester.

AS/AAS • Aquaculture
AS.AQUA/AAS.AQUA (60 Credit Hours)
This program will provide students with the knowledge and skills for an entry-level job in the aquaculture industry as a field/farm assistant or a laboratory technician. When students graduate they may also find employment in state agencies such as the Fresh Water Fish and Wildlife Commission that oversee environment and wildlife.

General Education Requirements

ANT 2000 Introduction to Anthropology or PSY 2012, General Psychology or SYG 2000, Introduction to Sociology .................................................................3 cr.
ENC 1101 English Composition I .................................................................3 cr.
ESC 1000 Earth Science and ..........................................................................3 cr.
ESC 1000L Earth Science Laboratory or .........................................................1 cr.
OCB 2000 Marine Biology and ......................................................................3 cr.
OCB 2000L Marine Biology Laboratory ..........................................................1 cr.
MGF 1119 Introductory Mathematics w/ Applications (non-transfer) or Mathematics General Education (transfer) .................................................................3 cr.
Humanities General Education ........................................................................3 cr.

Program Required Courses
CGS 1107 Introduction to Computers ..............................................................1 cr.
CHM 1025 Modern Chemistry .........................................................................3 cr.
CHM 1025L Modern Chemistry Laboratory ...................................................1 cr.
FAS 1012C* Aquacultural Organisms .............................................................3 cr.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAS 1401L</td>
<td>Aquacultural Laboratory Techniques</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FAS 1404C</td>
<td>Aquacultural Field Techniques</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FAS 2240C</td>
<td>Aquacultural Nutritional Techniques</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FAS 2253</td>
<td>Aquacultural Disease Processes</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FAS 2253L</td>
<td>Aquacultural Disease Processes Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>FAS 2263C</td>
<td>Aquacultural Reproductive Techniques</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FAS 2353C</td>
<td>Aquacultural Management Practices</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FAS 2941L</td>
<td>Aquacultural Field Experience I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FAS 2942L</td>
<td>Aquacultural Field Experience II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FAS 2943L</td>
<td>Aquacultural Field Experience III</td>
<td>3 cr.</td>
</tr>
<tr>
<td>IDS 1152C</td>
<td>Environmental Science</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SPC 1006</td>
<td>Speech Improvement</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ZOO 1450*</td>
<td>Ichthyology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ZOO 1450L*</td>
<td>Ichthyology Laboratory</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

* Recommended course(s) for the first semester.

**AS/AAS • Architectural Design and Construction Technology**

**AS.ADCT/AAS.ADCT (66 Credit Hours)**

This program will prepare students for a position as a construction planner or as an assistant to an architect or an architectural engineer in the planning and designing of structures, using construction materials and working with contracts and specifications. If students pass the contractor’s exam, they may become self-employed as contractors.

The course work in this program focuses on using the latest technology to solve problems faced by the architect, the engineer and building contractor as they apply to the planning and construction of buildings.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MGF 1119</td>
<td>Introductory Mathematics w/ Applications (non-transfer)</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Mathematics General Education (transfer)</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Humanities General Education</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Social Science General Education</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Natural Science General Education or Humanities General Education</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Social Science General Education</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 2304</td>
<td>Architectural Design IV</td>
<td>5 cr.</td>
</tr>
<tr>
<td>ARC 2461</td>
<td>Materials and Methods I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ARC 2501</td>
<td>Architectural Structures I</td>
<td>4 cr.</td>
</tr>
<tr>
<td>BCN 1210*</td>
<td>Construction Materials and Processes</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BCN 1250*</td>
<td>Introduction to Graphic Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BCN 2272*</td>
<td>Blueprint Reading</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BCN 2291C</td>
<td>Construction Materials Testing I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BCN 2939C</td>
<td>Construction Capstone</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BCT 2770C</td>
<td>Construction Estimating</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1107</td>
<td>Introduction to Computers</td>
<td>1 cr.</td>
</tr>
<tr>
<td>SPC 1006</td>
<td>Speech Improvement</td>
<td>1 cr.</td>
</tr>
<tr>
<td>SUR 2000C</td>
<td>Surveying I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>TAR 1120</td>
<td>Architectural Drawing I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>TAR 1122C</td>
<td>Architectural Drawing II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>TAR 2053</td>
<td>Introduction to Computer Aided Design and Drafting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>TAR 2054</td>
<td>Intermediate Computer Aided Design and Drafting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>TAR 2055</td>
<td>Advanced Computer Aided Design and Drafting</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

* Recommended course(s) for the first semester.
AS • Biotechnology
AS.BIO.TECH (61 Credit Hours)

This program prepares students seeking positions as biotechnology laboratory technicians, biological technicians, and medical or clinical technicians. It will enable individuals currently employed in biotechnology occupations to update skills to address changing technologies for career advancement. Biotechnology is a high-skill, high-demand, high-wage industry.

General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1010</td>
<td>Biological Science I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1010L</td>
<td>Biological Science I Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAC 1105</td>
<td>College Algebra</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHI 1600</td>
<td>Ethics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PSY 2012</td>
<td>General Psychology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>STA 2023</td>
<td>Elementary Statistics</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Program Required Courses/Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1420C</td>
<td>Introduction to Biotechnology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 2420</td>
<td>Biotechnology I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 2420L</td>
<td>Biotechnology I Laboratory</td>
<td>2 cr.</td>
</tr>
<tr>
<td>BSC 2427</td>
<td>Biotechnology II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 2427L</td>
<td>Biotechnology II Laboratory</td>
<td>2 cr.</td>
</tr>
<tr>
<td>BSC 2943</td>
<td>Biotechnology Internship</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1092C</td>
<td>Human Biology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1510</td>
<td>Spreadsheet Applications I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CHM 1045</td>
<td>College Chemistry I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CHM 1045L</td>
<td>College Chemistry I Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CHM 1046</td>
<td>College Chemistry II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CHM 1046L</td>
<td>College Chemistry II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CHM 2210</td>
<td>Organic Chemistry I</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CHM 2210L</td>
<td>Organic Chemistry I Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CHM 2211</td>
<td>Organic Chemistry II</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CHM 2211L</td>
<td>Organic Chemistry II Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>MCB 2010</td>
<td>General Microbiology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MCB 2010L</td>
<td>General Microbiology Laboratory</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

AS/AAS • Business Administration
AS.BUS.MAN/AS.BUS.MAN.INT/AAS.BUS.MAN/AAS.BUS.MAN.INT (64 Credit Hours)

AS • Business Administration and Management
AS.BUS.MAN

The associate in science degree in Business Administration and Management prepares students to assume management or supervisory positions in business, industry, and government. It provides basic skills in a broad range of business functions including accounting, computer usage, management, and marketing.

NOTE: Beginning Fall Term 2000, all graduates of this program shall articulate into a business administration baccalaureate degree in the designated university program under the provision of Rule 6A-10.024, Articulation Between Universities, Community Colleges, and School Districts.

General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>English Composition II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAC 1105</td>
<td>College Algebra</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SPC 1608</td>
<td>Public Speaking</td>
<td>3 cr.</td>
</tr>
<tr>
<td>STA 2023</td>
<td>Elementary Statistics</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Humanities General Education</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2021*</td>
<td>Financial Accounting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ACG 2071</td>
<td>Managerial Accounting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1000*</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td>Credits</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>ECO 2013</td>
<td>Principles of Macroeconomics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ECO 2023</td>
<td>Principles of Microeconomics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FIN 2001</td>
<td>Principles of Finance</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GEB 1011*</td>
<td>Introduction to Business</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAC 2233</td>
<td>Calculus for Business and Social Science</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAN 1021</td>
<td>Principles of Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAR 1011</td>
<td>Principles of Marketing</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Select 16 credit hours from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRC 1301</td>
<td>Introduction to Financial Institutions</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BUL 2241</td>
<td>Business Law I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BUL 2242</td>
<td>Business Law II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1160</td>
<td>Desktop Information Management</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1510</td>
<td>Spreadsheet Applications</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1540</td>
<td>Database Management I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 2301</td>
<td>Management Information Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ENT 1000</td>
<td>Introduction to Entrepreneurship</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GEB 1214</td>
<td>Business Communications and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GEB 1949</td>
<td>Business Internship</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GEB 2350</td>
<td>Introduction to International Business Essentials</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GEB 2351</td>
<td>International Business Practice Firm</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAN 2604</td>
<td>Intercultural Relations in Business</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHI 1600</td>
<td>Ethics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SBM 2000</td>
<td>Small Business Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SPN 1015</td>
<td>Conservalional Spanish for Occupational Programs</td>
<td>2 cr.</td>
</tr>
</tbody>
</table>

* Recommended course(s) for the first semester.

**AS/AAS • Business Administration – International Business Management**

**AS.BUS.MAN.INT/AAS.BUS.MAN.INT**

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 2000</td>
<td>Introduction to Anthropology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MGF 1106</td>
<td>Topics in Mathematics</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Select 6 credit hours from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENL 2012</td>
<td>British Literature to 1800</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ENL 2022</td>
<td>British Literature: 1800 to Present</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUM 2210</td>
<td>World Humanities: Prehistoric to Early Modern Era</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUM 2230</td>
<td>World Humanities: Early Modern to Contemporary</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUM 2410</td>
<td>Asian Humanities</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUM 2420</td>
<td>African Humanities</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUM 2461</td>
<td>Latin American Humanities</td>
<td>3 cr.</td>
</tr>
<tr>
<td>LIT 2110</td>
<td>World Literature to 1650</td>
<td>3 cr.</td>
</tr>
<tr>
<td>LIT 2120</td>
<td>World Literature: 1650 to Present</td>
<td>3 cr.</td>
</tr>
<tr>
<td>REL 2300</td>
<td>Introduction to Religion</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2021</td>
<td>Financial Accounting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ECO 2013</td>
<td>Principles of Macroeconomics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FIN 2001</td>
<td>Principles of Finance</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FIN 2051</td>
<td>International Financial Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GEB 1011</td>
<td>Introduction to Business</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GEB 1214</td>
<td>Business Communications and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GEB 2350</td>
<td>Introduction to International Business Essentials</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GEB 2351</td>
<td>International Business Practice Firm</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GEB 2370</td>
<td>Introduction to International Business Policy Issues</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAN 1021</td>
<td>Principles of Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAN 2604</td>
<td>Intercultural Relations in Business</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAR 1011</td>
<td>Principles of Marketing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAR 2150</td>
<td>International Marketing</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
Select 6 credit hours of specified electives from the following:

BUL 2241 Business Law I ................................................................. 3 cr.
BUL 2242 Business Law II ................................................................. 3 cr.
CGS 1000 Introduction to Computers and Technology ...................... 3 cr.
GEB 1949 Business Internship .......................................................... 3 cr.

AS/AAS • Computer Engineering Technology

AS.CET.UNIV/AAS.CET (68 Credit Hours)

AS • Computer Engineering Technology

AS.CET.UNIV

General Education Requirements

ENC 1101 English Composition I ......................................................... 3 cr.
ENC 1102 English Composition II ....................................................... 3 cr.
MAC 1105 College Algebra ............................................................... 3 cr.
SPC 1608 Public Speaking ............................................................... 3 cr.
PHY 1053 General Physics I ........................................................... 3 cr.
PHY 1053L General Physics I Laboratory ........................................ 1 cr.

Select 3 credit hours from the following:

AMH 1010 Early American History .................................................. 3 cr.
AMH 1020 Modern American History ........................................... 3 cr.
ANT 2000 Introduction to Anthropology .......................................... 3 cr.
EUH 1000 The Western World: Origins to Early Modern Europe ........ 3 cr.
EUH 1001 The Western World: Modern Europe ............................. 3 cr.
POS 1001 Introduction to Political Science ..................................... 3 cr.
POS 2041 American Government .................................................. 3 cr.

Select 4 credit hours from the following:

CET 1172C Computer Upgrade and Repair ....................................... 3 cr.
CET 1174C Advanced Computer Repair ........................................ 3 cr.
CET 2335C Microcomputer Systems .............................................. 3 cr.
CGS 1510 Spreadsheet Applications .............................................. 1 cr.
CGS 1540 Database Management I ............................................... 1 cr.
COP 1000 Programming Logic ..................................................... 3 cr.
COP 1220 Programming in “C” ...................................................... 3 cr.
COP 1332 Visual Basic, Beginning ................................................ 3 cr.
COP 1821 Visual Basic, Advanced ................................................ 3 cr.
COP 2800 JAVA Programming ..................................................... 3 cr.
CTS 1305 Introduction to Networking ............................................ 3 cr.
ECO 2013 Principles of Macroeconomics ........................................ 3 cr.

* Recommended course(s) for the first semester.
AAS • Computer Engineering Technology

AAS.CET

This program will prepare students for employment in an entry-level position as a computer technician. The course work focuses on the diagnosis and repair of hardware and software in micro, mini and mainframe computers. With minimal additional specialized training, students may become a field or in-house shop technician.

General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MGF 1119</td>
<td>Introductory Mathematics w/Applications</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PSC 1515</td>
<td>Energy and the Environment</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PSC 1515L</td>
<td>Energy and the Environment Laboratory</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET 1112C*</td>
<td>Basic Digital Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET 1123C</td>
<td>Introduction to Microprocessors</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET 1172C</td>
<td>Computer Upgrade and Repair</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET 1174C</td>
<td>Advanced Computer Repair</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET 1556C</td>
<td>Structured Cabling</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET 2113C</td>
<td>Digital Systems Analysis</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET 2152C</td>
<td>Advanced Microprocessors</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET 2939</td>
<td>Computer Engineering Technology Capstone</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 1305</td>
<td>Introduction to Networking</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 1327</td>
<td>Microsoft Windows Client Operating System</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EET 1036C*</td>
<td>Basic AC and DC</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EET 1083C*</td>
<td>Electronics Orientation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EET 1141C</td>
<td>Solid State Devices</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MTB 1327</td>
<td>Electronics Math</td>
<td>4 cr.</td>
</tr>
</tbody>
</table>

Select at least 6 credit hours from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1500</td>
<td>Applied Word Processing</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1510</td>
<td>Spreadsheet Applications I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1540</td>
<td>Database Management I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1554</td>
<td>Internet Basics</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1555</td>
<td>Introduction to Internet</td>
<td>1 cr.</td>
</tr>
<tr>
<td>COP 1000</td>
<td>Programming Logic</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1220</td>
<td>Programming in “C”</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1332</td>
<td>Visual BASIC, Beginning</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1821</td>
<td>Visual BASIC, Advanced</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2221</td>
<td>Advanced “C”</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2800</td>
<td>JAVA Programming</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2830</td>
<td>Scripting for the Web</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

* Recommended course(s) for the first semester.

AS/AAS • Computer Information Administrator

AS.CIA/AAS.CIA (63 Credit Hours)

This program prepares students for jobs in the field of PC support specialist, help desk specialist, microcomputer specialist, software specialist, and information systems specialist. Students who can demonstrate proficiency in CGS 1500, OST 1831, and OST 1832 can substitute an approved three credit hour selected elective course.

General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>English Composition II or Social Science General Education</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MGF 1119</td>
<td>Introductory Mathematics w/Applications (non-transfer) or Mathematics General Education (transfer)</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Social Science General Education | 3 cr. |
| Natural Science or Social Science General Education | 3 cr. |
### Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET 1172C</td>
<td>Computer Upgrading and Repair</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET 1174C</td>
<td>Advanced Computer Repair</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1000*</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1555</td>
<td>Introduction to the Internet</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1577</td>
<td>Presentations Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1761</td>
<td>Computer Operating Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2301</td>
<td>Management Information Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2541</td>
<td>Database Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CIS 1931</td>
<td>Microcomputer Concepts</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CIS 2321</td>
<td>Systems Analysis</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CIS 2939</td>
<td>Computer Information Administrator Capstone</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CNT 1401</td>
<td>Introduction to Network Security</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1000</td>
<td>Programming Logic</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1332</td>
<td>Visual BASIC, Beginning</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 1305</td>
<td>Introduction to Networking</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Select at least 3 credit hours from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET 1556C</td>
<td>Structured Cabling</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1160</td>
<td>Desktop Information Management</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1510</td>
<td>Spreadsheet Applications I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1871</td>
<td>Multimedia Authoring I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2511</td>
<td>Spreadsheet Applications II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 2512</td>
<td>Spreadsheet Applications III</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 2585</td>
<td>Desktop Internet Publishing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2804</td>
<td>Vector Graphic Application</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2821</td>
<td>Graphics Design for Multimedia/ Internet</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2827</td>
<td>Advanced Graphics Design for Multimedia/Internet</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2874</td>
<td>Multimedia Authoring II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CNT 2941</td>
<td>Networking Services Internship</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1821</td>
<td>Visual Basic, Advanced</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 1106</td>
<td>Introduction to UNIX</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 1306</td>
<td>Microsoft Windows Server Configuring Network Infrastructure</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 1328</td>
<td>Microsoft Windows Server</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 2301</td>
<td>Unix/Linux Administration I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1142</td>
<td>Keyboarding I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 1335</td>
<td>Business Communications</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1741</td>
<td>Word Processing I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 1831</td>
<td>Introduction to Windows I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 1832</td>
<td>Introduction to Windows II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 2742</td>
<td>Word Processing II</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

* Recommended course(s) for the first semester.

### AS/AAS • Computer Programming

#### AS.COP/AAS.COP (63 Credit Hours)

This program prepares students for jobs in the field of computer programmer aide, junior programmer, senior programmer, data manager, programmer analyst, and mid-range computer specialist.

### General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>English Composition II or Social Science General Education</td>
</tr>
<tr>
<td>MGF 1119</td>
<td>Introductory Mathematics w/Applications (non-transfer) or Mathematics General Education 3 cr.</td>
</tr>
</tbody>
</table>

### Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1000*</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
### Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1761</td>
<td>Computer Operation Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2301</td>
<td>Management Info. Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2541</td>
<td>Database Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CIS 2321</td>
<td>Systems Analysis</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1000</td>
<td>Programming Logic</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1120</td>
<td>COBOL, Beginning</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1220</td>
<td>Programming in “C”</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1812</td>
<td>Introduction to XML</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1332</td>
<td>Visual BASIC, Beginning</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2360</td>
<td>Programming in C#</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2800</td>
<td>JAVA Programming</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2805</td>
<td>JAVA, Advanced</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2939</td>
<td>Computer Programming Capstone</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 1106</td>
<td>Introduction to UNIX</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Select at least 3 specified elective credits from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1936</td>
<td>Perl and CGI</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1821</td>
<td>Visual BASIC, Advanced</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2224</td>
<td>Programming in C++</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2344</td>
<td>Shell Scripting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2830</td>
<td>Scripting for the Web</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 1305</td>
<td>Introduction to Networking</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 2301</td>
<td>Unix/Linux Administration I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 2440</td>
<td>Database Programming - SQL</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

* Recommended course(s) for the first semester.

### AAS • Construction Management Technology

**AAS.BCT (67 Credit Hours)**

#### General Education Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ESC 1000</td>
<td>Earth Science</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ESC 1000L</td>
<td>Earth Science Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>MGF 1106</td>
<td>Topics in Mathematics or higher Mathematics General Education</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHI 1600</td>
<td>Ethics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PSY 2012</td>
<td>General Psychology</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

#### Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCN 1001</td>
<td>Introduction to Building Construction</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BCN 1773</td>
<td>Building Construction Estimating, Scheduling and Cost Control</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BCN 2942</td>
<td>Construction Internship</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BCT 1040</td>
<td>Introductory Blueprint Reading</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BCT 1081</td>
<td>Introduction to Materials and Methods</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BCT 1120</td>
<td>Leveling Instruments, Site Preparation and Layout</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BCT 1720</td>
<td>Construction Methods</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BCT 1760</td>
<td>Building Codes and Safety Regulations</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BCT 2705</td>
<td>Construction Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BCT 2730</td>
<td>Construction Supervision</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BCT 2743</td>
<td>Construction Law</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BCT 2750</td>
<td>Building Construction Contracts and Finance</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BCT 2761</td>
<td>Structural Systems in Construction</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EVS 2893C</td>
<td>Environmental Sampling and Analysis I</td>
<td>5 cr.</td>
</tr>
<tr>
<td>PHY 1025</td>
<td>Fundamentals of Physics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHY 1025L</td>
<td>Fundamentals of Physics Laboratory</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>
AS • Criminology and Criminal Justice Studies

AS.CJT (64 Credit Hours)

The Criminal Justice associate in science degree program (AS to BS) offers students a broad background in the history, philosophy, organization, management and operation of the criminal justice system. Upon completion, this AS degree opens up entry-level, non-sworn (see Note 1) positions in local, state, and federal agencies, i.e. juvenile justice, private security, law enforcement, corrections, probation and parole, detention centers and community-based intervention programs. It can also be the first step toward a career in law.

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 securing approval in advance from the transfer institution.

For students interested in a two-year degree in criminal justice, this program will prepare them to work in law enforcement in agencies such as police departments, sheriff’s offices, correctional institutions, criminal and juvenile courts, crime laboratories or crime scene units dealing with physical evidence and will also help them develop the educational skills needed to advance into and within various law enforcement related fields such as police work and corrections and law.

For more information, students can refer to the Criminal Justice Technology website at www.hccfl.edu/yc/cjt.aspx for specific details.

NOTE 1: Beginning Fall Term 2004, all graduates of this program shall articulate into a criminal justice baccalaureate degree in the designated university program under the provision of Rule 6A-10.024, Articulation between Universities, Community Colleges, and School Districts.

General Education Requirements

ENC 1101 English Composition I ........................................................................................................... 3 cr.
POS 2041 American Government ........................................................................................................... 3 cr.
PSY 2012 General Psychology ................................................................................................................ 3 cr.
SYG 2000 Introduction to Sociology ......................................................................................................... 3 cr.
Humanities General Education ............................................................................................................ 3 cr.
Mathematics General Education .......................................................................................................... 3 cr.

Program Required Courses

CCJ 1010** Introduction to Criminology .............................................................................................. 3 cr.
CCJ 1020** Introduction to Criminal Justice ......................................................................................... 3 cr.
CCJ 2910 Directed Research ................................................................................................................... 3 cr.
CCJ 2940 Criminal Justice Internship or CCJ 2949, Criminal Justice Field Studies ......................... 3 cr.
CJE 2004 Career Choices in Criminal Justice ....................................................................................... 1 cr.
CJL 1002 Juvenile Delinquency ............................................................................................................ 3 cr.
CJL 1062 Constitutional Law .................................................................................................................. 3 cr.
CJL 1100 Criminal Law ......................................................................................................................... 3 cr.
CJL 2130 Criminal Evidence and Procedure ........................................................................................ 3 cr.

Select 3 credit hours from the following:

CJC 1000 Introduction to Corrections .................................................................................................... 3 cr.
CJE 1000 Introduction to Law Enforcement .......................................................................................... 3 cr.
CJE 1640 Introduction to Criminalistics ............................................................................................... 3 cr.
CJL 1500 Introduction to the Court System .......................................................................................... 3 cr.

Select 18 credit hours from the following:

CCJ 1488 Ethics in Criminal Justice ....................................................................................................... 3 cr.
CCJ 2013 Introduction to Victimology .................................................................................................... 3 cr.
CCJ 2111 Introduction to Theories of Criminal Behavior ........................................................................ 3 cr.
CCJ 2191 Human Behavior in Criminal Justice ..................................................................................... 3 cr.
CCJ 2600 Criminal Deviant Behavior in Society ..................................................................................... 3 cr.
CCJ 2610 Introduction to Criminal Typologies ...................................................................................... 3 cr.
CCJ 2618 Forensic Psychology ............................................................................................................. 3 cr.
CCJ 2648 Organized Crime .................................................................................................................... 3 cr.
CCJ 2671 Race, Gender, and Ethnicity in Criminal Justice .................................................................... 3 cr.
CCJ 2685 Domestic and Sexual Violence ............................................................................................... 3 cr.
CCJ 2720 Introduction to Criminal Justice Research Methods ............................................................... 3 cr.
CCJ 2934 Contemporary Issues in Criminal Justice .............................................................................. 3 cr.
CCJ 2935 Seminar on Criminal Justice Issues ....................................................................................... 3 cr.
CJC 1000 Introduction to Corrections .................................................................................................... 3 cr.
CJC 2162 Probation and Parole ................................................................................................................. 3 cr.
CJE 1000 Introduction to Law Enforcement .......................................................................................... 3 cr.
CJE 1640 Introduction to Criminalistics.........................................................3 cr.
CJE 1642C Introduction to Crime Scene Technology......................................3 cr.
CJE 1643C Advanced Crime Scene Technology..............................................3 cr.
CJE 1653 Introduction to Crime Analysis and Intelligence............................3 cr.
CJE 1680 Introduction to Computer Crimes................................................3 cr.
CJE 2170 Comparative Police and Criminal Justice Systems.......................3 cr.
CJE 2233 Drug Abuse and Crime ...............................................................3 cr.
CJE 2300 Police Administration and Organization........................................3 cr.
CJE 2400 Community Relations.................................................................3 cr.
CJE 2600 Criminal Investigation.................................................................3 cr.
CJE 2603 The Investigative Cycle from Crime Scene to Court.....................3 cr.
CJE 2614 Serial Killers ................................................................................3 cr.
CJE 2664 Advanced Crime and Intelligence Analysis...................................3 cr.
CJ 2004 Juvenile Justice System.................................................................3 cr.
CJL 1070 Legal Rights of Prisoners................................................................3 cr.
CJL 1500 Introduction to the Court System................................................3 cr.
CJL 2072 Civil Rights and Liability in Criminal Justice...............................3 cr.
CJL 2202 Legal Research in Criminal Justice..............................................3 cr.
CJL 2400 Criminal Court Litigation............................................................3 cr.
CJL 2610 Courtroom Presentation of Scientific Evidence...............................3 cr.
DSC 1002 Introduction to Terrorism..........................................................3 cr.
DSC 1003 Introduction to Homeland Security.............................................3 cr.
DSC 2033 Introduction to Terrorist Tactics and Weapons..............................3 cr.
SCC 1000 Introduction to Security ..............................................................3 cr.
SCC 1001 Introduction to Private Investigation............................................3 cr.

*May be taken if not previously chosen from the “Select 3 credit hours from the following” category.

** Recommended course(s) for the first semester.

NOTE 2: Regardless of degree work completed, in order to be a sworn law enforcement, corrections, or probation officer in the State of Florida, candidates must successfully complete a state mandated training academy such as those offered by Hillsborough Community College’s Criminal Justice Institute.

NOTE 3: Students who have successfully completed a Florida police or correction academy will be eligible for articulated credit toward this degree. Refer to the Criminal Justice Technology website at www.hccfl.edu/yc/cji.aspx for specific details.

AAS • Criminology and Criminal Justice Studies

AAS.CJT.OFR (64 Credit Hours)

This program will give law enforcement and corrections officers, as well as law enforcement and corrections academy graduates, a path toward an associate degree. Law enforcement and corrections officers, as well as law enforcement and corrections academy graduates, will be given articulated credit for successfully completing a Florida academy. For more information, student can refer to the Criminal Justice Technology website at www.hccfl.edu/yc/cji.aspx for specific details.

NOTE 1: Regardless of degree work completed, in order to be a sworn law enforcement, corrections, or probation officer in the State of Florida, candidates must successfully complete a state mandated training academy such as those offered by Hillsborough Community College’s Criminal Justice Institute.

General Education Requirements

ENC 1101 English Composition I...............................................................3 cr.
Humanities General Education...................................................................3 cr.
Mathematics General Education...................................................................3 cr.

Select 6 credit hours from the following Program Specified General Education Requirements:

POS 2041 American Government.............................................................3 cr.
PSY 2012 General Psychology.................................................................3 cr.
SYG 2000 Introduction to Sociology.......................................................3 cr.

Program Required Course

CJE 2004 Career Choices in Criminal Justice............................................1 cr.
Articulated Credit - 48 cr.

Students who have successfully completed a Florida police or correction academy or both will be eligible for between 27 and 39 articulated credits toward this degree. Refer to the Criminal Justice Technology website at www.hccfl.edu/vc/cji.aspx for specific details.

The balance of the 48 articulated credits must be chosen from the following list of courses:

Group A: Select 6 credit hours from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCJ 1010</td>
<td>Introduction to Criminology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CCJ 1020</td>
<td>Introduction to Criminal Justice</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJJ 1002</td>
<td>Juvenile Delinquency</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJL 1062</td>
<td>Constitutional Law</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJL 1100</td>
<td>Criminal Law</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJL 2130</td>
<td>Criminal Evidence and Procedures</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Group B: Select remaining credit hours from the following or any courses in Group A not already selected.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCJ 1488</td>
<td>Ethics in Criminal Justice</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CCJ 2013</td>
<td>Introduction to Victimology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CCJ 2111</td>
<td>Introduction to Theories of Criminal Behavior</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CCJ 2191</td>
<td>Human Behavior in Criminal Justice</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CCJ 2600</td>
<td>Criminal Deviant Behavior in Society</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CCJ 2610</td>
<td>Introduction to Criminal Typologies</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CCJ 2618</td>
<td>Forensic Psychology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CCJ 2648</td>
<td>Organized Crime</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CCJ 2671</td>
<td>Race, Gender, and Ethnicity in Criminal Justice</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CCJ 2685</td>
<td>Domestic and Sexual Violence</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CCJ 2720</td>
<td>Introduction to Criminal Justice Research Methods</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CCJ 2934</td>
<td>Contemporary Issues in Criminal Justice</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CCJ 2935</td>
<td>Seminar on Criminal Justice Issues</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CCJ 2949</td>
<td>Criminal Justice Field Studies</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJC 1000</td>
<td>Introduction to Corrections</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJC 2162</td>
<td>Probation and Parole</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJE 1000</td>
<td>Introduction to Law Enforcement</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJE 1640</td>
<td>Introduction to Criminalistics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJE 1642C</td>
<td>Introduction to Crime Scene Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJE 1643C</td>
<td>Advanced Crime Scene Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJE 1653</td>
<td>Introduction to Crime Analysis and Intelligence</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJE 1680</td>
<td>Introduction to Computer Crimes</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJE 2170</td>
<td>Comparative Police and Criminal Justice Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJE 2233</td>
<td>Drug Abuse and Crime</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJE 2300</td>
<td>Police Administration and Organization</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJE 2400</td>
<td>Community Relations</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJE 2600</td>
<td>Criminal Investigation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJE 2603</td>
<td>The Investigative Cycle from Crime Scene to Court</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJE 2614</td>
<td>Serial Killers</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJE 2664</td>
<td>Advanced Crime and Intelligence Analysis</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJJ 2004</td>
<td>Juvenile Justice System</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJL 1070</td>
<td>Legal Rights of Prisoners</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJL 1500</td>
<td>Introduction to the Court System</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJL 2072</td>
<td>Civil Rights and Liability in Criminal Justice</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJL 2202</td>
<td>Legal Research in Criminal Justice</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJL 2400</td>
<td>Criminal Court Litigation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJL 2610</td>
<td>Courtroom Presentation of Scientific Evidence</td>
<td>3 cr.</td>
</tr>
<tr>
<td>DSC 1002</td>
<td>Introduction to Terrorism</td>
<td>3 cr.</td>
</tr>
<tr>
<td>DSC 1003</td>
<td>Introduction to Homeland Security</td>
<td>3 cr.</td>
</tr>
<tr>
<td>DSC 2033</td>
<td>Introduction to Terrorist Tactics and Weapons</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SCC 1000</td>
<td>Introduction to Security</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SCC 1001</td>
<td>Introduction to Private Investigation</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
AS/AAS • Culinary Management
AS.CUL.CULA/AAS.CUL.CULA (64 Credit Hours)

This program will provide students with the skills necessary for employment as a restaurant cook or chef.

The Culinary Management program and courses are accredited by the American Culinary Federation Foundation’s Accrediting Commission at 180 Center Place Way, St. Augustine, Florida 32086.

NOTE: Beginning Fall term 2008, all graduates of this program are eligible to articulate the AS degree in Culinary Management to the BS degree in Hotel and Restaurant Management at the University of Houston, Conrad N. Hilton College of Hotel and Restaurant Management.

General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MGF 1119</td>
<td>Introductory Mathematics w/ Applications (non-transfer) or Mathematics General Education (transfer)</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Humanities General Education</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PSY 2012</td>
<td>General Psychology</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Natural Science General Education</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1107</td>
<td>Introduction to Computers</td>
<td>1 cr.</td>
</tr>
<tr>
<td>FOS 1201*</td>
<td>Sanitation and Safety Management</td>
<td>2 cr.</td>
</tr>
<tr>
<td>FSS 1223C*</td>
<td>Food Preparation for Managers</td>
<td>4 cr.</td>
</tr>
<tr>
<td>FSS 1063C</td>
<td>Food Specialty I (Baking)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FSS 1248C</td>
<td>Food Specialty II (Garde Manger I)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FSS 1500</td>
<td>Food and Beverage Control</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FSS 1941</td>
<td>Food Practicum I</td>
<td>2 cr.</td>
</tr>
<tr>
<td>FSS 1942</td>
<td>Food Practicum II</td>
<td>2 cr.</td>
</tr>
<tr>
<td>FSS 1943</td>
<td>Food Practicum III</td>
<td>2 cr.</td>
</tr>
<tr>
<td>FSS 1944</td>
<td>Food Practicum IV</td>
<td>2 cr.</td>
</tr>
<tr>
<td>FSS 1945</td>
<td>Food Practicum V</td>
<td>2 cr.</td>
</tr>
<tr>
<td>FSS 2100*</td>
<td>Food Plan and Menu Preparation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FSS 2120</td>
<td>Food Purchasing and Storage</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FSS 2271</td>
<td>Beverage Management Service</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HFT 1000</td>
<td>Introduction to Hospitality Industry Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HFT 2210</td>
<td>Supervisory Development</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HFT 2840</td>
<td>Maître d’ and Dining Room Service</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUN 2201</td>
<td>Fundamentals of Human Nutrition</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SPC 1006</td>
<td>Speech Improvement</td>
<td>1 cr.</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

* Recommended course(s) for the first semester.

AS/AAS • Database Technology
AS.DB.TECH/AAS.DB.TECH (63 credit hours)

The Database Technology program provides students with a general approach to database design, programming and administration.

General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>English Composition II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MGF 1119</td>
<td>Introductory Mathematics w/ Applications (non-transfer) or Mathematics General Education (transfer)</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Humanities General Education</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Social Science General Education</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1000*</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1103</td>
<td>Project Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2301</td>
<td>Management Information Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2541</td>
<td>Database Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CIS 2321</td>
<td>Systems Analysis</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CNT 1401</td>
<td>Introduction to Network Security</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Computer Science Electives</td>
<td>9 cr.</td>
</tr>
</tbody>
</table>
DIE 2419 Nutrition Education Practicum........................................................................................ ....... 2 cr.
DIE 2270 Clinical Nutrition I ................................................................................................. ................... 3 cr.
DIE 2000 Introduction to Dietetics ........................................................................................................... 3 cr.

Social Science General Education ............................................................................................ 3 cr.
Humanities General Education ............................................................................................... 3 cr.

DIE 2271 Clinical Nutrition II ................................................................................................................... 3 cr.

Humanities General Education ............................................................................................... 3 cr.
PSY 2012 General Psychology ................................................................................................... ............... 3 cr.

DIE 2401 Nutrition Education and Interviewing ................................................................................... 3 cr.
DIE 2533 Clinical Practicum ................................................................................................... .................. 2 cr.
FSS 2100 Food Plans and Menu Preparation ...................................................................................... ... 3 cr.
FSS 1941 Food Practicum I ..................................................................................................... .................. 2 cr.

MCB 1060 Food Microbiology .................................................................................................... ................ 3 cr.
HS C 1531 Medical Terminology................................................................................................................ 3 cr.
HUN 2201* Fundamentals of Human Nutrition ........................................................................................ 3 cr.

* Recommended course(s) for the first semester.

**AS • Dietetic Technician**

**AS.DIET.TECH (64 credit hours)**

The Dietetic Technician program prepares students to function at the generalist level of dietetic care under the supervision of a registered dietitian. Duties include supervision of employees, menu planning, diet instruction, food purchasing and supervision of food production. The multi-disciplinary training (culinary, hospitality and dietetics) will enable graduates to use culinary arts and food service management skills in a variety of traditional and non-traditional job settings. 

**NOTE:** The Dietetic Technician AS degree is currently granted candidacy for accreditation by the Commission on Accreditation for Dietetics Education of the American Dietetic Association, 120 S Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, 312-899-0040 x 5400. Graduates of a CADE accredited Dietetic Technician program are eligible to write the Commission on Dietetic Registration (CDR) registration examination for dietetic technicians.

**General Education Requirements**

**Program Required Courses**

ACG 2021 Financial Accounting............................................................................................................. 3 cr.
CGS 1000* Introduction to Computers and Technology ........................................................................... 3 cr.
DIE 2000 Introduction to Dietetics........................................................................................................ 3 cr.
DIE 2270 Clinical Nutrition I ................................................................................................................... 3 cr.
DIE 2271 Clinical Nutrition II ................................................................................................................... 3 cr.
DIE 2401 Nutrition Education and Interviewing..................................................................................... 3 cr.
DIE 2419 Nutrition Education Practicum ............................................................................................... 2 cr.
DIE 2533 Clinical Practicum.................................................................................................................... 2 cr.
FOS 1201 Sanitation and Safety Management ......................................................................................... 2 cr.
FSS 1223C Food Preparation for Managers ............................................................................................ 4 cr.
FSS 1941 Food Practicum I ........................................................................................................................ 2 cr.
FSS 2100 Food Plans and Menu Preparation ............................................................................................ 3 cr.
FSS 2120 Food Purchase and Storage....................................................................................................... 3 cr.
HFT 2210 Supervisory Development ...................................................................................................... 3 cr.
HSC 1531 Medical Terminology................................................................................................................ 3 cr.
HUN 2201* Fundamentals of Human Nutrition ........................................................................................ 3 cr.
MCB 1060 Food Microbiology .............................................................................................................. 3 cr.
MCB 1060L Food Microbiology Laboratory ............................................................................................... 1 cr.

* Recommended course(s) for the first semester.

**AS/AAS • Digital Media/Multimedia Technology**

**AS.MMT/AAS.MMT (64 Credit Hours)**

This program prepares students for jobs such as desktop publisher, production designer, electronic publisher, illustrator, multimedia specialist, multimedia presentation developer, interface designer, computer graphic designer, and project manager.

**General Education Requirements**

**NOTE:** The following general education requirements apply to Game Design, and Development and Multimedia Developer.

ENC 1101 English Composition I ........................................................................................................... 3 cr.
ENC 1102 English Composition II or Social Science General Education .............................................. 3 cr.
MGF 1119 Introductory Mathematics w/Applications (non-transfer) or Mathematics General Education (transfer) ......................................................................................................................... 3 cr.
Humanities General Education .............................................................................................................. 3 cr.
Social Science General Education ......................................................................................................... 3 cr.
NOTE: Select either the Game Design and Development program required courses or the Multimedia Developer program required courses to complete the Digital Media/Multimedia Technology degree.

Game Design and Development
AS.MMT.GAME/AAS.MMT.GAME

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 1023</td>
<td>Introduction to Game Development</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CAP 2042</td>
<td>Game Design and Development</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CAP 2043</td>
<td>Advanced Game Design and Development</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CAP 2939</td>
<td>Digital Media/Multimedia Technology Capstone</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1871</td>
<td>Multimedia Authoring I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2821</td>
<td>Graphics Design for Multimedia/Internet</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2827</td>
<td>Advanced Graphics Design for Multimedia/Internet</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2874</td>
<td>Multimedia Authoring II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2876</td>
<td>Digital Audio/Video Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2877</td>
<td>Digital Animation Design</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Select at least 16 specified elective credits from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 2585</td>
<td>Desktop Internet Publishing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2804</td>
<td>Vector Graphic Application</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EME 2040</td>
<td>Introduction to Technology for Educators</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Any courses with prefix: CEN, CET, CGS, CIS, COP, CNT or CTS

Multimedia Developer

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 2939</td>
<td>Digital Media/Multimedia Technology Capstone</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1577</td>
<td>Presentation Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1871</td>
<td>Multimedia Authoring I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2585</td>
<td>Desktop Internet Publishing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2804</td>
<td>Vector Graphic Application</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2820</td>
<td>Web Authoring HTML</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2821</td>
<td>Graphics Design for Multimedia/Internet</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2827</td>
<td>Advanced Graphics Design for Multimedia/Internet</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2874</td>
<td>Multimedia Authoring II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2876</td>
<td>Digital Audio/Video Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2877</td>
<td>Digital Animation Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1000</td>
<td>Programming Logic</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2830</td>
<td>Scripting for the Web</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EME 2040</td>
<td>Introduction to Educational Technology</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Select at least 4 specified elective credits from the following:

Any courses with prefix: CAP, CGS, CIS, COP, CTS

AS/AAS • Digital Television and Media Production
AS.DIG.RTV/AAS.DIG.RTV (64 Credit Hours)

This hands-on, skills-based program will prepare students for careers in television, radio, and media production for the Internet. Students will learn to produce music videos, talk shows, sports programs, music shows, concerts, and news shows for television, radio and the Internet using professional video cameras, high-quality nonlinear video editing equipment, and professional audio editing software. Students can gain valuable experience by broadcasting on the college's radio station and the educational TV cable channel.

General Education Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>English Composition II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MGF 1119</td>
<td>Introductory Mathematics w/Applications (non-transfer) or MGF 1106 Topics in Mathematics (transfer)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PSY 2012</td>
<td>General Psychology or SYG 2000, Introduction to Sociology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SPC 1608</td>
<td>Public Speaking</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
Humanities General Education .................................................................................................................. 3 cr.

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1000*</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1871</td>
<td>Multimedia Authoring I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2821</td>
<td>Graphics Design for Multimedia/Internet</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2877</td>
<td>Digital Animation Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ENT 1000</td>
<td>Introduction to Entrepreneurship</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FIL 2931*</td>
<td>Careers in Film and Video</td>
<td>1 cr.</td>
</tr>
<tr>
<td>RTV 1245</td>
<td>Electronic Field Production</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTV 1941</td>
<td>Radio/TV Internship I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTV 2000*</td>
<td>Introduction to Broadcasting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTV 2201</td>
<td>Broadcasting Techniques</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTV 2242</td>
<td>Advanced Television Studio Production</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTV 2246</td>
<td>Advanced Electronic Field Production</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTV 2270</td>
<td>Radio Production and Programming</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTV 2300</td>
<td>Broadcast News</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTV 2460</td>
<td>Broadcast Practicum</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTV 2942</td>
<td>Radio/TV Internship II</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

* Recommended course(s) for the first semester.

AS/AAS • Early Childhood Management

AS.CHIILD/AAS.CHIILD (63 Credit Hours)

This program will prepare students for a variety of careers in the early childhood area and will give students the competencies and practical experience needed for the Child Development Associate Equivalency (CDA-E) for the State of Florida. The course work focuses on the development, care, guidance and education of young children.

General Education Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MGF 1119</td>
<td>Introductory Mathematics w/ Applications (non-transfer) or Mathematics General Education (transfer)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PSY 2012</td>
<td>General Psychology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SYG 2000</td>
<td>Introduction to Sociology</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2021</td>
<td>Financial Accounting or APA 1111 Basic Accounting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1107</td>
<td>Introduction to Computers</td>
<td>1 cr.</td>
</tr>
<tr>
<td>DEP 2102</td>
<td>Child Development</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EDF 1005*</td>
<td>Introduction to the Teaching Profession</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EEC 1300*</td>
<td>Planning the Early Childhood Program</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EEC 1308</td>
<td>Enhancing Intellectual Development in the Early Childhood Setting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EEC 1311</td>
<td>Crafts in the Early Childhood Setting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EEC 1401</td>
<td>The Family and Early Childhood Education</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EEC 1521*</td>
<td>Operation of Early Childhood Center - Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EEC 1721</td>
<td>Enhancing Physical Development in the Early Childhood Setting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EEC 1941</td>
<td>Child Care Practicum I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EEC 1943</td>
<td>Child Care Practicum II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EEC 2270</td>
<td>Meeting the Special Needs of Children in Groups</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EEC 2271</td>
<td>Children with Special Needs</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1335</td>
<td>Business Communications</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SBM 2000</td>
<td>Small Business Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SPC 1006</td>
<td>Speech Improvement</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

* Recommended course(s) for the first semester.

In accordance with the State of Florida Statewide Articulation Manual, a student who receives a National Child Development Associate Credential, Florida Child Care Professional Credential or equivalent Staff Credential may articulate nine credits (EEC 1300, EEC 1311 and EEC 1941) toward the AS/AAS degree in Early Childhood Management.

Each practicum course will require 240 hours of work with children in a licensed child care setting, 20 hours of which must be completed at HCC’s Child Development Lab School. Hours are completed during the term the student is registered for practicum.
**ECPC (Early Childhood Professional Certificate)**

Every licensed child care facility must have one child care professional with a staff credential for every twenty children in care. HCC provides training for the Early Childhood Professional Certificate, a DCF and DOE approved pre-school staff credential. The Early Childhood Professional Certificate is based upon eight child care content areas. Preparation includes 45 hours of State-mandated training, child care curriculum coursework, 480 hours of direct work with children 5 years of age or younger, and preparation of a professional resource portfolio.

Individuals interested in obtaining the ECPC from Hillsborough Community College must complete an intent form. Forms may be obtained from the early childhood department by contacting (813) 253-7956.

**AS/AAS • Electronics Engineering Technology**

**AS.EET.UNIV/AAS.EET (68 Credit Hours)**

This program will prepare a student for an entry-level position as an electronics engineering technician. Technicians assist engineers in planning, research, development and design.

The course work focuses on the skills needed for troubleshooting electronic equipment, performing operations, calculations, testing and reporting.

NOTE: Beginning Fall Term 2000, all graduates of this program shall articulate into an Electronics Engineering Technology baccalaureate degree in the designated university program under the provision of Rule 6A-10.024, Articulation Between Universities, Community Colleges, and School Districts.

**General Education Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ENC</td>
<td>English Composition II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAC</td>
<td>College Algebra</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHY</td>
<td>General Physics I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHY</td>
<td>General Physics I Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>SPC</td>
<td>Public Speaking</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET</td>
<td>Basic Digital Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET</td>
<td>Introduction to Microprocessors</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET</td>
<td>Digital Systems Analysis</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP</td>
<td>Programming Logic</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP</td>
<td>Programming in C</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EET</td>
<td>Basic AC and DC</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EET</td>
<td>Circuit Analysis</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EET</td>
<td>Electronics Orientation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EET</td>
<td>Solid State Devices</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EET</td>
<td>Solid State Circuits</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EET</td>
<td>Linear Integrated Circuits</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EET</td>
<td>Electronics Engineering Technology Capstone</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAC</td>
<td>Trigonometry</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**Select 1 credit hour from the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET</td>
<td>Computer Upgrading and Repair</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET</td>
<td>Advanced Computer Repair</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET</td>
<td>Advanced Microprocessors</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS</td>
<td>Introduction to Networking</td>
<td>1 cr.</td>
</tr>
<tr>
<td>COP</td>
<td>Keyboarding I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS</td>
<td>Spreadsheet Applications</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS</td>
<td>Database Management</td>
<td>1 cr.</td>
</tr>
<tr>
<td>COP</td>
<td>Visual BASIC, Beginning</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP</td>
<td>Programming in C++</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP</td>
<td>JAVA Programming</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

* Recommended course(s) for the first semester.
AAS • Electronics Engineering Technology
AAS.EET (68 Credit Hours)

General Education Requirements

ENC 1101 English Composition I ................................................................. 3 cr.
MAC 1105 College Algebra .............................................................................. 3 cr.
PSC 1515 Energy and the Environment ............................................................. 3 cr.
PSC 1515L Energy and the Environment Laboratory ...................................... 1 cr.

* Recommended course(s) for the first semester.

OST 1142 Keyboarding I ..................................................................................... 1 cr.
COP 1120 COBOL, Beginning ............................................................................ 3 cr.
CET 1174C Advanced Computer Repair ........................................................... 3 cr.
EET 1083C* Electronic Orientation ...................................................................... 3 cr.
COP 1220 Programming in “C” .......................................................................... 3 cr.
CET 1123C Introduction to Microprocessors ....................................................... 3 cr.
CET 2113C Digital Systems Analysis .................................................................. 3 cr.
CET 2155C Linear Integrated Circuits .................................................................. 3 cr.
EET 2155C Linear Integrated Circuits .................................................................. 3 cr.
COP 2224 Programming in “C” .......................................................................... 3 cr.

Select 10 credit hours from the following:

CET 1172C Computer Upgrading and Repair .................................................... 3 cr.
CET 1174C Advanced Computer Repair ........................................................... 3 cr.
CET 1556C Structured Cabling .......................................................................... 3 cr.
CET 2152C Advanced Microprocessors ............................................................. 3 cr.
CET 2335C Microcomputer Systems ................................................................. 3 cr.
CGS 1510 Spreadsheet Applications ................................................................. 1 cr.
CGS 1540 Database Management ....................................................................... 3 cr.
CGS 1510 Spreadsheet Applications ................................................................. 1 cr.
COP 1120 COBOL, Beginning ............................................................................ 3 cr.
COP 1332 Visual BASIC, Beginning ................................................................. 3 cr.
COP 1821 Visual BASIC, Advanced ................................................................. 3 cr.
COP 2224 Programming in “C” .......................................................................... 3 cr.
COP 2800 JAVA Programming ........................................................................... 3 cr.
CTS 1305 Introduction to Networking ............................................................... 3 cr.
ECO 2013 Principles of Macroeconomics .......................................................... 3 cr.
OST 1142 Keyboarding I ..................................................................................... 1 cr.

* Recommended course(s) for the first semester.

AS/AAS • Engineering Technology
AS.ETI/AAS.ETI (60 Credit Hours)

Engineering Technology is a comprehensive program covering introductory computer-aided drafting, electronics, instrumentation and testing, processes and materials, quality and safety. These skills align with the national Manufacturing Skill Standards Council (MSSC) Portable Production Technician certification. The engineering technology curriculum which emphasizes advanced manufacturing, prepares students for many high skill/high wage/high demand jobs in manufacturing and other high-technology industries.

Graduates of the Engineering Technology associate in applied science degree program are eligible to transfer into a number of bachelors of applied science (BAS) degrees offered in Florida’s universities, state colleges.

General Education Requirements

ENC 1101 English Composition I ................................................................. 3 cr.
MFG 1119 Introductory Mathematics w/ Applications (non-transfer) or
Mathematics General Education (transfer) ........................................................ 3 cr.
Humanities General Education ....................................................................... 3 cr.
Natural Science General Education ................................................................. 3 cr.
### Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EET 1083C</td>
<td>Electronics Orientation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EST 1542</td>
<td>Introduction to Programmable Logic Controllers</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETD 1320C</td>
<td>Computer Aided Drafting for Engineers</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETI 1420</td>
<td>Manufacturing Processes and Materials</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETI 1110</td>
<td>Introduction to Quality</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETI 1622</td>
<td>Concepts of Lean and Six Sigma</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETI 1701</td>
<td>Industrial Safety</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETI 1843</td>
<td>Motors and Controls</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETI 2950</td>
<td>Engineering Technology Capstone</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETM 1010C</td>
<td>Mechanical Measurement and Instrumentation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETM 2315</td>
<td>Hydraulic and Pneumatic Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETM 2315L</td>
<td>Hydraulic and Pneumatic Laboratory</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

**Select 11 credits hours from the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1510</td>
<td>Spreadsheet Applications I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>EGS 2122C</td>
<td>Geometric Dimensioning and Toleringc</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ENC 2210</td>
<td>Technical Writing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EST 1535</td>
<td>Automated Process Control</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EST 1540</td>
<td>Industrial Applications using PLCs and Robotics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETI 1403</td>
<td>Introduction to Advanced Manufacturing Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETI 1644</td>
<td>Production and Inventory Control</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETI 1931</td>
<td>Special Topics in Modern Manufacturing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETI 1949</td>
<td>Manufacturing Internship</td>
<td>2 cr.</td>
</tr>
<tr>
<td>ETI 2151C</td>
<td>Process Metrology</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

### AS/AAS • Environmental Science Technology

**AS.EVR.LAB/AS.EVR.ETEC/AS.EVR.AWT/AS.EVR.LAB/AAS.EVR.ETEC (64 Credit Hours)**

This program will prepare students for positions as environmental pollution control technicians or environmental technicians. The program curriculum will prepare students to conduct environmental surveys; conduct investigations and evaluations of noise, air, and water conditions for compliance with public laws and regulations; or to effectively manage natural resources.

**AAS • Advanced Water Treatment**

**AS.EVR.AWT**

This program will prepare students with the skills necessary to enter the field of water technologies and resource management.

### General Education Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1005C</td>
<td>Biological Foundations I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MGF 1106</td>
<td>Topics in Mathematics</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Humanities General Education</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Social or Behavioral Science General Education</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

### Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVS 1001</td>
<td>Introduction to Environmental Science</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EVS 1181</td>
<td>Conventional and Pre-Treatment Water Technologies</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EVS 1183</td>
<td>Introduction to Water Treatment Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EVS 1185</td>
<td>Membrane Technologies I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EVS 1186</td>
<td>Membrane Technologies II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EVS 1190</td>
<td>Water Treatment Plant Equipment</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EVS 2180</td>
<td>Advanced Membrane Monitoring</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EVS 2182</td>
<td>High Purity Water Technologies</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EVS 2184</td>
<td>Ion Exchange Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EVS 2187</td>
<td>Membrane Unit Monitoring and Troubleshooting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EVS 2188</td>
<td>Pre-Treatment Troubleshooting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EVS 2179</td>
<td>Water Analysis and Monitoring</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EVS 2894C</td>
<td>Environmental Sampling and Analysis II</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
EVS 2895C Environmental Sampling and Analysis III .............................................................................................................. 5 cr.
EVS 2939 Water Treatment Capstone Course ......................................................................................................................... 3 cr.

AS/AAS • Environmental Technician
AS.EVR.ETEC/AAS.EVR.ETEC

General Education Requirements
ENC 1101 English Composition I .......................................................................................................................................................... 3 cr.
GLY 1010 Physical Geology .................................................................................................................................................................. 3 cr.
GLY 1010L Physical Geology Laboratory ................................................................................................................................................ 1 cr.
MET 2010C Meteorology ...................................................................................................................................................................... 3 cr.
Mathematics General Education ............................................................................................................................................................ 3 cr.
Humanities General Education ............................................................................................................................................................ 3 cr.
Social or Behavioral Science General Education .................................................................................................................................. 3 cr.

Program Required Courses
BSC 1005C Biological Foundations I .................................................................................................................................................. 3 cr.
CGS 1000 Introduction to Computers and Technology ...................................................................................................................... 3 cr.
CHM 1025 Modern Chemistry .............................................................................................................................................................. 3 cr.
CHM 1025L Modern Chemistry Laboratory ........................................................................................................................................ 1 cr.
EVR 2858 Environmental Law ............................................................................................................................................................... 4 cr.
EVS 1001 Introduction to Environmental Science ............................................................................................................................... 3 cr.
EVS 2893C Environmental Sampling and Analysis I ............................................................................................................................. 4 cr.
EVS 2894C Environmental Sampling and Analysis II ............................................................................................................................. 5 cr.
EVS 2895C Environmental Sampling and Analysis III ............................................................................................................................. 5 cr.
EVS 2942L Environmental Technology Practicum .............................................................................................................................. 3 cr.
SPC 1006 Speech Improvement ................................................................................................................................................................. 1 cr.
Specified Electives .................................................................................................................................................................................. 9 cr.

Select 9 specified elective credits from the following:

Air Monitoring
EVS 2793 Sources and Effects of Air Pollution ........................................................................................................................................ 4 cr.

Water Emphasis
EVS 1026 Chemistry and Biology of Natural Waters ............................................................................................................................ 4 cr.
EVS 2005C Treatment of Water and Wastewater .................................................................................................................................... 4 cr.
EVS 2891 Hydrology and Quality of Water Resources .......................................................................................................................... 4 cr.

Geographic Information and Global Positioning Systems
EVR 1041 Natural Resource Management w/Applications in GIS ........................................................................................................... 4 cr.
EVR 2040 Advanced GIS w/Environmental Applications ..................................................................................................................... 4 cr.
EVS 1042 Water Resources w/Applications in GIS .................................................................................................................................... 4 cr.
GIS 1041 Survey of Geographic Information Systems and Global Positioning Systems ........................................................................... 4 cr.
GIS 2040 Fundamentals Geographic Information Systems ...................................................................................................................... 3 cr.

Natural Resource Management
EVR 1328 Natural Resource Conservation and Ecology .......................................................................................................................... 3 cr.
FNR 1001 Natural Resource Management ........................................................................................................................................... 3 cr.
ORH 1523 Native Upland Plants ............................................................................................................................................................ 2 cr.
ORH 1524 Native Wetland Plants ............................................................................................................................................................ 2 cr.

AS/AAS • Laboratory Technician
AS.EVR.LAB/AAS.EVR.LAB

General Education Requirements
ENC 1101 English Composition I ............................................................................................................................................................ 3 cr.
BSC 1010 Biological Science I ................................................................................................................................................................. 3 cr.
BSC 1010L Biological Science I Laboratory ........................................................................................................................................ 1 cr.
CHM 1045 College Chemistry I ............................................................................................................................................................... 3 cr.
CHM 1045L College Chemistry I Laboratory ......................................................................................................................................... 1 cr.
Mathematics General Education ............................................................................................................................................................. 3 cr.
Humanities General Education ............................................................................................................................................................ 3 cr.
Recommended course(s) for the first semester.

**Program Required Courses**

- FFP 2401 Hazardous Materials I ................................................................. 3 cr.
- FFP 2120 Fire Service Building Construction ............................................. 3 cr.
- FFP 2521 Construction Documents and Plans Review ............................... 3 cr.
- FFP 2510 Codes and Standards ................................................................... 3 cr.
- FFP 2490C Chemistry of Hazardous Materials .......................................... 4 cr.
- FFP 2402 Hazardous Materials II ............................................................... 3 cr.
- FFP 2811 Fire Fighting Tactics and Strategy II ............................................. 3 cr.
- FFP 2540 Private Fire Protection Systems .................................................. 3 cr.
- FFP 2604 Cause and Origin ......................................................................... 3 cr.
- FFP 2740 Fire Service Course Delivery ...................................................... 3 cr.
- FFP 2811 Fire Fighting Tactics and Strategy II ............................................. 3 cr.
- SPC 1006 Speech Improvement .................................................................... 1 cr.

Select 6 credit hours of specified electives from the following:

- ETI 1181 Quality Systems and Work Place Dynamics .................................. 2 cr.
- ETI 1701 Industrial Safety ........................................................................... 2 cr.
- ETI 1720 Occupational Safety and Health .................................................. 3 cr.
- EVS 1893 Comparative Sampling and Analysis Methods ........................... 3 cr.
- MCB 1060 Food Microbiology ................................................................. 3 cr.
- MCB 1060L Food Microbiology Laboratory .............................................. 1 cr.

**AS/AAS • Fire Science Technology**

This program will prepare students for jobs as fire science technicians, fire officers or fire safety inspectors, fire assistants, safety inspectors, building inspectors or jobs in fire insurance sales.

**NOTE:** All graduates of this AS degree program shall be granted admission into the Fire Science Management baccalaureate degree program at Northwood University.

**General Education Requirements**

- ENC 1101 English Composition I ................................................................. 3 cr.
- MGF 1119 Introductory Mathematics w/Applications (non-transfer) or Mathematics General Education (transfer) ........................................... 3 cr.
- PSY 2012 General Psychology ..................................................................... 3 cr.
- SYG 2000 Introduction to Sociology ........................................................... 3 cr.

**Program Required Courses**

- CGS 1000 Introduction to Computers ........................................................... 3 cr.
- FFP 1506* Fire Prevention and Investigation .............................................. 3 cr.
- FFP 1710 Company Officer .......................................................................... 3 cr.
- FFP 1810 Fire Fighting Tactics and Strategy I ............................................. 3 cr.
- FFP 2120 Fire Service Building Construction ............................................. 3 cr.
- FFP 2401 Hazardous Materials I ............................................................... 3 cr.
- FFP 2402 Hazardous Materials II ............................................................... 3 cr.
- FFP 2490C Chemistry of Hazardous Materials .......................................... 4 cr.
- FFP 2510 Codes and Standards ................................................................... 3 cr.
- FFP 2521 Construction Documents and Plans Review ............................... 3 cr.
- FFP 2540 Private Fire Protection Systems .................................................. 3 cr.
- FFP 2604 Cause and Origin ......................................................................... 3 cr.
- FFP 2740 Fire Service Course Delivery ...................................................... 3 cr.
- FFP 2811 Fire Fighting Tactics and Strategy II ............................................. 3 cr.
- SPC 1006 Speech Improvement .................................................................... 1 cr.

* Recommended course(s) for the first semester.

**NOTE 1:** The following classes are required for Florida Bureau of Fire Standards and Training Certification as a Fire Officer: FFP 1710, FFP 1506, FFP 1810, FFP 2740, FFP 2540, FFP 2401, and FFP 2402.
NOTE 2: The following classes are required for Florida Bureau of Fire Standards and Training Certification as a Municipal Fire Safety Inspector: FFP 1506, FFP 2120, FFP 2540, FFP 2521, and FFP 2510.

AS • Hospitality and Tourism Management

AS.HFT.RESH (64 Credit Hours)

This program will prepare students for supervisory jobs in the hospitality industry as managers, motel managers, a recreation establishment manager or resort manager.

NOTE 1: Beginning Fall term 2000, all graduates of this program shall articulate into a Hospitality Administration/Management baccalaureate degree (in those programs not accredited by AACSB) in the designated university program under the provision of Rule 6A-10.024, Articulation between Universities, Community Colleges, and School Districts.

NOTE 2: Beginning Fall term 2008, all graduates of this program are eligible to articulate the AS degree in Culinary Management to the BS degree in Hotel and Restaurant Management at the University of Houston, Conrad N. Hilton College of Hotel and Restaurant Management.

General Education Requirements

ENC 1101 English Composition I ............................................................... 3 cr.
ENC 1102 English Composition II ............................................................ 3 cr.
MGF 1119 Introductory Mathematics w/Applications (non-transfer) or Mathematics General Education (transfer) ................................................................. 3 cr.
PSY 2012 General Psychology ................................................................. 3 cr.
SYG 2000 Introduction to Sociology ........................................................ 3 cr.

Program Required Courses

ACG 2021 Financial Accounting ............................................................... 3 cr.
ECO 2023 Principles of Microeconomics ............................................... 3 cr.
FSS 1223C Food Preparation for Managers ......................................... 4 cr.
FSS 1500 Food and Beverage Control .................................................. 3 cr.
FSS 2100 Food Plans and Menu Preparation ....................................... 3 cr.
FSS 2120 Food Purchasing and Storage .............................................. 3 cr.
HFT 1000 Introduction to Hospitality Industry Management ................ 3 cr.
HFT 1410 Front Desk Procedures ......................................................... 3 cr.
HFT 1790 The Event Industry .............................................................. 3 cr.
HFT 2210 Supervisory Development .................................................... 3 cr.
HFT 2530 Hospitality Merchandising Techniques ............................. 3 cr.
HFT 2600 Hospitality Industry Law ...................................................... 3 cr.
HFT 2750 Meeting, Convention and Exposition Industry ............... 3 cr.
HFT 2840 Maitre d’ and Dining Room Service .................................... 3 cr.
HFT 2941 Hospitality Management Internship .................................. 2 cr.
HFT 2942 Hospitality Management Internship .................................. 2 cr.

AAS • Industrial Management Technology

AAS.INDM.ARR/AAS.INDM.BCV /AAS.INDM.FORD/AAS.INDM.PMT /AAS.INDM.TECO (60 Credit Hours)

This program will prepare students for jobs as industrial managers and for advancement in various technical fields. Students must be enrolled in the Ford ASSET program at Brewster Technical Center or have successfully completed one of the various Tampa Electric Company training programs that have been articulated with the program (lineman, field engineering, substation electrician, plant electrician and controls analyst) or the HCC PSAV Auto Collision Repair certificate program or one of the HCC apprenticeship programs (ABC or IEC).

Articulated Credit and Electives ........................................................... 33 cr.

General Education Requirements

ENC 1151* Technical English ................................................................. 3 cr.
MGF 1119 Introductory Mathematics w/Applications ........................ 3 cr.
PHI 1600 Ethics ................................................................................. 3 cr.
PSY 2012 General Psychology .......................................................... 3 cr.
SPC 1608 Public Speaking ................................................................. 3 cr.

Program Required Courses

CGS 1000 Introduction to Computers and Technology ....................... 3 cr.
NOTE:

Social Science General Education ............................................................................................ 3 cr.
Humanities General Education ............................................................................................... 3 cr.

CTS 2311 Unix/Linux Security .................................................................................................. 3 cr.
CTS 2310 Windows Security .................................................................................................... 3 cr.
SBM 2000 Small Business Management .................................................................................... 3 cr.
CTS 2322 Unix/Linux Administration II ....................................................................................... 3 cr.
CTS 2333 Unix/Linux Networking ............................................................................................... 3 cr.
CGS 1871 Multimedia Authoring I ............................................................................................... 3 cr.
CGS 1000 Introduction to Computers and Technology .................................................................... 3 cr.

General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>English Composition II</td>
</tr>
</tbody>
</table>

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET 1172C</td>
<td>Computer Upgrading and Repair</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers and Technology</td>
</tr>
<tr>
<td>CGS 2091</td>
<td>Information Technology Ethical and Legal Issues</td>
</tr>
<tr>
<td>CIS 2352C</td>
<td>Ethical Hacking I</td>
</tr>
<tr>
<td>CIS 2353</td>
<td>Security Management and Computer Auditing</td>
</tr>
<tr>
<td>CIS 2359C</td>
<td>Ethical Hacking II</td>
</tr>
<tr>
<td>CIS 2381C</td>
<td>Computer Forensics and Incident Response</td>
</tr>
<tr>
<td>CIS 2945</td>
<td>Information Technology Security Capstone</td>
</tr>
<tr>
<td>CNT 1401</td>
<td>Introduction to Network Security</td>
</tr>
<tr>
<td>CTS 1106</td>
<td>Introduction to Unix</td>
</tr>
<tr>
<td>CTS 1305</td>
<td>Introduction to Networking</td>
</tr>
<tr>
<td>CTS 2301</td>
<td>Unix/Linux Administration I</td>
</tr>
<tr>
<td>CTS 2310</td>
<td>Windows Security</td>
</tr>
<tr>
<td>CTS 2311</td>
<td>Unix/Linux Security</td>
</tr>
<tr>
<td>CTS 2322</td>
<td>Unix/Linux Administration II</td>
</tr>
<tr>
<td>CTS 2333</td>
<td>Unix/Linux Networking</td>
</tr>
</tbody>
</table>

AS/AAS • Information Technology Security

AS.CIS.SECURITY/AAS.CIS.SECURITY (63 Credit Hours)

This program prepares students for employment as information technology security professionals assisting business and industry in developing and implementing strategies to defend company e-business infrastructure and data assets against security attacks.

General Education Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>English Composition II</td>
</tr>
<tr>
<td>Humanities General Education</td>
<td></td>
</tr>
<tr>
<td>Mathematics General Education</td>
<td></td>
</tr>
<tr>
<td>Social Science General Education</td>
<td></td>
</tr>
</tbody>
</table>

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET 1172C</td>
<td>Computer Upgrading and Repair</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers and Technology</td>
</tr>
<tr>
<td>CGS 2091</td>
<td>Information Technology Ethical and Legal Issues</td>
</tr>
<tr>
<td>CIS 2352C</td>
<td>Ethical Hacking I</td>
</tr>
<tr>
<td>CIS 2353</td>
<td>Security Management and Computer Auditing</td>
</tr>
<tr>
<td>CIS 2359C</td>
<td>Ethical Hacking II</td>
</tr>
<tr>
<td>CIS 2381C</td>
<td>Computer Forensics and Incident Response</td>
</tr>
<tr>
<td>CIS 2945</td>
<td>Information Technology Security Capstone</td>
</tr>
<tr>
<td>CNT 1401</td>
<td>Introduction to Network Security</td>
</tr>
<tr>
<td>CTS 1106</td>
<td>Introduction to Unix</td>
</tr>
<tr>
<td>CTS 1305</td>
<td>Introduction to Networking</td>
</tr>
<tr>
<td>CTS 2301</td>
<td>Unix/Linux Administration I</td>
</tr>
<tr>
<td>CTS 2310</td>
<td>Windows Security</td>
</tr>
<tr>
<td>CTS 2311</td>
<td>Unix/Linux Security</td>
</tr>
<tr>
<td>CTS 2322</td>
<td>Unix/Linux Administration II</td>
</tr>
<tr>
<td>CTS 2333</td>
<td>Unix/Linux Networking</td>
</tr>
</tbody>
</table>

AS/AAS • Internet Services Technology

AS.WEB.TECH.OPT1/AS.WEB.TECH.OPT2/AAS.WEB.TECH.OPT1/AAS.WEB.TECH.OPT2 (63 Credit Hours)

General Education Requirements

NOTE: The following general education requirements apply to AS Web Designer and AS Web Developer:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>English Composition II or Social Science General Education</td>
</tr>
</tbody>
</table>

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers and Technology</td>
</tr>
<tr>
<td>CGS 1103</td>
<td>Project Management</td>
</tr>
<tr>
<td>CGS 1871</td>
<td>Multimedia Authoring I</td>
</tr>
<tr>
<td>CGS 2585</td>
<td>Desktop/Internet Publishing</td>
</tr>
<tr>
<td>CGS 2786</td>
<td>Web 2.0 Applications</td>
</tr>
</tbody>
</table>

AS/AAS • Web Designer

AS.WEB.TECH.OPT1/AAS.WEB.TECH.OPT1

This program prepares students for internet-related jobs such as web designer, site designer, and internet architect.

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers and Technology</td>
</tr>
<tr>
<td>CGS 1103</td>
<td>Project Management</td>
</tr>
<tr>
<td>CGS 1871</td>
<td>Multimedia Authoring I</td>
</tr>
<tr>
<td>CGS 2585</td>
<td>Desktop/Internet Publishing</td>
</tr>
<tr>
<td>CGS 2786</td>
<td>Web 2.0 Applications</td>
</tr>
</tbody>
</table>
AS/AAS • Web Developer
AS.WEB.TECH.OPT2/AAS.WEB.TECH.OPT2
This program prepares students for internet-related jobs such as webmaster, web developer, site developer and internet programmer.

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 2820</td>
<td>Web Authoring - HTML</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2821</td>
<td>Graphics Design for Multimedia/Internet</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2822</td>
<td>Web Site Creation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2827</td>
<td>Advanced Graphics Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2874</td>
<td>Multimedia Authoring II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2876</td>
<td>Digital Audio/Video Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2877</td>
<td>Digital Animation Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2939</td>
<td>Internet Services Technology Capstone</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1000</td>
<td>Programming Logic</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2830</td>
<td>Scripting for the Web</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Select at least 15 credit hours from any courses with prefix: CEN, CET, CGS, CIS, CNT, CTS

AS/AAS • Network Administrator
AS.NA.GEN/AS.NA.OPT1/AS.NA.OPT2/AS.NA.OPT3/AS.NA.GEN/AS.NA.OPT1/AAS.NA.OPT2/AS.NA.OPT3 (63 Credit Hours)

General Education Requirements

NOTE: The following general education requirements apply to AS/AAS Cisco and Telecommunications, AS/AAS General Networking, AS/AAS Microsoft Certified Systems Engineer, and AS/AAS Unix/Linux Systems Administration.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>English Composition II or Social Science General Education</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MGF 1119</td>
<td>Introductory Mathematics w/ Applications (non-transfer)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MGF 1119</td>
<td>Mathematics General Education (transfer)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>Humanities General Education</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ENC 1102</td>
<td>Social Science or Natural Science General Education</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

NOTE: Select either the Cisco and Telecommunications program required courses, the General Networking program required courses, the Microsoft Certified Systems Engineer program required courses, or the Unix/Linux Systems Administration program required courses to complete the Network Administrator degree.

AS/AAS • Cisco and Telecommunications
AS.NA.OPT2/AAS.NA.OPT2
This program prepares students for jobs such as computer network specialist, network administrator, customer support analyst, telecom analyst, project coordinator, systems installer, and network systems engineer. Focus is on Cisco certification and telecommunications specialist.

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEN 2939</td>
<td>Network Administrator Capstone</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET 1172C</td>
<td>Computer Upgrading and Repair</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET 1174C</td>
<td>Advanced Computer Repair</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET 1556C</td>
<td>Structured Cabling</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET 1600</td>
<td>Cisco Network Fundamentals</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
CET 1610 Cisco Router Technology ........................................................................................................... 3 cr.
CET 2615 Cisco Advanced Router Technology ........................................................................................... 3 cr.
CET 2620 Cisco Wide-Area Networking Technologies ................................................................................. 3 cr.
CGS 1000 Introduction to Computers and Technology ................................................................................. 3 cr.
CGS 1761 Computer Operating Systems ...................................................................................................... 3 cr.
CGS 2301 Management Information Systems ............................................................................................. 3 cr.
CGS 2541 Database Design .......................................................................................................................... 3 cr.
CIS 2321 Systems Analysis .............................................................................................................................. 3 cr.
CNT 1401 Introduction to the Network Security ............................................................................................... 3 cr.
CNT 2510 Wireless Networking ..................................................................................................................... 3 cr.
CTS 1305 Introduction to Networking .......................................................................................................... 3 cr.

**AS/AAS • General Networking**

**AS.NA.GEN/AAS.NA.GEN**

This program prepares students to plan, install, configure, monitor, troubleshoot and manage computer networks in a LAN environment. Students will be provided conceptual and theoretical knowledge for employment as cabling specialists, PC support technicians, network control operators, data communication analysts, help desk specialists, network managers and computer security specialists.

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEN 2939</td>
<td>Network Administrator Capstone</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET 1172C</td>
<td>Computer Upgrading and Repair</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET 1174C</td>
<td>Advanced Computer Repair</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET 1556C</td>
<td>Structured Cabling</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1555</td>
<td>Introduction to the Internet</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1761</td>
<td>Computer Operating Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2301</td>
<td>Management Information Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2541</td>
<td>Database Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CNT 1401</td>
<td>Introduction to Network Security</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CNT 2510</td>
<td>Wireless Networking</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 1106</td>
<td>Introduction to Unix</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 1305</td>
<td>Introduction to Networking</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 1306</td>
<td>Microsoft Windows Server Configuring Network Infrastructure</td>
<td></td>
</tr>
<tr>
<td>CTS 1327</td>
<td>Microsoft Windows Client Operating System</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Select 3 credit hours of electives from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTS 1303</td>
<td>Microsoft Windows Configuring Active Directory</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 2301</td>
<td>Unix/Linux Administration I</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**AS/AAS • Microsoft Certified Information Technology Professional (MCITP)**

**AS.NA.OPT1/AAS.NA.OPT1**

This program prepares students for jobs such as computer network specialist, network administrator, customer support analyst, telecom analyst, project coordinator, systems installer, and network systems engineer. The coursework focus is on Microsoft certification and telecommunications specialist.

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEN 2939</td>
<td>Network Administrator Capstone</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET 1172C</td>
<td>Computer Upgrading and Repair</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction to Information and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1555</td>
<td>Introduction to the Internet</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1761</td>
<td>Computer Operating Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2301</td>
<td>Management Information Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2541</td>
<td>Database Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CNT 1401</td>
<td>Introduction to Network Security</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CNT 2510</td>
<td>Wireless Networking</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 1302</td>
<td>Microsoft Windows Applications Infrastructure</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 1303</td>
<td>Microsoft Windows Configuring Active Directory</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 1305</td>
<td>Introduction to Networking</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 1306</td>
<td>Microsoft Windows Server Configuring Network Infrastructure</td>
<td></td>
</tr>
<tr>
<td>CTS 1327</td>
<td>Microsoft Windows Client Operating System</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 1328</td>
<td>Microsoft Windows Server</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
Select 3 credit hours of electives from the following list:
CTS 1342 Microsoft Windows Enterprise Administrator ................................................................. 3 cr.
Any courses with prefix: CEN, CGS, CIS, CNT .................................................................................. 3 cr.

AS/AAS • Unix/Linux System Administration
AS.NA.OPT3/AAS.NA.OPT3

The purpose of this program is to prepare students for employment as a Unix or Linux system administrator or to provide supplemental training for persons previously or currently employed in these occupations. The content prepares individuals to install information technology equipment, troubleshoot information technology equipment, and support information technology users.

Program Required Courses
CEN 2939 Network Administrator Capstone .................................................................................. 3 cr.
CET 1172C Computer Upgrade and Repair ...................................................................................... 3 cr.
CGS 1000 Introduction to Computers and Technology ..................................................................... 3 cr.
CGS 1555 Introduction to the Internet .................................................................................................. 3 cr.
CGS 1761 Computer Operating Systems ............................................................................................. 3 cr.
CGS 2301 Management Information Systems ..................................................................................... 3 cr.
CNT 1401 Introduction to Network Security .......................................................................................... 3 cr.
COP 2344 Shell Scripting ...................................................................................................................... 3 cr.
COP 1000 Programming Logic ............................................................................................................. 3 cr.
CTS 2311 Unix/Linux Security ............................................................................................................ 3 cr.
CTS 2333 Unix/Linux Networking ...................................................................................................... 3 cr.
CTS 1106 Introduction to Unix ............................................................................................................. 3 cr.
CTS 1305 Introduction to Networking .................................................................................................. 3 cr.
CTS 2301 Unix/Linux Administration I .............................................................................................. 3 cr.
CTS 2322 Unix/Linux Administration II ............................................................................................ 3 cr.

Select 3 credit hours of electives from the following list:
CET 1610 Cisco Router Technology ........................................................................................................ 3 cr.
CET 2615 Cisco Advanced Router Technology ...................................................................................... 3 cr.
CGS 1936 Perl and CGI .......................................................................................................................... 3 cr.
CGS 2541 Database Design .................................................................................................................. 3 cr.
CNT 2510 Wireless Networking ............................................................................................................. 3 cr.
COP 1220 Programming in "C" .............................................................................................................. 3 cr.
CTS 1327 Microsoft Windows Client Operating System ................................................................. 3 cr.
CTS 1328 M/S Windows Server ............................................................................................................ 3 cr.

AS/AAS • Office Administration
AS.OA.OMTS/AS.OA.OSTS/AAS.OA.OMTS/AAS.OA.OSTS (63 Credit Hours)

General Education Requirements

NOTE: The following general education requirements apply to AS/AAS Office Systems Technology, AS/AAS Office Management and AS/AAS Medical Office Administration.

ENC 1101 English Composition I ........................................................................................................ 3 cr.
MGF 1119 Introductory Mathematics w/ Applications (non-transfer) or Mathematics General Education (transfer) .............................................................................................. 3 cr.
PSY 2012 General Psychology ............................................................................................................. 3 cr.
SYG 2000 Introduction to Sociology ..................................................................................................... 3 cr.

NOTE: Select the following Office System Technology required courses, or the Office Management program required courses or the Medical Office Administration program required courses listed below to complete the Office Administration degree.

AS/AAS • Office Systems Technology
AS.OA.OSTS/AAS.OA.OSTS

This specialization focuses on careers in office systems technology. Depending on the curriculum options selected, graduates will be prepared for positions such as office systems manager, senior administrative assistant, executive office administrator, senior word processing specialist, administrative assistant, office receptionist, software applications specialist, customer service representative, executive secretary, software trainer, or help desk specialist.
## Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>APA 1111</td>
<td>Basic Accounting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1510</td>
<td>Spreadsheet Applications I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CIS 1931*</td>
<td>Microcomputer Concepts</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1110*</td>
<td>Intermediate PC Typing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1330*</td>
<td>Skills for Transcription</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1335</td>
<td>Business Communications</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1741</td>
<td>Word Processing I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 1813</td>
<td>Desktop Publishing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1831*</td>
<td>Introduction to Windows I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 2357</td>
<td>Electronics Records Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2501</td>
<td>Office Administration</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2722</td>
<td>Advanced Word Processing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2742</td>
<td>Word Processing II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 2743</td>
<td>Word Processing III</td>
<td>1 cr.</td>
</tr>
<tr>
<td>SLS 1261</td>
<td>Personal Skills for Business</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SPC 1608</td>
<td>Public Speaking</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Select at least 10 credit hours from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 2816</td>
<td>Database Management II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1520</td>
<td>Business Graphics I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1540</td>
<td>Database Management I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1555</td>
<td>Introduction to the Internet</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2511</td>
<td>Spreadsheet Applications II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CTS 1305</td>
<td>Introduction to Networking</td>
<td>3 cr.</td>
</tr>
<tr>
<td>LIS 1004</td>
<td>Introduction to Internet Research</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 1100</td>
<td>Beginning PC Typing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1142</td>
<td>Keyboarding I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 1143</td>
<td>Keyboarding II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 1825</td>
<td>Desktop Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1941</td>
<td>OST Internship</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2145</td>
<td>Data Entry Applications</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

* Recommended course(s) for the first semester.

**NOTE:** Students may enroll in OST 1741, OST 2742 or OST 2743 three times for credit to learn different word processing software or to learn to operate different brands of word processing machines available at different campuses. However, one credit hour per course is the maximum applicable to program requirements (see course description).

## AS/AAS • Office Management

**AS.OA.OMTS/AAS.OA.OMTS**

This specialization prepares students for mid-management positions such as administrative office manager, office manager, equipment sales representative, administrative support manager, staff assistant, executive secretary, human resource technician, office manager, or executive assistant.

## Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2021</td>
<td>Financial Accounting or APA 1111, Basic Accounting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BUL 2241</td>
<td>Business Law I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2301</td>
<td>Management Information Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CIS 1931</td>
<td>Microcomputer Concepts</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ECO 2013</td>
<td>Principles of Macroeconomics or ECO 2023, Microeconomics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GEB 1011</td>
<td>Introduction to Business</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAN 1021</td>
<td>Principles of Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1100</td>
<td>Beginning PC Typing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1335</td>
<td>Business Communications</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1741</td>
<td>Word Processing I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 2357</td>
<td>Electronic Records Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2501</td>
<td>Office Administration</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SLS 1261</td>
<td>Personal Skills for Business</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SPC 1608</td>
<td>Public Speaking</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
Select 7 credit hours from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 2816</td>
<td>Database Management II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1510</td>
<td>Spreadsheet Applications I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1520</td>
<td>Business Graphics I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1540</td>
<td>Database Management I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1555</td>
<td>Introduction to the Internet</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2511</td>
<td>Spreadsheet Applications II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CTS 1305</td>
<td>Introduction to Networking</td>
<td>3 cr.</td>
</tr>
<tr>
<td>LIS 1004</td>
<td>Introduction to Internet Research</td>
<td>1 cr.</td>
</tr>
<tr>
<td>MNA 1320</td>
<td>Human Resources Recruitment, Interviewing, and Selection</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MNA 1325</td>
<td>Human Resources Statistical Analysis, Compensation and Benefits</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1110</td>
<td>Intermediate PC Typing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1142</td>
<td>Keyboarding I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 1143</td>
<td>Keyboarding II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 1330</td>
<td>Skills for Transcription</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1813</td>
<td>Desktop Publishing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1825</td>
<td>Desktop Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1831</td>
<td>Introduction to Windows I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1941</td>
<td>OST Internship</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2742</td>
<td>Word Processing II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 2743</td>
<td>Word Processing III</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 2722</td>
<td>Advanced Word Processing</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

NOTE: Students may enroll in OST 1741, OST 2742 or OST 2743 three times for credit to learn various word processing software or to learn to operate different brands of word processing machines available at different campuses. However, one credit hour per course is the maximum applicable to Program Requirements (see course description).

AAS • Medical Office Administration
AAS.OA.MOA

This specialization prepares students for a position as a medical office manager, medical office assistant, medical coder, medical staff assistant, medical billing clerk, medical records clerk, insurance processor, medical transcriptionist, or executive assistant.

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>APA 1111</td>
<td>Basic Accounting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CIS 1931</td>
<td>Microcomputer Concepts</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HIM 1000</td>
<td>Medical Record Content</td>
<td>1 cr.</td>
</tr>
<tr>
<td>HIM 1453</td>
<td>Anatomy and Physiology for Medical Coding</td>
<td>4 cr.</td>
</tr>
<tr>
<td>HIM 1442</td>
<td>Pharmacology</td>
<td>2 cr.</td>
</tr>
<tr>
<td>HSC 1531</td>
<td>Medical Terminology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HSC 1641</td>
<td>Legal and Ethical Aspects in Health Care</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1110</td>
<td>Intermediate PC Typing</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 1330</td>
<td>Skills for Transcription</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1335</td>
<td>Business Communications</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1741</td>
<td>Word Processing I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 2135</td>
<td>Medical Document Production on the PC</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2145</td>
<td>Data Entry</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2357</td>
<td>Electronic Records Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2501</td>
<td>Office Administration</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SLS 1261</td>
<td>Personal Skills for Business</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SPC 1608</td>
<td>Public Speaking</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Select 3 credit hours from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIM 1433</td>
<td>Principles of Disease</td>
<td>4 cr.</td>
</tr>
<tr>
<td>HIM 2940</td>
<td>Clinical Billing Practicum</td>
<td>2 cr.</td>
</tr>
<tr>
<td>HIM 2941</td>
<td>Clinical Coder Practicum</td>
<td>2 cr.</td>
</tr>
<tr>
<td>OST 1941</td>
<td>OST Internship</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2742</td>
<td>Word Processing II</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>
NOTE: Students may enroll in OST 1741 or OST 2742 three times for credit to learn different word processing software or to learn to operate different brands of word processing machines available at different campuses. However, one credit hour per course is the maximum applicable to Program Requirements (see course description).

**AS/AAS • Paralegal Studies (Legal Assisting)**

**AS.LEGAL/AAS.LEGAL (64 Credit Hours)**

This program will prepare students for a paraprofessional career as a paralegal (legal assistant). Under the supervision and direction of a licensed attorney, paralegals may engage in legal research, case development, preparation of legal documents and trial exhibits, analyze information, interview clients, assist in office management, and other responsibilities unique to the legal profession. Graduates of the program are prepared to sit for national certification exams.

NOTE: All graduates of this AS degree program shall be granted admission into the Legal Studies baccalaureate degree program at Florida Gulf Coast University or St. Pete College.

**General Education Requirements**

- ENC 1101 English Composition I ................................................................. 3 cr.
- ENC 1102 English Composition II ............................................................... 3 cr.
- MGF 1119 Introductory Mathematics w/Applications (non-transfer) or Mathematics General Education (transfer) ..................................................... 3 cr.
- Humanities General Education .................................................................. 3 cr.
- Social Science General Education ............................................................. 3 cr.

**Program Required Courses**

- APA 1111 Basic Accounting ........................................................................ 3 cr.
- CGS 1000 Introduction to Computers and Technology ............................ 3 cr.
- PLA 1003* Introduction to the Paralegal Profession ................................. 3 cr.
- PLA 1104 Writing and Research I .............................................................. 3 cr.
- PLA 1203 Litigation Procedures I ............................................................... 3 cr.
- PLA 1271* Tort Law .................................................................................. 3 cr.
- PLA 1433 Business Organizations ............................................................ 3 cr.
- PLA 1611 Real Estate Law/Property Transactions I ................................. 3 cr.
- PLA 1600 Administering Wills/Trusts/Probate ........................................ 3 cr.
- PLA 2114 Writing and Research II ............................................................. 3 cr.
- PLA 2223 Litigation Procedures II .............................................................. 3 cr.
- PLA 2421 Contract Law ............................................................................ 3 cr.
- PLA 2800 Family Law ............................................................................... 3 cr.
- SPC 1006 Speech Improvement ............................................................... 3 cr.

Choose 9 specified PLA elective credits from the following:

- ACG 2021 Financial Accounting ............................................................... 3 cr.
- ACG 2071 Managerial Accounting .......................................................... 3 cr.
- PLA 1700 Legal Ethics and Professional Responsibility ........................ 3 cr.
- PLA 1949 Paralegal Internship ................................................................. 3 cr.
- PLA 2303 Criminal Litigation ................................................................. 3 cr.
- PLA 2460 Bankruptcy Law ..................................................................... 3 cr.
- PLA 2531 Elder Law .............................................................................. 3 cr.
- PLA 2612 Real Estate Law/Property Trans II .......................................... 3 cr.
- PLA 2732 Law Office Computer Applications ....................................... 3 cr.
- PLA 2763 Law Office Management ......................................................... 3 cr.

* Recommended course(s) for the first semester.

**AS/AAS • Restaurant Management**

**AS.CUL.RES/AAS.CUL.RES (64 Credit Hours)**

This program provides students with the skills necessary for employment as a manager of a hotel/motel, a restaurant, a cafe, a bar, a liquor establishment, a coffee shop, a catering agency or a fast food service.

The Restaurant Management program and courses are accredited by the American Culinary Federation Foundation's Accrediting Commission at 180 Center Place Way, St. Augustine, Florida 32095.

NOTE: Beginning Fall term 2008, all graduates of this program are eligible to articulate the AS degree in Culinary Management to the BS degree in Hotel and Restaurant Management at the University of Houston, Conrad N. Hilton College of Hotel and Restaurant Management.
General Education Requirements

ENC 1101  English Composition I ................................................................. 3 cr.
PSY 2012  General Psychology ................................................................. 3 cr.

Humanities General Education ................................................................. 3 cr.
Mathematics General Education ............................................................... 3 cr.
Natural Science General Education ......................................................... 3 cr.

Program Required Courses

ACG 2021  Financial Accounting ............................................................. 3 cr.
CGS 1000*  Introduction to Computers and Technology ......................... 3 cr.
FOS 1201  Sanitation and Safety Management ......................................... 2 cr.
FSS 1223C*  Food Preparation for Managers ........................................ 4 cr.
FSS 1063C  Food Specialty I (Baking) ..................................................... 3 cr.
FSS 1248C  Food Specialty II (Garde Manger I) ...................................... 3 cr.
FSS 1500  Food and Beverage Control .................................................. 3 cr.
FSS 2100*  Food Plans and Menu Preparation ...................................... 3 cr.
FSS 2271  Beverage Management and Service ...................................... 3 cr.
HFT 1000  Introduction to Hospitality Industry Management ............... 3 cr.
HFT 1790  The Event Industry ............................................................... 3 cr.
HFT 2210  Supervisory Development .................................................... 3 cr.
HFT 2530  Hospitality Merchandising Techniques .................................. 3 cr.
HFT 2600  Hospitality Industry Law ....................................................... 3 cr.
HFT 2840  Maitre’ d’ and Dining Room Service .................................... 3 cr.
SPC 1006  Speech Improvement ............................................................ 1 cr.

* Recommended course(s) for the first semester.

AS/AAS • Sign Language Interpretation

AS.INTT/AAS.INTT (72 Credit Hours)

This program will prepare students for entry-level positions as sign language interpreters/transliterators in a variety of community and educational settings. This sequenced AS/AAS degree program provides training in American Sign Language, deaf culture, communication models, interpreting processes and interpreting ethics. Course work focusing on interpreting from English into American Sign Language (ASL) and from ASL into English includes classroom and practical lab work, practicum and a field internship. There is also a strong sociolinguistic component to the program with courses in speech pathology and audiology, linguistics of ASL, and the social and educational aspects of hearing loss. However, graduates are granted State interpreting levels or certification only after testing and evaluation by the Florida Registry of Interpreters for the Deaf (FRID) or the National Registry of Interpreters for the Deaf (NRID).

NOTE: Students of the Sign Language Interpretation program will be required to submit to fingerprinting and a background check at the expense of the student.

NOTE: Graduates from this AS degree program shall be granted admission into the Interpreter Training concentration of the Communication Sciences and Disorders baccalaureate degree program at the University of South Florida.

Prerequisite Courses for Admission

ASL 1140C  American Sign Language I .................................................. 4 cr.
ASL 1150C  American Sign Language II ................................................ 4 cr.

General Education Requirements

ANT 2000  Introduction to Anthropology or PSY 2012 General Psychology or
SYG 2000  Introduction to Sociology ..................................................... 4 cr.
ENC 1101  English Composition I .......................................................... 3 cr.
ENC 1102  English Composition II ........................................................ 3 cr.
BSC 1005C  Biological Foundations I or Biological Science General
Education w/Lab .................................................................................... 3 cr.
MIF 1119  Introductory Mathematics w/Applications (non-transfer) or
Mathematics General Education (transfer) ......................................... 3 cr.
Humanities General Education ............................................................... 3 cr.

Program Required Courses

ASL 1300C  American Sign Language-Applied Linguistics .................... 4 cr.
ASL 1430  Fingerspelling ...................................................................... 2 cr.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASL 1140C</td>
<td>American Sign Language I</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ASL 1150C</td>
<td>American Sign Language II</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ASL 1430C</td>
<td>Fingerspelling</td>
<td>2 cr.</td>
</tr>
<tr>
<td>ASL 2160C</td>
<td>American Sign Language III</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ASL 2210C</td>
<td>American Sign Language IV</td>
<td>4 cr.</td>
</tr>
<tr>
<td>INT 1941</td>
<td>Interpreting Practicum</td>
<td>2 cr.</td>
</tr>
<tr>
<td>INT 2130</td>
<td>Introduction to Interpreting Ethics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>INT 2200</td>
<td>Interactive Interpreting I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>INT 2200L</td>
<td>Interactive Interpreting I Lab</td>
<td>2 cr.</td>
</tr>
<tr>
<td>INT 2201L</td>
<td>Interactive Interpreting II Lab</td>
<td>3 cr.</td>
</tr>
<tr>
<td>INT 2210L</td>
<td>Interactive Transliterating Lab</td>
<td>3 cr.</td>
</tr>
<tr>
<td>INT 2231L</td>
<td>American Sign Language to Spoken English Interpreting (Lab Only)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>INT 2400</td>
<td>Educational Interpreting</td>
<td>2 cr.</td>
</tr>
<tr>
<td>INT 2400L</td>
<td>Educational Interpreting Lab</td>
<td>2 cr.</td>
</tr>
<tr>
<td>INT 2930</td>
<td>Interpreting Topics</td>
<td>2 cr.</td>
</tr>
<tr>
<td>INT 2942</td>
<td>Interpreting Internship</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SPA 2001</td>
<td>Survey of Communication Disorders</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**Sign Language Interpretation Program - Experiential Credit Option (72 credits)**

The following program credit hours will be awarded to individuals who have earned National Certification from the Registry of Interpreters for the Deaf (RID) and have proof of said certification and proof of current membership in good standing with RID. Eighteen credit hours will be awarded to those individuals seeking the Experiential Credit Option to earn the Sign Language Interpretation AS or AAS degree.

**Credit Hours awarded for Experience:** 18 cr.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT 1941</td>
<td>Interpreting Practicum</td>
<td>2 cr.</td>
</tr>
<tr>
<td>INT 2200</td>
<td>Interactive Interpreting I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>INT 2200L</td>
<td>Interactive Interpreting I Lab</td>
<td>2 cr.</td>
</tr>
<tr>
<td>INT 2201L</td>
<td>Interactive Interpreting II Lab</td>
<td>3 cr.</td>
</tr>
<tr>
<td>INT 2210L</td>
<td>Interactive Transliterating Lab</td>
<td>3 cr.</td>
</tr>
<tr>
<td>INT 2231L</td>
<td>ASL-to-Spoken English Interpreting (Lab Only)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>INT 2400</td>
<td>Educational Interpreting</td>
<td>2 cr.</td>
</tr>
<tr>
<td>INT 2400L</td>
<td>Educational Interpreting Lab</td>
<td>2 cr.</td>
</tr>
<tr>
<td>INT 2930</td>
<td>Interpreting Topics</td>
<td>2 cr.</td>
</tr>
</tbody>
</table>

To complete the Sign Language Interpretation AS/AAS degree, students seeking the Experiential Credit Option are eligible to take the credit-by-exam tests or transfer credits from accredited sources for the following courses specified below:

**Program Specific Courses Allowed for Credit-by-Exam:** 18 cr.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASL 1140C</td>
<td>American Sign Language I</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ASL 1150C</td>
<td>American Sign Language II</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ASL 1430</td>
<td>Fingerspelling</td>
<td>2 cr.</td>
</tr>
<tr>
<td>ASL 2160C</td>
<td>American Sign Language III</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ASL 2210C</td>
<td>American Sign Language IV</td>
<td>4 cr.</td>
</tr>
</tbody>
</table>

Credit-by-exam can only be taken once per course and must be passed with a score of 75 or above to receive “S” (satisfactory) for credit. If the student fails the exam or does not receive an “S” (score of 75) or better the student must then register for and take the course when it is offered within the regular program sequence.

Only those individuals who are following the experiential credit option for a degree are eligible to take the credit-by-exam for the ASL II through ASL IV courses (ASL 1150C, ASL 2160C, ASL 2210C, ASL 1430), and the Fingerspelling course. The credit-by-exam for ASL I (ASL 1140C) is not restricted to the experiential credit option.

Experiential credit option seeking students must also complete at HCC or transfer from an accredited source (with a “C” or better) the following:

**General Education Coursework:** 18 cr.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASL 1300C</td>
<td>American Sign Language Applied Linguistics</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ASL 1510</td>
<td>Introduction to Deaf Culture</td>
<td>3 cr.</td>
</tr>
<tr>
<td>INT 1941</td>
<td>Interpreting Practicum</td>
<td>2 cr.</td>
</tr>
<tr>
<td>INT 2930</td>
<td>Interpreting Topics</td>
<td>2 cr.</td>
</tr>
<tr>
<td>INT 2130</td>
<td>Introduction to Interpreting Ethics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>INT 2942</td>
<td>Interpreting Internship</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SPA 2001</td>
<td>Survey of Communication Disorders</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
To receive the degree from HCC at least 18 credit hours of coursework must be completed at HCC.

NOTE: Graduates from this AS degree program shall be granted admission into the interpreter training concentration of the Communication Sciences and Disorders baccalaureate degree program at the University of South Florida.

**AS • Veterinary Technology**

**AS.VET.TECH (73 Credit Hours)**

Veterinary Technology is a rapidly growing field. Employment of veterinary technicians/technologists is expected to grow much faster than the average for all occupations through the year 2012, according to the most recent information from the U.S. Department of Labor. Graduates from this program will find careers in areas such as private practice, animal shelters and humane societies, agriculture (equine services, farms, and ranches), biomedical research, zoo/wildlife medicine, tourist/recreational facility animal care and research, and pharmaceutical and government. This program which awards the associate in science degree will prepare students to enter the workforce prepared for clinical practice, research animal husbandry, or clinical management.

The HCC Veterinary Technology program is accredited by the American Veterinary Medical Association. Graduates of this program are eligible to take the Veterinary Technician National Examination.

**Prerequisites for Admission***

*NOTE: Additional prerequisite changes have been approved to be effective fall term 2012. Consult with an advisor or counselor regarding these changes.

NOTE: Completion of prerequisites for admission with a grade of “C” or higher is required.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC 1101</td>
<td>English Composition I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 1005C</td>
<td>Biological Foundations I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAC 1105</td>
<td>College Algebra</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>MGF 1106, Topics in Mathematics or higher General Education Mathematics or STA 2023, Elementary Statistics</td>
<td>3 cr.</td>
</tr>
<tr>
<td></td>
<td>Humanities General Education or Social Science General Education</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

* If 3 credit hours of social/behavioral science general education are taken as a prerequisite for admission, the student must take a total of 6 credit hours of humanities to complete the program’s general education requirements.

NOTE: Completion of all general education and Veterinary Technology program required courses with a grade of “C” or higher is required for graduation.

**General Education Requirements**

Humanities General Education............................................................................................................. 3 cr.
Social Science General Education ........................................................................................................ 3 cr.

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE 1001</td>
<td>Introduction to Veterinary Technology</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ATE 1110</td>
<td>Animal Anatomy</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ATE 1110L</td>
<td>Animal Anatomy Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ATE 1211</td>
<td>Animal Physiology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ATE 1311L</td>
<td>Veterinary Office Procedures Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ATE 1630</td>
<td>Pharmacology for Veterinary Technicians</td>
<td>2 cr.</td>
</tr>
<tr>
<td>ATE 1650L</td>
<td>Veterinary Clinical Practice Laboratory I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ATE 1741</td>
<td>Veterinary Medical Terminology</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ATE 1943</td>
<td>Veterinary Work Experience I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ATE 1944</td>
<td>Veterinary Work Experience II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ATE 2020</td>
<td>Contemporary Clinical Issues</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ATE 2050</td>
<td>Small Animal Breeds and Behavior</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ATE 2501</td>
<td>Veterinary Professional Development/Ethics Seminar</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ATE 2611</td>
<td>Animal Medicine I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ATE 2612</td>
<td>Small Animal Nursing II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ATE 2614</td>
<td>Animal Medicine II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ATE 2631</td>
<td>Small Animal Nursing I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ATE 2636</td>
<td>Large Animal Nursing and Clinical Skills</td>
<td>2 cr.</td>
</tr>
<tr>
<td>ATE 2638</td>
<td>Animal Clinical Pathology I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ATE 2638L</td>
<td>Animal Clinical Pathology I Laboratory</td>
<td>2 cr.</td>
</tr>
<tr>
<td>ATE 2639</td>
<td>Animal Clinical Pathology II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ATE 2639L</td>
<td>Animal Clinical Pathology II Laboratory</td>
<td>2 cr.</td>
</tr>
<tr>
<td>ATE 2651L</td>
<td>Small Animal Nursing Laboratory</td>
<td>2 cr.</td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
<td>Credit</td>
</tr>
<tr>
<td>------</td>
<td>-------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>ATE 2652L</td>
<td>Veterinary Clinical Practice Laboratory II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ATE 2661</td>
<td>Large Animal Diseases</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ATE 2671L</td>
<td>Medicine of Laboratory Animals</td>
<td>2 cr.</td>
</tr>
<tr>
<td>ATE 2710</td>
<td>Animal Emergency Medicine</td>
<td>2 cr.</td>
</tr>
<tr>
<td>ATE 2722</td>
<td>Avian and Exotic Pet Medicine</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ATE 2945</td>
<td>Veterinary Work Experience III</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ATE 2946</td>
<td>Veterinary Work Experience IV</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>
College Credit Certificates

A college credit certificate (CCC) may be awarded for programs of less than two years in selected technical areas leading to an associate in applied science degree. The CCC’s are designed to prepare the student for entry into a particular field or to upgrade the skills of those already employed in the field.

ATC • Executive Fire Officer
ATC.FIRE.OFR (30 Credit Hours)

The Executive Fire Officer Technical Certificate is designed to develop the student’s knowledge in the area of executive management of modern fire and rescue service systems. The curriculum will be centered on upper level management techniques, and current trends affecting the delivery of a fire and rescue service.

Admission Requirements

Possess a current Certificate of Compliance/Completion from the Florida State Bureau of Fire Standards. Hold an AS Degree in Fire Science Technology or AS Degree in Emergency Medical Services and have completed courses: FFP 1710, FFP 1810, FFP 2700, FFP 2740, FFP 2811 and FFP 2401.

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFP 2118</td>
<td>Interpersonal Management in Fire Science</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FFP 2280</td>
<td>Management for EMS for Fire Science</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FFP 2590</td>
<td>Management of Fire Prevention Programs</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FFP 2701</td>
<td>Organization/Command Fire Science Operations</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FFP 2720</td>
<td>Executive Fire Officer Leadership/ Personnel Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FFP 2741</td>
<td>Fire Service Course Development</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FFP 2750</td>
<td>Financial Management in Fire Service</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FFP 2790</td>
<td>Analysis of Fire Department Operations</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FFP 2801</td>
<td>Incident Command for Disaster Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FFP 2830</td>
<td>Incident Command/Major Fire Department Operations</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

ATC • Paralegal (Legal Assisting)
ATC.PLA (21 Credit Hours)

The Paralegal/Legal Assisting Advanced Technical Certificate is designed to enable students who already hold a bachelor’s degree or higher to take paralegal courses at Hillsborough Community College and qualify to take the Certified Legal Assistant exam sponsored by the National Association for Legal Assistants. It further prepares those students for work of a legal nature in law offices, corporations or governmental agencies.

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLA 1003</td>
<td>Introduction to the Paralegal Profession</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PLA 1271</td>
<td>Tort Law</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PLA 1104</td>
<td>Writing and Research I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PLA 2114</td>
<td>Writing and Research II</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Select 9 credit hours from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLA 1203</td>
<td>Litigation Procedures I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PLA 1433</td>
<td>Business Organizations</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PLA 1600</td>
<td>Administration of Wills/Trusts/Probate</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PLA 1611</td>
<td>Real Estate Law/Property Transactions I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PLA 1700</td>
<td>Legal Ethics and Professional Responsibility</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PLA 2303</td>
<td>Criminal Litigation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PLA 2421</td>
<td>Contract Law</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PLA 2460</td>
<td>Bankruptcy Law</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PLA 2800</td>
<td>Family Law</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

NOTE: A grade of “C” or better must be attained for each course taken for this certificate.
### ATD • Pest Control Operations
**ATD.PCO (24 Credit Hours)**

There is a growing need for available service industries such as pest control operation to satisfy the pest control needs of
the general public and agricultural interests. An ATD in pest control operations will provide the training and skills needed to
enter this field.

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOS 1010</td>
<td>Horticultural Science</td>
<td>3 cr.</td>
</tr>
<tr>
<td>IPM 1011</td>
<td>Plant Pests</td>
<td>3 cr.</td>
</tr>
<tr>
<td>IPM 1301</td>
<td>Application of Pesticides and Fertilizers</td>
<td>3 cr.</td>
</tr>
<tr>
<td>IPM 2302</td>
<td>Applied Materials Chemistry and Calculations</td>
<td>3 cr.</td>
</tr>
<tr>
<td>IPM 2634</td>
<td>Management of Diseases and Weeds</td>
<td>3 cr.</td>
</tr>
<tr>
<td>IPM 2253</td>
<td>Management of Insects and Nematodes</td>
<td>3 cr.</td>
</tr>
<tr>
<td>IPM 2551</td>
<td>Regulatory Environment of Pest Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SWS 1102</td>
<td>Soils and Fertilizers</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

### CCC • Accounting Applications
**CCC.ACG.APPS (30 Credit Hours)**

This program will prepare students for employment as an accounting clerk, a junior accountant or an accounting assistant.

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2021</td>
<td>Financial Accounting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ACG 2071</td>
<td>Managerial Accounting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ACG 2100</td>
<td>Intermediate Accounting I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ACG 2110</td>
<td>Intermediate Accounting II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ACG 2340</td>
<td>Cost Accounting I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ACG 2350</td>
<td>Cost Accounting II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1000</td>
<td>Programming Logic</td>
<td>3 cr.</td>
</tr>
<tr>
<td>TAX 2000</td>
<td>Federal Tax Accounting I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>TAX 2010</td>
<td>Federal Tax Accounting II</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**NOTE:** Coursework may be applied to the two-year AAS degree Accounting Technology program.

### CCC • Aquaculture Technology
**CCC.AQUA (26 Credit Hours)**

This program will prepare students for employment in the field of aquaculture technology and transfers into the associate
in science degree program titled Aquaculture.

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAS 1012C</td>
<td>Aquacultural Organisms</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FAS 1401L</td>
<td>Aquacultural Laboratory Techniques</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FAS 1404C</td>
<td>Aquacultural Field Techniques</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FAS 2240C</td>
<td>Aquacultural Nutritional Techniques</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FAS 2253</td>
<td>Aquaculture Disease Processes</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FAS 2253L</td>
<td>Aquaculture Disease Processes Laboratory</td>
<td>1 cr.</td>
</tr>
<tr>
<td>FAS 2263C</td>
<td>Aquacultural Reproductive Techniques</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FAS 2353C</td>
<td>Aquacultural Management Practices</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ZOO 1450</td>
<td>Ichthyology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ZOO 1450L</td>
<td>Ichthyology Laboratory</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

**NOTE:** Coursework may be applied to the two-year AS/AAS degree Aquaculture program.

### CCC • AutoCAD Foundations
**CCC.ADCT.CAD (15 Credit Hours)**

This certificate provides students with the AutoCAD skills needed to assist architects and construction engineers in planning,
designing and detailing. Computer design techniques are emphasized in the certificate.

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 2461</td>
<td>Materials and Methods I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BCN 1250</td>
<td>Introduction to Graphic Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BCN 2272</td>
<td>Blueprint Reading</td>
<td>3 cr.</td>
</tr>
<tr>
<td>TAR 2053</td>
<td>Introduction to Computer Aided Design and Drafting</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
Program Required Courses

**NOTE:** Coursework may be applied to the two-year AS/AAS degree Architectural Design and Technology program.

**CCC • Automation**  
**CCC.EST (12 Credit Hours)**

This certificate prepares students for engineering technology support positions dealing with PLCs, automation, and control systems in high tech production, manufacturing, distribution, and engineering research and development facilities.

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 1535</td>
<td>Automated Process Control</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EST 1540</td>
<td>Industrial Applications using PLCs and Robotics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EST 1542</td>
<td>Introduction to Programmable Logic Controllers</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETI 1843</td>
<td>Motors and Controls</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**NOTE:** Coursework may be applied to the two-year AS/AAS degree Engineering Technology program.

**CCC • Biotechnology Specialist**  
**CCC.BIO.TECH.SP (19 Credit Hours)**

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC 1420C</td>
<td>Introduction to Biotechnology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 2420</td>
<td>Biotechnology I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 2420L</td>
<td>Biotechnology I Laboratory</td>
<td>2 cr.</td>
</tr>
<tr>
<td>BSC 2427</td>
<td>Biotechnology II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BSC 2427L</td>
<td>Biotechnology II Laboratory</td>
<td>2 cr.</td>
</tr>
<tr>
<td>BSC 2943</td>
<td>Biotechnology Internship</td>
<td>3 cr.</td>
</tr>
<tr>
<td>PHI 1600</td>
<td>Ethics</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**NOTE:** Coursework may be applied to the two-year AS degree Biotechnology program.

**CCC • Broadcast Production**  
**CCC.RTV (24 Credit Hours)**

This certificate allows students to obtain basic training for a specific entry-level job in broadcast production.

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTV 1245</td>
<td>Electronic Field Production</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTV 2000</td>
<td>Introduction to Broadcasting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTV 1941</td>
<td>Radio/TV Internship</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTV 2201</td>
<td>Broadcasting Techniques</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTV 2242</td>
<td>Advanced Television Studio Production</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTV 2246</td>
<td>Advanced Electronic Field Production</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTV 2270</td>
<td>Radio Production and Programming</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTV 2300</td>
<td>Broadcast News</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**NOTE:** Coursework may be applied to the two-year AS/AAS degree Digital Television and Media Production program.

**CCC • Business Development and Entrepreneurship**  
**CCC.BUS.DEV.ENT (25 Credit Hours)**

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2021</td>
<td>Financial Accounting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BUL 2241</td>
<td>Business Law I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1510</td>
<td>Spreadsheet Applications I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>ENT 1000</td>
<td>Introduction to Entrepreneurship</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GEB 1214</td>
<td>Business Communications and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GEB 2351</td>
<td>International Business Practice Firm</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MAR 1011</td>
<td>Principles of Marketing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SBM 2000</td>
<td>Small Business Management</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**NOTE:** Coursework may be applied to the two-year AS/AAS degree Business Administration program.

**CCC • Business Management**  
**CCC.BUS.MAN (24 Credit Hours)**

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 2021</td>
<td>Financial Accounting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ACG 2071</td>
<td>Managerial Accounting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>BUL 2241</td>
<td>Business Law I</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
NOTE: Coursework may be applied to the two-year AS/AAS degree Business Administration program.

CCC • Business Operations

Program Required Courses

ACG 2021 Financial Accounting ................................................................. 3 cr.
BUL 2241 Business Law I ........................................................................ 3 cr.
GEB 1011 Introduction to Business .......................................................... 3 cr.
MAN 1021 Principles of Management ...................................................... 3 cr.
MAR 1011 Principles of Marketing ............................................................. 3 cr.
SPC 1608 Public Speaking ........................................................................ 3 cr.

NOTE: Coursework may be applied to the two-year AS/AAS degree Business Administration program.

CCC • Chef’s Apprentice

Program Required Courses

FOS 1201 Sanitation and Safety Management ........................................... 2 cr.
FSS 1063C Food Specialties I (Baking) ....................................................... 3 cr.
FSS 1223C Food Preparation for Managers .............................................. 4 cr.
FSS 1248 Food Specialties II (Garde Manger I) ........................................ 3 cr.

NOTE: Coursework may be applied to the two-year AS/AAS degree Culinary Management program.

CCC • Cisco CCNA

Program Required Courses

EET 1036C Basic AC and DC ................................................................. 3 cr.
EET 1083C Electronics Orientation .......................................................... 3 cr.

This certificate is designed to prepare students for employment as telecommunications system engineers, telecommunications specialists, network support technicians, network system specialists, and field support engineers as it relates to Cisco-based networks that includes local area and wide area network routers and switches.
Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET 1600</td>
<td>Cisco Network Fundamentals</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET 1610</td>
<td>Cisco Router Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET 2615</td>
<td>Cisco Advanced Router Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CET 2620</td>
<td>Cisco Wide-Area Networking Technologies</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**NOTE:** Coursework may be applied to the two-year AS/AAS degree Computer Programming program.

### CCC • Computer Programming

**CCC.COP.OPT1 (33 Credit Hours)**

This program prepares students for jobs in the field of computer programmer aide, junior programmer, senior programmer, data manager, programmer analyst, and mid-range computer specialist.

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2301</td>
<td>Management Information Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CIS 2321</td>
<td>Systems Analysis</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1000</td>
<td>Programming Logic</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Select 21 credit hours from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COP 1120</td>
<td>COBOL, Beginning</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1220</td>
<td>Programming in C</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1332</td>
<td>Visual BASIC, Beginning</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1812</td>
<td>Introduction to XML</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1821</td>
<td>Visual BASIC, Advanced</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2224</td>
<td>Programming in C++</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2360</td>
<td>Programming in C#</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2800</td>
<td>JAVA Programming</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2805</td>
<td>JAVA, Advanced</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**NOTE:** Coursework may be applied to the two-year AS/AAS degree Computer Programming program.

### CCC • Computer Programming Specialist

**CCC.PROG.SPEC (18 Credit Hours)**

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CIS 2321</td>
<td>Systems Analysis</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1000</td>
<td>Programming Logic</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Select 9 credit hours from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COP 1120</td>
<td>COBOL, Beginning</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1220</td>
<td>Programming in C</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1332</td>
<td>Visual BASIC, Beginning</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2360</td>
<td>Programming in C#</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2800</td>
<td>JAVA Programming</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**NOTE:** Coursework may be applied to the two-year AS/AAS degree Computer Programming program.

### CCC • Crime Scene

**CCC.CS (28 Credit Hours)**

This program is designed to prepare graduates for work in the field of crime scene investigations and forensics. For more information, students can refer to the Criminal Justice Technology website at www.hccfl.edu/yborcampus/cjt for specific details.

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCJ 1020</td>
<td>Introduction to Criminal Justice</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJE 1640</td>
<td>Introduction to Criminalistics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJE 1642C</td>
<td>Introduction to Crime Scene Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJE 1643C</td>
<td>Advanced Crime Scene Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJE 2600</td>
<td>Criminal Investigation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJE 2671C</td>
<td>Latent Fingerprint Development</td>
<td>2 cr.</td>
</tr>
<tr>
<td>CJE 2672C</td>
<td>Fingerprint Classification</td>
<td>2 cr.</td>
</tr>
<tr>
<td>CJE 2770C</td>
<td>Forensic Photography</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJI 2130</td>
<td>Criminal Evidence and Procedure</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CJI 2610</td>
<td>Courtroom Presentation of Scientific Evidence</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**NOTE:** Coursework may be applied to the two-year AS/AAS degree Criminal Justice Technology program.
CCC • Culinary Arts

CCC.CULA (35 Credit Hours)

The purpose of this program is to prepare students for employment in commercial and institutional positions such as bakers, pantry cooks, prep cooks, and lead cooks in the culinary industry and/or to provide supplemental training for persons previously or currently employed in these occupations.

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSS 1223C</td>
<td>Food Preparation for Managers</td>
<td>4 cr.</td>
</tr>
<tr>
<td>FSS 1063C</td>
<td>Food Specialties I (Baking)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FSS 1248C</td>
<td>Food Specialties II (Garde Manger I)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FSS 1500</td>
<td>Food and Beverage Control</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FOS 1201</td>
<td>Safety and Sanitation Management</td>
<td>2 cr.</td>
</tr>
<tr>
<td>FSS 2100</td>
<td>Food Plans and Menu Preparation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FSS 2120</td>
<td>Food Purchase and Storage</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HFT 1000</td>
<td>Introduction to Hospitality Industry Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HFT 2210</td>
<td>Management of Hospitality Personnel</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HFT 2840</td>
<td>Maitre D’ and Dining Room Service</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HUN 2201</td>
<td>Fundamentals of Human Nutrition</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FSS electives</td>
<td></td>
<td>2 cr.</td>
</tr>
</tbody>
</table>

NOTE: Coursework may be applied to the two-year AS/AAS degree Culinary Management program.

CCC • Database Administrator

CCC.DBA.ADMIN (15 Credit Hours)

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 2541</td>
<td>Database Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 2440</td>
<td>Database Programming – SQL</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 2441</td>
<td>Database Administration I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 2442</td>
<td>Database Administration II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 2445</td>
<td>Database Programming – Advanced</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

NOTE: Coursework may be applied to the two-year AS/AAS Database Technology program.

CCC • Digital Media/Multimedia Instructional Technology

CCC.MMT.IT (15 Credit Hours)

This certificate prepares students for initial employment as an instructional developer, instructional media integrator, or instructional media specialist.

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1577</td>
<td>Presentation Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1871</td>
<td>Multimedia Authoring I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2820</td>
<td>Web Authoring – HTML</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2821</td>
<td>Graphics Design for Multimedia/Internet</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EME 2040</td>
<td>Introduction to Education Technology</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

NOTE: Coursework may be applied to the two-year AS/AAS degree Digital Media/Multimedia Technology program.

CCC • Digital Media/Multimedia Production

CCC.MMT.PROD (15 Credit Hours)

This certificate prepares students for initial employment as a videographers or video editors.

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1577</td>
<td>Presentation Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1871</td>
<td>Multimedia Authoring I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2821</td>
<td>Graphics Design for Multimedia/Internet</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2876</td>
<td>Digital Audio/Video Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2877</td>
<td>Digital Animation Design</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

NOTE: Coursework may be applied to the two-year AS/AAS degree Digital Media/Multimedia Technology program.

CCC • Digital Media/Multimedia Video Production

CCC.MMT.VIDEO (12 Credit Hours)

This certificate prepares students for initial employment as a videographers or video editors.

Program Required 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 Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2821</td>
<td>Graphics Design for Multimedia/Internet</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
CGS 2876 Digital Audio/Video Design ................................................................. 3 cr.
CGS 2877 Digital Animation Design ................................................................. 3 cr.

NOTE: Coursework may be applied to the two-year AS/AAS degree Digital Media/Multimedia Technology program.

**CCC • Digital Media/Multimedia Web Production**

**CCC.MMT.WEB (15 Credit Hours)**

This certificate is designed to prepare the student for initial employment as a web production assistant or web production artist.

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 2820</td>
<td>Web Authoring – HTML</td>
<td>3</td>
</tr>
<tr>
<td>CGS 2876</td>
<td>Digital Audio/Video Design</td>
<td>3</td>
</tr>
<tr>
<td>CGS 2877</td>
<td>Digital Animation Design</td>
<td>3</td>
</tr>
<tr>
<td>CGS 2821</td>
<td>Graphics Design for Multimedia/Internet</td>
<td>3</td>
</tr>
<tr>
<td>COP 2830</td>
<td>Scripting for the Web</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: Coursework may be applied to the two-year AS/AAS degree Digital Media/Multimedia Technology program.

**CCC • Digital Video Production**

**CCC.DGTL.PROD (12 Credit Hours)**

This certificate allows students to obtain basic training for a specific entry-level job in video production.

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1871</td>
<td>Multimedia Authoring or GRA 111C, Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>RTV 1245</td>
<td>Electronic Field Production</td>
<td>3</td>
</tr>
<tr>
<td>RTV 2246</td>
<td>Advanced Electronic Field Production</td>
<td>3</td>
</tr>
<tr>
<td>VIC 1202</td>
<td>Film and TV Graphics</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: Coursework may be applied to the two-year AS/AAS degree Digital Television and Media Production program.

**CCC • Drafting**

**CCC.ADC.T.DRAFT (24 Credit Hours)**

This certificate provides the students with the practical skills necessary to accept the challenges of a construction drafting career. Successful certificate holders may find employment as a draftsperson in architect’s, engineer’s, or contractor’s offices; governmental agencies, corporate planning departments or other private industries.

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 2461</td>
<td>Materials and Methods I</td>
<td>3</td>
</tr>
<tr>
<td>BNC 1210</td>
<td>Construction Materials and Processes</td>
<td>3</td>
</tr>
<tr>
<td>BNC 1250</td>
<td>Introduction to Graphic Technology</td>
<td>3</td>
</tr>
<tr>
<td>BNC 2272</td>
<td>Blueprint Reading</td>
<td>3</td>
</tr>
<tr>
<td>TAR 1120</td>
<td>Architectural Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>TAR 2053</td>
<td>Introduction to Computer Aided Design and Drafting</td>
<td>3</td>
</tr>
<tr>
<td>TAR 2054</td>
<td>Intermediate Computer Aided Design and Drafting</td>
<td>3</td>
</tr>
<tr>
<td>TAR 2055</td>
<td>Advanced Computer Aided Design and Drafting</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: Coursework may be applied to the two-year AS/AAS degree Architectural Design and Technology program.

**CCC • Electronics Technician**

**CCC.EET (31 Credit Hours)**

This program prepares individuals for employment as electrical and electronics technicians, electronic engineering technicians, or in related occupations in electronics. This program includes the Florida core electronics competencies as identified in the electronics industry. Graduates of this program will be able to assemble, install, operate, maintain, troubleshoot and repair electronic equipment used in industry.

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET 1112C</td>
<td>Basic Digital Systems</td>
<td>3</td>
</tr>
<tr>
<td>CET 1172C</td>
<td>Computer Upgrading and Repair</td>
<td>3</td>
</tr>
<tr>
<td>CET 1174C</td>
<td>Advanced Computer Repair</td>
<td>3</td>
</tr>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers and Technology</td>
<td>3</td>
</tr>
<tr>
<td>EET 1036C</td>
<td>Basic AC and DC</td>
<td>3</td>
</tr>
<tr>
<td>EET 1037C</td>
<td>Circuit Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EET 1083C</td>
<td>Electronics Orientation</td>
<td>3</td>
</tr>
<tr>
<td>EET 1141C</td>
<td>Solid State Devices</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1105</td>
<td>College Algebra</td>
<td>3</td>
</tr>
</tbody>
</table>

Select 4 credit hours from the following:
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETM 1010C</td>
<td>Mechanical Measurement and Instrumentation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CSEP</td>
<td>Certificate can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>FSS 1223C</td>
<td>Food Production for Managers</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ECO 2013</td>
<td>Principles of Macroeconomics</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETI 1110</td>
<td>Introduction to Quality</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETI 1420</td>
<td>Manufacturing Processes and Materials</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETI 1701</td>
<td>Industrial Safety</td>
<td>3 cr.</td>
</tr>
<tr>
<td>EET 1083C</td>
<td>Electronics Orientation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETD 1320C</td>
<td>Computer Aided Drafting for Engineers</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1510</td>
<td>Spreadsheet Applications</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1540</td>
<td>Database Management I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CTS 1305</td>
<td>Introduction to Networking</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ECO 2021</td>
<td>Financial Accounting</td>
<td></td>
</tr>
<tr>
<td>ACG 2021</td>
<td>Financial Accounting or APA 1111, Basic Accounting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FSS 1223C</td>
<td>Food Production for Managers</td>
<td>4 cr.</td>
</tr>
<tr>
<td>FSS 1500</td>
<td>Food and Beverage Control</td>
<td>3 cr.</td>
</tr>
<tr>
<td>FSS 2120</td>
<td>Food Purchase and Storage</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HFT 1000</td>
<td>Hospitality Industry Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HFT 1790</td>
<td>The Event Industry</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HFT 2210</td>
<td>Supervisory Development</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HFT 2530</td>
<td>Hospitality Merchandising Techniques</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HFT 2600</td>
<td>Hospitality Industry Law</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HFT 2750</td>
<td>Meeting, Convention and Exposition Industry</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HFT 2840</td>
<td>Maitre D’ and Dining Room Service</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HFT 2600</td>
<td>Hospitality Industry Law</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HFT 2750</td>
<td>Meeting, Convention and Exposition Industry</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HFT 2840</td>
<td>Maitre D’ and Dining Room Service</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>Certification can help prepare students for the CSEP certification exam.</td>
<td></td>
</tr>
</tbody>
</table>
CCC • Food and Beverage Operations
CCC. FOOD.BEV.OP (18 credit hours)
Program Required Courses

CGS 1107 Introduction to Computers ................................................................. 1 cr.
FOS 1201 Safety and Sanitation Management .................................................... 2 cr.
FSS 2110 Food Plans and Menu Preparation ...................................................... 3 cr.
FSS 2120 Food Purchasing and Storing ............................................................. 3 cr.
HFT 2110 Supervisory Development ................................................................. 3 cr.
HFT 2600 Hospitality Law .................................................................................. 3 cr.
HFT 2840 Maitre d’ and Dining Room Service .................................................. 3 cr.

NOTE: Coursework may be applied to the two-year AS/AAS degree Hospitality and Tourism Management program.

CCC • Game Authoring
CCC.MMT.AUTH (12 Credit Hours)
This certificate is designed to prepare students for initial employment as a digital media/multimedia author.

Program Required Courses

CAP 1023 Introduction to Game Development .................................................... 3 cr.
CAP 2042 Game Design and Development ....................................................... 3 cr.
CAP 2043 Advanced Game Design and Development ....................................... 3 cr.
CGS 2827 Advanced Graphics for Multimedia/Internet .................................... 3 cr.

NOTE: Coursework may be applied to the two-year AS/AAS degree Digital Media/Multimedia Technology program.

CCC • Human Resource Management
CCC.OSS.HRS (27 Credit Hours)
This program teaches students the process of accomplishing administrative support functions for human resources managers in the areas of employee benefits, recruitment and staffing, training and development, salary and compensation, employee relations, and safety and worker’s compensation.

Students are prepared for such positions as human resource assistant, employment interviewer, labor relations assistant, and human resource specialist.

Program Required Courses

BUL 2241 Business Law .................................................................................... 3 cr.
CIS 1931 Microcomputer Concepts .................................................................... 3 cr.
GEB 1011 Introduction to Business ..................................................................... 3 cr.
MNA 1320 Human Resources Recruitment, Interviewing, and Selection ............. 3 cr.
MNA 1325 Human Resources Statistical Analysis, Compensation and Benefits .................................................................................. 3 cr.
OST 1335 Business Communications .................................................................. 3 cr.
OST 2501 Office Administration .......................................................................... 3 cr.
OST 2357 Electronic Records Management ...................................................... 3 cr.
SLS 1261 Personal Skills for Business ............................................................... 3 cr.

NOTE: Coursework may be applied to the two-year AS/AAS degree Office Administration program.

CCC • Information Technology Analysis
CCC.CIS.ANA (27 Credit Hours)
This certificate is designed to prepare students for employment as an applications system specialist, information systems specialist, technical support specialist, software tester or user support specialist.

Program Required Courses

CGS 1000 Introduction to Computers and Technology ....................................... 3 cr.
CGS 2301 Management Information Systems ................................................... 3 cr.
CGS 1555 Introduction to the Internet ............................................................... 3 cr.
CGS 1761 Computer Operating Systems ........................................................... 3 cr.
CET 1172C Computer Upgrade and Repair ...................................................... 3 cr.
CET 1174C Advanced Computer Repair ............................................................ 3 cr.
CIS 1931 Microcomputer Concepts ................................................................... 3 cr.
CIS 2321 Systems Analysis ................................................................................ 3 cr.
CTS 1305 Introduction to Networking ............................................................... 3 cr.

NOTE: Coursework may be applied to the two-year AS/AAS degree Computer Information Administrator program.
CCC • Information Technology Management
CCC.CIS.MAN (30 Credit Hours)
This certificate prepares the student for employment as information technology specialists, data communications analysts, help desk specialists, network technicians, computer security specialists, network specialists, network managers, network systems technicians, network support specialists, microcomputer technicians, or network troubleshooters. The content prepares individuals to plan, install, configure, monitor, troubleshoot and manage computer networks in a LAN/WAN environment.

Program Required Courses
CGS 1000 Introduction to Computers and Technology ................................................................. 3 cr.
CGS 1555 Introduction to the Internet .......................................................................................... 3 cr.
CGS 2301 Management Information Systems ............................................................................. 3 cr.
CET 1172C Computer Upgrade and Repair .................................................................................. 3 cr.
CET 1174C Advanced Computer Repair ...................................................................................... 3 cr.
CET 1556C Structured Cabling .................................................................................................. 3 cr.
CTS 1305 Introduction to Networking ......................................................................................... 3 cr.
CTS 1306 Microsoft Windows Server Configuring Network Infrastructure .................................. 3 cr.
CTS 1328 Microsoft Windows Server .......................................................................................... 3 cr.

Select one server course from the following:
CTS 1303 Microsoft Windows Configuring Active Directory .................................................. 3 cr.
CTS 2301 Unix Administration I ................................................................................................ 3 cr.

NOTE: Coursework may be applied to the two-year AS/AAS degree Computer Information Administrator program.

CCC • Information Technology Security
CCC.CIS.SEC (18 Credit Hours)
This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers such as database security professionals and E-commerce security professionals in the information technology career cluster. It provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and , and occupation-specific skills and knowledge.

Program Required Courses
CNT 1401 Introduction to Network Security .................................................................................. 3 cr.
CGS 2091 Information Technology Ethical and Legal Issues .................................................... 3 cr.
CIS 2352C Ethical Hacking I ....................................................................................................... 3 cr.
CIS 2353 Security Management and Computer Auditing .......................................................... 3 cr.
CIS 2359C Ethical Hacking II ..................................................................................................... 3 cr.
CIS 2381C Computer Forensics and Incident Response ............................................................ 3 cr.

NOTE: Coursework may be applied to the two-year AS/AAS degree Information Technology Security program.

CCC • Information Technology Support Specialist
CCC.CIS.SPEC (18 Credit Hours)
This certificate prepares students for employment as a microcomputer support specialist, help desk specialist, user support analyst, customer service representative, network operator, computer repair technician, computer sales person, software tester or user support specialist.

Program Required Courses
CET 1172C Computer Upgrade and Repair .................................................................................. 3 cr.
CET 1174C Advanced Computer Repair ...................................................................................... 3 cr.
CGS 1000 Introduction to Computers and Technology ................................................................. 3 cr.
CGS 1555 Introduction to the Internet .......................................................................................... 3 cr.
CIS 1931 Microcomputer Concepts .............................................................................................. 3 cr.
CTS 1305 Introduction to Networking .......................................................................................... 3 cr.

NOTE: Coursework may be applied to the two-year AS/AAS degree Computer Information Administrator program.

CCC • Information Technology Technician
CCC.CIS.TECH (21 Credit Hours)
This certificate prepares students for employment as cabling specialists, information technology specialists, network control operators, data communications analysts, help desk specialists, network technicians, network systems technicians, network support specialists, or microcomputer specialists. The content prepares individuals to plan, install, configure, and monitor computer networks in a LAN/WAN environment.

Program Required Courses
CCC • Internet Services Technology Web Development Specialist - Designer
CCC.WEB.OPT1 (35 Credit Hours)
This program prepares students for internet-related jobs such as web designer, site designer or internet architect, and transfers into the associate degree program titled Internet Services Technology-Web Designer.

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1871</td>
<td>Multimedia Authoring I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2585</td>
<td>Desktop Internet Publishing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2786</td>
<td>Web 2.0 Applications</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2820</td>
<td>Web Authoring - HTML</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2821</td>
<td>Graphics Design for Multimedia/Internet</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2822</td>
<td>Web Site Creation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2827</td>
<td>Advanced Graphics Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2876</td>
<td>Desktop Audio/Video Design/Animation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2877</td>
<td>Digital Animation Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2830</td>
<td>Scripting for the Web</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Select any 2 credit hours from any of the following courses prefixes:
CAP, CEN, CET, CGS, CIS, CNT, COP, CTS

NOTE: Coursework may be applied to the two-year AS/AAS degree Internet Services Technology program.

CCC • Internet Services Technology Web Development Specialist - Developer
CCC.WEB.OPT2 (35 Credit Hours)
This program prepares students for internet-related jobs such as webmaster, web developer, site developer and internet programmer.

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1000</td>
<td>Introduction to Computers and Technology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 1103</td>
<td>Project Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2541</td>
<td>Database Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2820</td>
<td>Web Authoring - HTML</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CGS 2822</td>
<td>Web Site Creation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1000</td>
<td>Programming Logic</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 1812</td>
<td>Introduction to XML</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2830</td>
<td>Scripting for the Web</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2833</td>
<td>Database-Driven Web Program – Client</td>
<td>3 cr.</td>
</tr>
<tr>
<td>COP 2836</td>
<td>Database-Driven Web Program – Server</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CTS 2440</td>
<td>Database Programming – SQL</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

Select any 2 credit hours from any of the following course prefixes:
CAP, CEN, CET, CGS, CIS, CNT, COP, CTS

NOTE: Coursework may be applied to the two-year AS/AAS degree Internet Services Technology program.

CCC • Irrigation Technology
CCC.IRRIGATION (30 Credit Hours)
This certificate will prepare students for employment in positions such as irrigation technicians, irrigation installers, landscaping and grounds keeping personnel, lawn maintenance personnel, and sales and service personnel.

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOS 1010</td>
<td>Horticultural Science</td>
<td>3 cr.</td>
</tr>
<tr>
<td>LDE 1310</td>
<td>Irrigation/Water Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ORH 1002</td>
<td>Water Resources and Land Use</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ORH 1302</td>
<td>Irrigation System Installation</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
ORH 1304 Low Volume Irrigation Systems ................................................................. 3 cr.
ORH 1306 Computer Software for Irrigation Systems ............................................ 3 cr.
ORH 1309 Irrigation Troubleshooting and Repair .................................................. 3 cr.
ORH 1312 Residential Irrigation Design ............................................................... 3 cr.
ORH 1314 Commercial Irrigation Design ............................................................. 3 cr.
ORH 1936 Irrigation Seminar .................................................................................. 3 cr.

**CCC • Landscape and Horticulture Professional**

**CCC.ORH.PROF (18 Credit Hours)**

This certificate is primarily for individuals who are presently in the workforce in this field and those who want to prepare for the Florida Nurserymen and Growers Association certification for Landscape and Horticulture Professional. It is also applicable to those individuals not working in the field, but who need hands-on experience for employment in this area.

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT 1000</td>
<td>Plant Physiology and Growth</td>
<td>3 cr.</td>
</tr>
<tr>
<td>IPM 1011</td>
<td>Plant Pests</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ORH 1005C</td>
<td>Horticulture Field Skills</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ORH 1510</td>
<td>Plant Identification</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ORH 2251</td>
<td>Florida Horticulture Professional Preparation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SWS 1102</td>
<td>Soils and Fertilizers</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**CCC • Landscape and Horticulture Specialist**

**CCC.ORH.SPEC (12 Credit Hours)**

This certificate is for individuals presently working in the field who want to expand their knowledge, improve their skills or who want to change careers or become employed in the field.

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT 1000</td>
<td>Plant Physiology and Growth</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ORH 1510</td>
<td>Plant Identification</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ORH 2251</td>
<td>Florida Horticulture Professional Preparation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SWS 1102</td>
<td>Soils and Fertilizers</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**CCC • Landscape and Horticulture Technician**

**CCC.ORH.TECH (30 Credit Hours)**

This certificate is to prepare individuals presently working in the field for employment in this area.

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT 1000</td>
<td>Plant Physiology and Growth</td>
<td>3 cr.</td>
</tr>
<tr>
<td>GCO 2230</td>
<td>Pumping and Irrigation Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>IPM 1011</td>
<td>Plant Pests</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ORH 1005C</td>
<td>Horticulture Field Skills</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ORH 1016</td>
<td>Environmental Issues in Horticulture</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ORH 1220</td>
<td>Turf and Landscape Maintenance</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ORH 1510</td>
<td>Plant Identification</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ORH 1830</td>
<td>Landscape Design</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ORH 2251</td>
<td>Florida Horticulture Professional Preparation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SWS 1102</td>
<td>Soils and Fertilizers</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**CCC • Lean Manufacturing**

**CCC.ETM (12 Credit Hours)**

This certificate prepares students for engineering technology support positions dealing with quality systems and their implementation in high tech production, manufacturing, distribution, and engineering research and development facilities.

**Program Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETI 1110</td>
<td>Introduction to Quality</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETI 1622</td>
<td>Concepts of Lean and Six Sigma</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETI 1644</td>
<td>Production and Inventory Control</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETM 1010C</td>
<td>Mechanical Measurement and Instrumentation</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**NOTE:** Coursework may be applied to the two-year AS/AAS degree Engineering Technology program.

**CCC • Medical Information Coder/Biller: Medical Biller**

**CCC.OSS.MEDB (34 Credit Hours)**

This program teaches students how to process insurance forms, assign basic medical codes, and operate databases and medical billing computer software. Course work focuses on medical terminology and anatomy, and the use of ICD-9, Basic
CPT codes, Medicare, and other government, private, self-insurance, and managed care plans. Students are prepared to work in hospitals, physicians’ offices, health care facilities, and billing departments of medical facilities, or to set up a private billing service.

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>APA 1111</td>
<td>Basic Accounting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CIS 1931</td>
<td>Microcomputer Concepts</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HIM 2222</td>
<td>Basic ICD-9-CM Coding</td>
<td>1 cr.</td>
</tr>
<tr>
<td>HIM 2253</td>
<td>Basic CPT Coding</td>
<td>1 cr.</td>
</tr>
<tr>
<td>HIM 2275C</td>
<td>Medical Billing and Insurance I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HIM 2272C</td>
<td>Medical Billing and Insurance II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HIM 2273</td>
<td>Billing Software</td>
<td>2 cr.</td>
</tr>
<tr>
<td>HIM 2940</td>
<td>Clinical Billing Practicum</td>
<td>2 cr.</td>
</tr>
<tr>
<td>HSC 1531</td>
<td>Medical Terminology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HSC 1641</td>
<td>Legal and Ethical Aspects in Health Care</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 1100</td>
<td>Beginning PC Typing or OST 1110 Intermediate PC Typing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1335</td>
<td>Business Communications</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2145</td>
<td>Data Entry</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SLS 1261</td>
<td>Personal Skills for Business</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

NOTE: Coursework may be applied to the two-year AS/ AAS degree Office Administration program.

**CCC • Medical Information Coder/Biller: Medical Coder**  
**CCC.OSS.HIM (34 Credit Hours)**

This program prepares students to be members of a health information service team. Coursework focuses on using a classification system to assign code numbers and letters to each symptom, diagnosis, disease, procedure, and operation on a patient’s chart. A high degree of accuracy, critical thinking skills, a working knowledge of medical terminology, and skill development in coding and computer software are required. Career opportunities include hospital inpatient/outpatient coding specialist, reimbursement specialist, coding abstractor or insurance claim analyst, managed-care coding specialist, procedural coding specialist, and physician’s office or clinical coding specialist.

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1931</td>
<td>Microcomputer Concepts</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HIM 1000</td>
<td>Medical Record Content</td>
<td>1 cr.</td>
</tr>
<tr>
<td>HIM 1433</td>
<td>Principles of Disease</td>
<td>4 cr.</td>
</tr>
<tr>
<td>HIM 1442</td>
<td>Pharmacology</td>
<td>2 cr.</td>
</tr>
<tr>
<td>HIM 1453</td>
<td>Anatomy and Physiology for Medical Coding</td>
<td>4 cr.</td>
</tr>
<tr>
<td>HIM 2222</td>
<td>Basic ICD-9-CM Coding</td>
<td>1 cr.</td>
</tr>
<tr>
<td>HIM 2232</td>
<td>Intermediate ICD-9-CM Coding</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HIM 2253</td>
<td>Basic CPT Coding</td>
<td>1 cr.</td>
</tr>
<tr>
<td>HIM 2254</td>
<td>Intermediate CPT Coding</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HIM 2275C</td>
<td>Medical Billing and Insurance I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HIM 2283</td>
<td>Advanced Coding</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HIM 2941</td>
<td>Clinical Coder Practicum</td>
<td>2 cr.</td>
</tr>
<tr>
<td>HSC 1531</td>
<td>Medical Terminology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HSC 1641</td>
<td>Legal and Ethical Aspects in Health Care</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

NOTE: Coursework may be applied to the two-year AS/ AAS degree Office Administration program.

**CCC • Medical Office Management**  
**CCC.MED.MAN (34 Credit Hours)**

Prepares individuals to support management by expediting and facilitating the maintenance and production of correspondence and records; to transcribe recordings, telecommunicate, maintain office budget, prepare correspondence and resolutions; to file and maintain documents; and to assist in the administration of policy.

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>APA 1111</td>
<td>Basic Accounting</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CIS 1931</td>
<td>Microcomputer Concepts</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HIM 2275C</td>
<td>Medical Billing and Insurance I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HIM 2272C</td>
<td>Medical Billing and Insurance II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HSC 1531</td>
<td>Medical Terminology</td>
<td>3 cr.</td>
</tr>
<tr>
<td>HSC 1641</td>
<td>Legal and Ethical Aspects in Health Care</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 1110</td>
<td>Intermediate PC Typing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1330</td>
<td>Skills for Transcription</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2357</td>
<td>Electronic Records Management</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
OST 2135 Medical Document Production on the PC ................................................................. 3 cr.
OST 2402 Office Procedures ........................................................................................................... 3 cr.
OST 1335 Business Communications ............................................................................................ 3 cr.

CCC • Medical Office Specialist
CCC.OA.SPEC.MED (18 Credit Hours)

Program Required Courses
CIS 1931 Microcomputer Concepts ............................................................................................... 3 cr.
HSC 1531 Medical Terminology ..................................................................................................... 3 cr.
OST 1100 Beginning PC Typing or OST 1110 Intermediate PC Typing ........................................ 3 cr.
OST 2145 Data Entry ....................................................................................................................... 3 cr.
OST 2501 Office Administration ..................................................................................................... 3 cr.
SLS 1261 Personal Skills for Business ............................................................................................ 3 cr.

NOTE: Coursework may be applied to the two-year AS/AAS degree Office Administration program.

CCC • Microcomputer Repairer/Installer
CCC.CET.REPAIR (15 Credit Hours)

This certificate is designed to prepare students for employment as computer engineering technicians in electronics/information technology.

Program Required Courses
CET 1112C Basic Digital Systems .................................................................................................. 3 cr.
CET 1172C Computer Upgrade and Repair ................................................................................... 3 cr.
CET 1174C Advanced Computer Repair ....................................................................................... 3 cr.
CGS 1761 Computer Operating Systems ....................................................................................... 3 cr.
CTS 1305 Introduction to Networking ........................................................................................... 3 cr.

NOTE: Coursework may be applied to the two-year AS/AAS degree Computer Engineering Technology program.

CCC • Network Communication – LAN
CCC.NST.LAN (18 Credit Hours)

Program Required Courses
CET 1172C Computer Upgrading and Repair .............................................................................. 3 cr.
CET 1174C Advanced Computer Repair ....................................................................................... 3 cr.
CET 1556C Structured Cabling ...................................................................................................... 3 cr.
CGS 1000 Introduction to Computers and Technology ................................................................. 3 cr.
CNT 1401 Introduction to Network Security .................................................................................. 3 cr.
CTS 1305 Introduction to Networking or CET 1600 Cisco Network Fundamentals ..................... 3 cr.

NOTE: Coursework may be applied to the two-year AS/AAS degree Network Administrator program.

CCC • Office Management
CCC.OA.OFM (27 Credit Hours)

Program Required Courses
APA 1111 Basic Accounting ......................................................................................................... 3 cr.
CIS 1931 Microcomputer Concepts ............................................................................................... 3 cr.
OST 1110 Intermediate PC Typing .................................................................................................. 3 cr.
OST 1330 Skills for Transcription ................................................................................................... 3 cr.
OST 1335 Business Communications ............................................................................................ 3 cr.
OST 1741 Word Processing I ......................................................................................................... 1 cr.
OST 2357 Electronic Records Management .................................................................................. 3 cr.
OST 2501 Office Administration .................................................................................................... 3 cr.
OST 2742 Word Processing II ........................................................................................................ 1 cr.
OST 2743 Word Processing III ....................................................................................................... 1 cr.
SLS 1261 Personal Skills for Business ........................................................................................... 3 cr.

NOTE: Coursework may be applied to the two-year AS/AAS degree Office Administration program.

CCC • Office Software Applications Specialist
CCC.OA.SPEC.SAS (18 Credit Hours)

Program Required Courses
CAP 2816 Database Management II ............................................................................................ 1 cr.
CIS 1931 Microcomputer Concepts ............................................................................................... 3 cr.
CGS 1577 Presentation Systems .................................................................................................... 3 cr.
This certificate prepares students for engineering technology support positions dealing with facilities operations and maintenance in high tech production, manufacturing, distribution, and engineering research and development facilities.

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EET 1083C</td>
<td>Electronics Orientation</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETI 1420</td>
<td>Manufacturing Processes and Materials</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETI 1843</td>
<td>Motors and Controls</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETM 2315</td>
<td>Hydraulic and Pneumatic Systems</td>
<td>3 cr.</td>
</tr>
<tr>
<td>ETM 2315L</td>
<td>Hydraulic and Pneumatic Laboratory</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

NOTE: Coursework may be applied to the two-year AS/AAS degree Engineering Technology program.

CCC • Records Management
CCC.RECS (27 Credit Hours)

Program Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 2816</td>
<td>Database Management II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 2511</td>
<td>Spreadsheet Applications II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CIS 1931</td>
<td>Microcomputer Concepts</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1143</td>
<td>Keyboarding II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 1831</td>
<td>Introduction to Windows I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 2357</td>
<td>Electronic Records Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2501</td>
<td>Office Administration</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2742</td>
<td>Word Processing II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 2743</td>
<td>Word Processing III</td>
<td>1 cr.</td>
</tr>
<tr>
<td>SLS 1261</td>
<td>Personal Skills for Business</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

NOTE: Coursework may be applied to the two-year AS/AAS degree Engineering Technology program.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1510</td>
<td>Spreadsheets I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1540</td>
<td>Database Management I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CIS 1931</td>
<td>Microcomputer Concepts</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1100</td>
<td>Beginning PC Typing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1110</td>
<td>Intermediate PC Typing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1335</td>
<td>Business Communications</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2145</td>
<td>Data Entry Applications</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2357</td>
<td>Electronic Records Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2501</td>
<td>Office Administration</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SLS 1261</td>
<td>Personal Skills for Business</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**NOTE:** Coursework may be applied to the two-year AS/AAS degree Office Administration program.

### CCC • Records Management Specialist

**CCC.OA.SPEC.RMS (18 Credit Hours)**

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS 1555</td>
<td>Introduction to the Internet</td>
<td>3 cr.</td>
</tr>
<tr>
<td>CIS 1931</td>
<td>Microcomputer Concepts</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1100</td>
<td>Beginning PC Typing or OST 1110, Intermediate PC Typing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2357</td>
<td>Electronic Records Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2501</td>
<td>Office Administration</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SLS 1261</td>
<td>Personal Skills for Business</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**NOTE:** Coursework may be applied to the two-year AS/AAS degree Office Administration program.

### CCC • Records Management Support

**CCC.OA.OS.RMS (12 Credit Hours)**

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1931</td>
<td>Microcomputer Concepts</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1100</td>
<td>Beginning PC Typing or OST 1110, Intermediate PC Typing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2357</td>
<td>Electronic Records Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>SLS 1261</td>
<td>Personal Skills for Business</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**NOTE:** Coursework may be applied to the two-year AS/AAS degree Office Administration program.

### CCC • Software Applications Management

**CCC.OA.SAM (27 Credit Hours)**

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 2816</td>
<td>Database Management II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1510</td>
<td>Spreadsheet Applications I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1520</td>
<td>Business Graphics I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 1540</td>
<td>Database Management I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CGS 2511</td>
<td>Spreadsheet Applications II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>CIS 1931</td>
<td>Microcomputer Concepts</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1110</td>
<td>Intermediate PC Typing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1741</td>
<td>Word Processing I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1813</td>
<td>Desktop Publishing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 1831</td>
<td>Introduction to Windows I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 2357</td>
<td>Electronic Records Management</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2722</td>
<td>Advanced Word Processing</td>
<td>3 cr.</td>
</tr>
<tr>
<td>OST 2742</td>
<td>Word Processing II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>OST 2743</td>
<td>Word Processing III</td>
<td>1 cr.</td>
</tr>
<tr>
<td>SLS 1261</td>
<td>Personal Skills for Business</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**NOTE:** Coursework may be applied to the two-year AS/AAS degree Office Administration program.

### CCC • Television Production

**CCC.TV.PROD (12 Credit Hours)**

The purpose of this program is to provide basic training for a specific entry-level job in TV production.

Program Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTV 1245</td>
<td>Electronic Field Production</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTV 2201</td>
<td>Broadcasting Techniques</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTV 2242</td>
<td>Advanced TV Studio Production</td>
<td>3 cr.</td>
</tr>
<tr>
<td>RTV 2246</td>
<td>Advanced Electronic Field Production</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>
NOTE: Coursework may be applied to the two-year AS/AAS degree Digital Television and Media Production.

**CCC • Unix/Linux System Administration**

**CCC.NST.UNIXLINUX (18 Credit Hours)**

The purpose of this program is to prepare students for employment as a Unix or Linux system administrator or to provide supplemental training for persons previously or currently employed in these occupations. The content prepares individuals to install information technology equipment, troubleshoot information technology equipment, and support information technology users.

Program Required Courses

- COP 2344 Shell Scripting ................................................................. 3 cr.
- CTS 1106 Introduction to Unix ......................................................... 3 cr.
- CTS 2301 Unix/Linux Administration I ................................................ 3 cr.
- CTS 2311 Unix/Linux Security ........................................................... 3 cr.
- CTS 2322 Unix/Linux Administration II ............................................. 3 cr.
- CTS 2333 Unix/Linux Networking ..................................................... 3 cr.

NOTE: Coursework may be applied to the two-year AS/AAS degree Network Administrator program.

**CCC • Video Editing and Post Production**

**CCC.VIDEO.PROD (24 Credit Hours)**

This certificate is designed to prepare students for employment in an entry-level position in video editing and post production.

Program Required Courses

- CGS 1871 Multimedia Authoring or GRA 2111C Graphic Design ............ 3 cr.
- RTV 1941 Radio/TV Internship ......................................................... 3 cr.
- RTV 2000 Introduction to Broadcasting .............................................. 3 cr.
- RTV 1245 Electronic Field Production ................................................ 3 cr.
- RTV 2201 Broadcasting Techniques .................................................. 3 cr.
- RTV 2242 Advanced Television Studio Production ............................. 3 cr.
- RTV 2246 Advanced Electronic Field Production ............................... 3 cr.
- VIC 1202 Film and TV Graphics ....................................................... 3 cr.

NOTE: Coursework may be applied to the two-year AS/AAS degree Digital Television and Media Production.

**CCC • Water Quality Technician**

**CCC. ENV.WQ.TECH (12 Credit Hours)**

This certificate is designed to prepare students for immediate entry into a career in the workforce as a water quality technician.

Program Required Courses

- EVS 1001 Introduction to Environmental Science ................................. 3 cr.
- EVS 2894C Environmental Sampling and Analysis II ............................ 5 cr.
- Select 4 credit hours from the following:
  - EVS 1026 Chemistry and Biology of Natural Waters .......................... 4 cr.
  - EVS 2891 Hydrology and Quality of Water Resources ........................ 4 cr.

NOTE: Coursework may be applied to the two-year AS/AAS degree Environmental Science Technology program.

**CCC • Wireless and IP Communications**

**CCC.NST.WIRE.IP (15 Credit Hours)**

This certificate prepares individuals to design, configure, and troubleshoot wireless and IP Telephony networks. Graduates of this technical program will be prepared to enter advanced training and education in specialized IP Communications related fields.

Program Required Courses

- CET 1556C Structured Cabling ......................................................... 3 cr.
- CGS 1000 Introduction to Computers and Technology ........................ 3 cr.
- CGS 1761 Computer Operating Systems ............................................ 3 cr.
- CNT 2510 Wireless Networking ....................................................... 3 cr.
- CTS 1305 Introduction to Networking ............................................... 3 cr.
Postsecondary Adult Vocational Programs

Hillsborough Community College will award a Postsecondary Adult Vocational (PSAV) certificate for completion of a specified course of study designed to prepare individuals for employment. PSAV programs are designed for those students interested in a specific job in business or industry.

PSAV Certificate credit requirements vary in the number of hours required for completion. Courses in these programs are not considered as college credit.

All PSAV programs require students to possess a standard high school diploma or high school equivalency diploma with the following exceptions: Apprenticeship programs, Autobody Collision Repair and Refinishing; Automotive Service Technology; Bail Bond Agent; Transit Technician; Sheet Metal Fabrication; and Welding Technology.

For additional information about a particular certificate contact a counselor or advisor at one of the campus locations.

PSAV • Autobody Collision Repair and Refinishing
VOC.ARR.TECH (1400 Clock Hours)

Students in the Automotive Collision Repair and Refinishing program learn automotive painting, body repair, frame straightening, trim and custom painting, tinting, welding, and glass and sheet metal installation.

Program Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Clock hr.</th>
<th>Voc. cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARR 0020</td>
<td>Estimating</td>
<td>100 hr</td>
<td>3.3 cr.</td>
</tr>
<tr>
<td>ARR 0110</td>
<td>Welding and Cutting</td>
<td>100 hr</td>
<td>3.3 cr.</td>
</tr>
<tr>
<td>ARR 0121</td>
<td>Refinishing</td>
<td>300 hr</td>
<td>10 cr.</td>
</tr>
<tr>
<td>ARR 0240</td>
<td>Plastic Repair</td>
<td>100 hr</td>
<td>3.3 cr.</td>
</tr>
<tr>
<td>ARR 0290</td>
<td>Structural Repair</td>
<td>150 hr</td>
<td>5.0 cr.</td>
</tr>
<tr>
<td>ARR 0310</td>
<td>Non-structural Repair</td>
<td>150 hr</td>
<td>5.0 cr.</td>
</tr>
<tr>
<td>ARR 0374</td>
<td>Mechanical and Electrical Repair</td>
<td>100 hr</td>
<td>3.3 cr.</td>
</tr>
<tr>
<td>ARR 0940</td>
<td>Auto Collision Internship</td>
<td>400 hr</td>
<td>13.3 cr.</td>
</tr>
</tbody>
</table>

PSAV • Automotive Service Technology
VOC.AST (1800 Clock Hours)

This program is designed for high school graduates who are interested in automotive technology as a career option or who desire postsecondary vocational training as a means of expanding or enhancing their career opportunities.

Program Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Clock hr.</th>
<th>Voc. cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AER 0010C</td>
<td>Introduction to Automotive Technology</td>
<td>150 hr</td>
<td>5.0 cr.</td>
</tr>
<tr>
<td>AER 0199C</td>
<td>Engine Repair</td>
<td>150 hr</td>
<td>5.0 cr.</td>
</tr>
<tr>
<td>AER 0299C</td>
<td>Automatic Transmissions and Transaxes</td>
<td>150 hr</td>
<td>5.0 cr.</td>
</tr>
<tr>
<td>AER 0399C</td>
<td>Manual Transmissions and Drivelines</td>
<td>150 hr</td>
<td>5.0 cr.</td>
</tr>
<tr>
<td>AER 0499C</td>
<td>Suspension and Steering Systems</td>
<td>150 hr</td>
<td>5.0 cr.</td>
</tr>
<tr>
<td>AER 0599C</td>
<td>Brake Systems</td>
<td>150 hr</td>
<td>5.0 cr.</td>
</tr>
<tr>
<td>AER 0691C</td>
<td>Electrical/Electronic Systems I</td>
<td>150 hr</td>
<td>5.0 cr.</td>
</tr>
<tr>
<td>AER 0692C</td>
<td>Electrical/Electronic Systems II</td>
<td>150 hr</td>
<td>5.0 cr.</td>
</tr>
<tr>
<td>AER 0797C</td>
<td>Air Conditioning and Heating Systems</td>
<td>150 hr</td>
<td>5.0 cr.</td>
</tr>
<tr>
<td>AER 0891C</td>
<td>Engine Performance I</td>
<td>150 hr</td>
<td>5.0 cr.</td>
</tr>
<tr>
<td>AER 0892C</td>
<td>Engine Performance II</td>
<td>150 hr</td>
<td>5.0 cr.</td>
</tr>
<tr>
<td>AER 0949C</td>
<td>Automotive Technology Co-op Work Experience</td>
<td>150 hr</td>
<td>5.0 cr.</td>
</tr>
</tbody>
</table>

PSAV • Bail Bonding
VOC.BB (120 Clock Hours)

This program prepares student for licensing and employment as a bail bond agent in the State of Florida. For more information, student can refer to the Criminal Justice Technology website at www.hccfl.edu/yborcampus/cjt for specific details.

Program Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Clock hr.</th>
<th>Voc. cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCY 0010</td>
<td>Bail Bond</td>
<td>120 hr</td>
<td>4.0 cr.</td>
</tr>
</tbody>
</table>
PSAV • Bus Transit Technician  
VOC.TRANS.TECH1/VOC.TRANS.TECH2/VOC.TRANS.TECH3 (1920 Clock Hours) 

Program Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Clock hr.</th>
<th>Voc. cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIM 0810</td>
<td>Transit Equipment Preventive Maintenance</td>
<td>200 hrs</td>
<td>6.6 cr.</td>
</tr>
<tr>
<td>DIM 0811</td>
<td>Transit Basic Electrical Systems</td>
<td>120 hrs</td>
<td>4.0 cr.</td>
</tr>
<tr>
<td>DIM 0812</td>
<td>Transit Wheelchair Lift/Ramp</td>
<td>60 hrs</td>
<td>2.0 cr.</td>
</tr>
<tr>
<td>DIM 0813</td>
<td>Transit Diesel Engine Preventative Maintenance</td>
<td>120 hrs</td>
<td>4.0 cr.</td>
</tr>
<tr>
<td>DIM 0814</td>
<td>Transit Steering and Suspension</td>
<td>120 hrs</td>
<td>4.0 cr.</td>
</tr>
<tr>
<td>DIM 0820</td>
<td>Transit Hydraulics</td>
<td>60 hrs</td>
<td>2.0 cr.</td>
</tr>
<tr>
<td>DIM 0821</td>
<td>Transit Diesel Electrical and Diesel Engine Electronics</td>
<td>120 hrs</td>
<td>4.0 cr.</td>
</tr>
<tr>
<td>DIM 0822</td>
<td>Transit Drive Train</td>
<td>120 hrs</td>
<td>4.0 cr.</td>
</tr>
<tr>
<td>DIM 0823</td>
<td>Transit Intermediate Electrical Systems</td>
<td>120 hrs</td>
<td>4.0 cr.</td>
</tr>
<tr>
<td>DIM 0824</td>
<td>Transit Brakes/Air System</td>
<td>200 hrs</td>
<td>6.6 cr.</td>
</tr>
<tr>
<td>DIM 0830</td>
<td>Transit Alternative Fuels System</td>
<td>120 hrs</td>
<td>4.0 cr.</td>
</tr>
<tr>
<td>DIM 0831</td>
<td>Transit Advanced Electrical Systems</td>
<td>120 hrs</td>
<td>4.0 cr.</td>
</tr>
<tr>
<td>DIM 0832</td>
<td>Transit Heating and A/C</td>
<td>200 hrs</td>
<td>6.6 cr.</td>
</tr>
<tr>
<td>DIM 0833</td>
<td>Transmission Diagnosis, Rebuild and Repair</td>
<td>120 hrs</td>
<td>4.0 cr.</td>
</tr>
<tr>
<td>DIM 0834</td>
<td>Diesel Engine Diagnosis</td>
<td>120 hrs</td>
<td>4.0 cr.</td>
</tr>
</tbody>
</table>

PSAV • Correctional Officer 
VOC.COFR (552 Clock Hours) 

This program prepares students for employment as a correctional officer in a criminal justice facility. Please call the Criminal Justice Training Institute Program Manager at 253-7954 to obtain an application handbook.

Program Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Clock hr.</th>
<th>Voc. cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJD 0772</td>
<td>Criminal Justice Communications</td>
<td>42 hr</td>
<td>1.4 cr.</td>
</tr>
<tr>
<td>CJD 0750</td>
<td>Interpersonal Skills II</td>
<td>50 hr</td>
<td>1.7 cr.</td>
</tr>
<tr>
<td>CJD 0741</td>
<td>Emergency Preparedness</td>
<td>26 hr</td>
<td>0.9 cr.</td>
</tr>
<tr>
<td>CJD 0752</td>
<td>Correctional Operations</td>
<td>64 hr</td>
<td>2.1 cr.</td>
</tr>
<tr>
<td>CJD 0770</td>
<td>Criminal Justice Legal I</td>
<td>46 hr</td>
<td>1.5 cr.</td>
</tr>
<tr>
<td>CJD 0771</td>
<td>Criminal Justice Legal II</td>
<td>22 hr</td>
<td>0.7 cr.</td>
</tr>
<tr>
<td>CJK 0031</td>
<td>CMS First Aid for Criminal Justice Officers</td>
<td>40 hr</td>
<td>1.3 cr.</td>
</tr>
<tr>
<td>CJK 0040</td>
<td>CMS Criminal Justice Firearms</td>
<td>80 hr</td>
<td>2.7 cr.</td>
</tr>
<tr>
<td>CJK 0051</td>
<td>CMS Criminal Justice Defense Tactics</td>
<td>80 hr</td>
<td>2.7 cr.</td>
</tr>
<tr>
<td>CJK 0280</td>
<td>Criminal Justice Officer Physical Fitness Training</td>
<td>40 hr</td>
<td>1.3 cr.</td>
</tr>
<tr>
<td>CJK 0283</td>
<td>Interpersonal Skills I</td>
<td>62 hr</td>
<td>2.1 cr.</td>
</tr>
</tbody>
</table>

PSAV • Dental Assisting 
VOC.DEA (1230 Clock Hours) 

Dental Assisting offers the student a career that requires both interpersonal and technical skills; he or she will have the most comprehensive duties in the dental office. The dental assistant will expose and process X-rays, fabricate temporary crowns, take impressions for study models, place sealants, polish teeth, place fluoride treatments, place and remove rubber dams, place and remove temporary restorations, place oral surgical dressings, chart oral conditions, instruct the patient on oral home care, complete office management tasks, and keep the office in compliance with OSHA and blood borne pathogens mandates.

Career opportunities: a student who completes the program can be employed in the local private dental office in one of the following areas: general practice, orthodontics, periodontics, pediatric dentistry, oral surgery, endodontics, or in a dental clinic in the correctional facilities, military bases, and public health unit.

NOTE: The Dental Assisting program has specific criteria that must be met prior to admission and is twelve months in length if attended full-time. For further information call Constance Reed at (813) 253-7279 or email at creed17@hccfl.edu.

Program Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Clock hr.</th>
<th>Voc. cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEA 0130</td>
<td>Allied Dental Theory</td>
<td>45 hr</td>
<td>1.5 cr.</td>
</tr>
<tr>
<td>DEA 0134</td>
<td>Dental Office Emergencies</td>
<td>30 hr</td>
<td>1.0 cr.</td>
</tr>
<tr>
<td>DEA 0800</td>
<td>Clinical Practice I</td>
<td>75 hr</td>
<td>2.5 cr.</td>
</tr>
<tr>
<td>DEA 0800L</td>
<td>Clinical Practice I Lab</td>
<td>150 hr</td>
<td>5.0 cr.</td>
</tr>
<tr>
<td>DEA 0801L</td>
<td>Dental Practicum</td>
<td>254 hr</td>
<td>8.5 cr.</td>
</tr>
<tr>
<td>DEA 0931</td>
<td>Dental Assisting in Orthodontics</td>
<td>15 hr</td>
<td>0.5 cr.</td>
</tr>
</tbody>
</table>
DEA 0931L Dental Assisting in Orthodontics Lab ............................................................... 30 hr. ......................... 1.0 cr.
DES 0021 Head, Neck, and Dental Anatomy ................................................................. 45 hr. ......................... 1.5 cr.
DES 0021L Head, Neck, and Dental Anatomy Lab..................................................... 30 hr. ......................... 1.0 cr.
DES 0053 Dental Pharmacology/Pain Control ......................................................... 30 hr. ......................... 1.0 cr.
DES 0053L Dental Pharmacology/Pain Control Lab ................................................. 15 hr. ......................... 0.5 cr.
DES 0103 Dental Materials ......................................................................................... 45 hr. ......................... 1.5 cr.
DES 0103L Dental Materials Lab ............................................................................. 45 hr. ......................... 1.5 cr.
DES 0205 Dental Radiology ...................................................................................... 45 hr. ......................... 1.5 cr.
DES 0205L Dental Radiology Lab........................................................................... 45 hr. ......................... 1.5 cr.
DES 0300 Dental Psychology .................................................................................... 15 hr. ......................... 0.5 cr.
DES 0400 Dental Anatomy and Physiology ............................................................. 45 hr. ......................... 1.5 cr.
DES 0500 Computer Applications in Modern Dentistry ........................................ 30 hr. ......................... 1.0 cr.
DES 0501 Dental Office Management ................................................................. 30 hr. ......................... 1.0 cr.
DES 0804 Intro to Clinical Procedures I ................................................................. 60 hr. ......................... 2.0 cr.
DES 0804L Intro to Clinical Procedures I Lab ......................................................... 30 hr. ......................... 1.0 cr.
DES 0830 Expanded Functions for Dental Auxiliaries .......................................... 15 hr. ......................... 0.5 cr.
DES 0830L Expanded Functions for Dental Auxiliaries Lab .................................. 45 hr. ......................... 1.5 cr.
DES 0844 Preventive Dentistry ................................................................................ 30 hr. ......................... 1.0 cr.
DES 0936 Dental Seminar ...................................................................................... 15 hr. ......................... 0.5 cr.
HSC 0003 Fundamentals of Allied Health Occupations ......................................... 16 hr. ......................... 0.5 cr.

PSAV • Early Childhood Education
VOC.CHILD (610 Clock Hours)
This program provides students with the knowledge and skills needed to be employed as a child care worker, a childcare teacher aide, a preschool teacher or a childcare development specialist. Graduates are eligible to receive a Florida Child Care Professional Credential (FCCPC).

Program Requirements
Clock hr. Voc. cr.
HEV 0108 Child Abuse and Neglect ............................................................... 4 hr. ......................... 0.1 cr.
HEV 0111 Child Growth and Development I ................................................... 6 hr. ......................... 0.2 cr.
HEV 0114 Rules and Regulations ................................................................. 6 hr. ......................... 0.2 cr.
HEV 0130 Child Growth and Development II ............................................... 10 hr. ......................... 0.3 cr.
HEV 0132 Developmentally Appropriate Activities ....................................... 15 hr. ......................... 0.5 cr.
HEV 0137 Learning Environments I ............................................................... 15 hr. ......................... 0.5 cr.
HEV 0141 Understanding and Guiding Children's Behavior ............................. 10 hr. ......................... 0.3 cr.
HEV 0142 Learning Environments II .............................................................. 10 hr. ......................... 0.3 cr.
HEV 0152 The Early Childhood Profession ..................................................... 10 hr. ......................... 0.3 cr.
HEV 0163 Leadership ....................................................................................... 10 hr. ......................... 0.3 cr.
HEV 0164 Food and Nutrition ........................................................................... 8 hr. ......................... 0.3 cr.
HEV 0172 Behavioral Observation & Screening in Childcare ........................... 6 hr. ......................... 0.2 cr.
HEV 0181 Observing and Recording Behaviors .............................................. 10 hr. ......................... 0.3 cr.
HEV 0183 Child Care Practicum I ................................................................. 100 hr. ......................... 3.3 cr.
HEV 0184 Child Care Practicum II ................................................................. 250 hr. ......................... 8.3 cr.
HEV 0185 Child Care Practicum III ................................................................. 130 hr. ......................... 4.3 cr.

Select 10 clock hours from the following:
HEV 0175 Developmentally Appropriate Practices: Infant/Toddler .................. 10 hr. ......................... 0.3 cr.
HEV 0151 Developmentally Appropriate Practices: Young Child .................... 10 hr. ......................... 0.3 cr.
HEV 0126 Developmentally Appropriate Practices: Special Needs .................. 10 hr. ......................... 0.3 cr.
HEV 0195 Developmentally Appropriate Practices: School Age ....................... 10 hr. ......................... 0.3 cr.

PSAV • Field Service Engineer (Low Voltage Systems) Apprenticeship
VOC.BCA.BCV (4360 Clock Hours)

Program Requirements
Clock hr. Voc. cr.
BCA 0375 Telecom Technician Apprenticeship VI ........................................... 90 hr. ......................... 3.0 cr.
BCA 0376 Telecom Technician Apprenticeship VII ........................................... 90 hr. ......................... 3.0 cr.
BCA 0385 Telecom Technician Apprenticeship VI Co-op .................................. 1000 hr. ......................... 33.3 cr.
This program prepares students for employment as a law enforcement officer. Please call the Criminal Justice Training Institute Public Service Program Manager at 253-7927 to obtain an application handbook. The program does have specified admission criteria that students must meet to be considered for admission to an academy.

Program Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Clock hr.</th>
<th>Voc. cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJK 0007</td>
<td>Introduction to Law Enforcement</td>
<td>11 hr.</td>
<td>0.4 cr.</td>
</tr>
<tr>
<td>CJK 0008</td>
<td>Legal</td>
<td>69 hr.</td>
<td>2.3 cr.</td>
</tr>
<tr>
<td>CJK 0011</td>
<td>Human Issues</td>
<td>40 hr.</td>
<td>1.33 cr.</td>
</tr>
<tr>
<td>CJK 0017</td>
<td>Communications</td>
<td>76 hr.</td>
<td>2.5 cr.</td>
</tr>
<tr>
<td>CJK 0020</td>
<td>CMS Law Enforcement Vehicle Operations</td>
<td>48 hr.</td>
<td>1.6 cr.</td>
</tr>
<tr>
<td>CJK 0031</td>
<td>CMS First Aid for Criminal Justice Officers</td>
<td>40 hr.</td>
<td>1.3 cr.</td>
</tr>
<tr>
<td>CJK 0040</td>
<td>CMS Criminal Justice Firearms</td>
<td>80 hr.</td>
<td>2.7 cr.</td>
</tr>
<tr>
<td>CJK 0051</td>
<td>CMS Criminal Justice Defensive Tactics</td>
<td>80 hr.</td>
<td>2.7 cr.</td>
</tr>
<tr>
<td>CJK 0061</td>
<td>Patrol I</td>
<td>58 hr.</td>
<td>1.9 cr.</td>
</tr>
<tr>
<td>CJK 0062</td>
<td>Patrol II</td>
<td>40 hr.</td>
<td>1.3 cr.</td>
</tr>
<tr>
<td>CJK 0071</td>
<td>Criminal Investigations</td>
<td>56 hr.</td>
<td>1.9 cr.</td>
</tr>
<tr>
<td>CJK 0076</td>
<td>Crime Scene Investigations</td>
<td>24 hr.</td>
<td>0.8 cr.</td>
</tr>
<tr>
<td>CJK 0082</td>
<td>Traffic Stops</td>
<td>24 hr.</td>
<td>0.8 cr.</td>
</tr>
<tr>
<td>CJK 0083</td>
<td>DUI Traffic Stops</td>
<td>24 hr.</td>
<td>0.8 cr.</td>
</tr>
<tr>
<td>CJK 0086</td>
<td>Traffic Crash Investigation</td>
<td>32 hr.</td>
<td>1.1 cr.</td>
</tr>
</tbody>
</table>
### Program Requirements

**PSAV • Law Enforcement Stun Gun**  
**VOC.LAWE.AUX (319 Clock Hours)**

Graduates are able to serve as a part-time volunteer law enforcement officer. Call the Criminal Justice Training Institute Public Service Program Manager at 253-7697 to obtain an application handbook. The program does have specified admission criteria that must be met for an individual to be considered for admission to an academy.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Clock hr.</th>
<th>Voc. cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJK 0096</td>
<td>Criminal Justice Officer Physical Fitness</td>
<td>60 hr.</td>
<td>2.0 cr.</td>
</tr>
<tr>
<td>CJK 0422</td>
<td>Dart-Firing Stun Gun</td>
<td>8 hr.</td>
<td>0.3 cr.</td>
</tr>
</tbody>
</table>

**PSAV • Law Enforcement Auxiliary**  
**VOC.LAWE.AUX (319 Clock Hours)**

This program prepares students for a career as a police or fire dispatcher. The need for certified dispatchers has never been greater.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Clock hr.</th>
<th>Voc. cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJK 0020</td>
<td>CMS Law Enforcement Vehicle Operations</td>
<td>48 hr.</td>
<td>1.6 cr.</td>
</tr>
<tr>
<td>CJK 0031</td>
<td>CMS First Aid for Criminal Justice Officers</td>
<td>40 hr.</td>
<td>1.3 cr.</td>
</tr>
<tr>
<td>CJK 0040</td>
<td>CMS Criminal Justice Firearms</td>
<td>80 hr.</td>
<td>2.7 cr.</td>
</tr>
<tr>
<td>CJK 0051</td>
<td>CMS Criminal Justice Defensive Tactics</td>
<td>80 hr.</td>
<td>2.7 cr.</td>
</tr>
<tr>
<td>CJK 0240</td>
<td>Law Enforcement Auxiliary Introduction</td>
<td>27 hr.</td>
<td>0.9 cr.</td>
</tr>
<tr>
<td>CJK 0241</td>
<td>Law Enforcement Auxiliary Patrol and Traffic</td>
<td>19 hr.</td>
<td>0.6 cr.</td>
</tr>
<tr>
<td>CJK 0242</td>
<td>Law Enforcement Auxiliary Investigations</td>
<td>17 hr.</td>
<td>0.6 cr.</td>
</tr>
<tr>
<td>CJK 0422</td>
<td>Dart-Firing Stun Gun</td>
<td>8 hr.</td>
<td>0.3 cr.</td>
</tr>
<tr>
<td>CJK 0051</td>
<td>CMS Defensive Tactics</td>
<td>80 hr.</td>
<td>2.7 cr.</td>
</tr>
</tbody>
</table>

**PSAV • Private Investigation**  
**VOC.PI (40 Clock Hours)**

This program prepares students for a career as a police or fire dispatcher. The need for certified dispatchers has never been greater.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Clock hr.</th>
<th>Voc. cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCY 051</td>
<td>Private Investigation A</td>
<td>24 hr.</td>
<td>0.8 cr.</td>
</tr>
<tr>
<td>SCY 052</td>
<td>Private Investigation B</td>
<td>16 hr.</td>
<td>0.5 cr.</td>
</tr>
</tbody>
</table>

**PSAV • Public Safety Telecommunications**  
**VOC.PST (232 Clock Hours)**

This program prepares students for a career as a police or fire dispatcher. The need for certified dispatchers has never been greater.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Clock hr.</th>
<th>Voc. cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJK 0520C</td>
<td>Public Safety Telecommunications I</td>
<td>208 hr.</td>
<td>6.9 cr.</td>
</tr>
<tr>
<td>CJK 0521C</td>
<td>Public Safety Telecommunications II</td>
<td>24 hr.</td>
<td>0.8 cr.</td>
</tr>
</tbody>
</table>

**PSAV • Sheet Metal Fabrication Technology**  
**VOC.SMF.TECH (1350 Clock Hours)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Clock hr.</th>
<th>Voc. cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMT 0030</td>
<td>Sheet Metal Helper</td>
<td>450 hrs.</td>
<td>15.0 cr.</td>
</tr>
<tr>
<td>PMT 0032</td>
<td>Sheet Metal Fabricator</td>
<td>225 hrs.</td>
<td>7.5 cr.</td>
</tr>
<tr>
<td>PMT 0033</td>
<td>Architectural Fabricator</td>
<td>225 hrs.</td>
<td>7.5 cr.</td>
</tr>
<tr>
<td>PMT 0034</td>
<td>Commercial Kitchen Fabricator</td>
<td>225 hrs.</td>
<td>7.5 cr.</td>
</tr>
<tr>
<td>PMT 0035</td>
<td>Sheet Metal Welder</td>
<td>225 hrs.</td>
<td>7.5 cr.</td>
</tr>
</tbody>
</table>

**PSAV • Recreational Vehicle Service Technician**  
**VOC.RV.SVC.TECH (1000 Clock Hours)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Clock hr.</th>
<th>Voc. cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARR 0071</td>
<td>Lot Porter</td>
<td>150 hrs.</td>
<td>5.0 cr.</td>
</tr>
<tr>
<td>ARR 0072</td>
<td>Pre-delivery Inspection Technician</td>
<td>300 hrs.</td>
<td>10 cr.</td>
</tr>
<tr>
<td>ARR 0073</td>
<td>Recreational Vehicle Technician I</td>
<td>275 hrs.</td>
<td>9.2 cr.</td>
</tr>
<tr>
<td>ARR 0074</td>
<td>Recreational Vehicle Technician II</td>
<td>275 hrs.</td>
<td>9.2 cr.</td>
</tr>
</tbody>
</table>
## PSAV • Welding Technology
VOC.WELDING.TECH (1170 Clock Hours)

### Program Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
<th>Clock hr.</th>
<th>Voc. cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMT 0011</td>
<td>Welder: Helper</td>
<td>250 hrs</td>
<td>8.3 cr.</td>
</tr>
<tr>
<td>PMT 0012</td>
<td>Welder: Shielded Metal Arc</td>
<td>250 hrs</td>
<td>8.3 cr.</td>
</tr>
<tr>
<td>PMT 0013</td>
<td>Welder: Gas Metal Arc</td>
<td>125 hrs</td>
<td>4.1 cr.</td>
</tr>
<tr>
<td>PMT 0014</td>
<td>Welder: Flux Cored Arc Welding</td>
<td>100 hrs</td>
<td>3.3 cr.</td>
</tr>
<tr>
<td>PMT 0015</td>
<td>Welder: Gas Tungsten Arc</td>
<td>175 hrs</td>
<td>5.8 cr.</td>
</tr>
<tr>
<td>PMT 0016</td>
<td>Welder: Pipe</td>
<td>270 hrs</td>
<td>9.0 cr.</td>
</tr>
</tbody>
</table>
## Program Placement Rates

In accordance with Florida House Bill 167, enacted as of July 1, 1992, the following are the graduate placement rates for the last three reported academic years.

### Associate in Science/Associate in Applied Science Degrees

<table>
<thead>
<tr>
<th>Program Title</th>
<th>CIP*</th>
<th>09/10</th>
<th>08/09</th>
<th>07/08</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS/AAS - Accounting Technology</td>
<td>1507010100/0507010100</td>
<td>100%</td>
<td>86%</td>
<td>100%</td>
</tr>
<tr>
<td>AS/AAS - Aquaculture Management</td>
<td>1101030301/0101030301</td>
<td>100%</td>
<td>100%</td>
<td>50%</td>
</tr>
<tr>
<td>AS/AAS - Architectural Design &amp; Construction Tech</td>
<td>1615010100/0615010100</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AS/AAS - Biomedical Engineering Technology</td>
<td>1615040101/0615040101</td>
<td>N/A</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AS/AAS - Business Administration</td>
<td>1506040102/0506040102</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AS/AAS - Computer Engineering Technology</td>
<td>1615040200/0615040200</td>
<td>100%</td>
<td>No Grads</td>
<td>100%</td>
</tr>
<tr>
<td>AS/AAS - Computer Information Technology</td>
<td>1507030600/0507030600</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AS/AAS - Computer Programming &amp; Analysis</td>
<td>1507030500/0507030500</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AS/AAS - Criminal Justice Technology</td>
<td>1743010300/0743010300</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AS/AAS - Culinary Management</td>
<td>1620040100/0620040100</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AS - Dental Hygiene</td>
<td>1317010200</td>
<td>100%</td>
<td>95%</td>
<td>91%</td>
</tr>
<tr>
<td>AS/AAS - Diagnostic Medical Sonography Technology</td>
<td>1317021200/0317021200</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AS/AAS – Dietetic Technician</td>
<td>1420040401</td>
<td>100%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>AS/AAS - Digital Media/Multimedia Technology</td>
<td>1610010202/0610010202</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AAS - Early Childhood Management</td>
<td>1420020300/0420020300</td>
<td>100%</td>
<td>55%</td>
<td>86%</td>
</tr>
<tr>
<td>AS/AAS - Electronics Engineering Technology</td>
<td>1615030301/0615030301</td>
<td>100%</td>
<td>No Grads</td>
<td>100%</td>
</tr>
<tr>
<td>AAS - Emergency Medical Services</td>
<td>0317020601</td>
<td>83%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AS/AAS - Environmental Science Technology</td>
<td>1715059901/0715059901</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AS/AAS - Fire Science Technology</td>
<td>1743020100/0743020100</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AS - Hospitality and Tourism Management</td>
<td>1206079900</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AS/AAS - Human Services Generalist</td>
<td>1317040600/0317040600</td>
<td>100%</td>
<td>80%</td>
<td>86%</td>
</tr>
<tr>
<td>AAS - Industrial Management Technology</td>
<td>0606200101</td>
<td>100%</td>
<td>85%</td>
<td>100%</td>
</tr>
<tr>
<td>AS/AAS - Internet Services Technology</td>
<td>1507039902/0507039902</td>
<td>0%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AS/AAS - Legal Assisting</td>
<td>1722010300/0722010300</td>
<td>100%</td>
<td>80%</td>
<td>83%</td>
</tr>
<tr>
<td>AS/AAS - Network Services Technology</td>
<td>1507030401/0507030401</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AAS - Nuclear Medicine Technology</td>
<td>0317020800</td>
<td>83%</td>
<td>100%</td>
<td>92%</td>
</tr>
<tr>
<td>AS - Nursing</td>
<td>1318110100</td>
<td>99%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AS/AAS - Office Administration</td>
<td>1507060300/0507060300</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AAS - Optical Management Technology</td>
<td>0317070502</td>
<td>0%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AS - Optician</td>
<td>0317070100</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AS/AAS - Radiography</td>
<td>1317020901/0317020901</td>
<td>100%</td>
<td>85%</td>
<td>83%</td>
</tr>
<tr>
<td>AS/AAS – Digital Media and Video Production</td>
<td>1610010402/0610010402</td>
<td>100%</td>
<td>100%</td>
<td>N/A</td>
</tr>
<tr>
<td>AS - Radiation Therapy</td>
<td>1317020900</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AS/AAS - Respiratory Care</td>
<td>1317081800/0317081800</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AAS - Restaurant Management</td>
<td>0206070400</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AS/AAS - Sign Language Interpretation</td>
<td>1713100301/0713100301</td>
<td>0%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>AS/AAS – Veterinary Technology</td>
<td>1317051200</td>
<td>100%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
### College Credit Certificates

<table>
<thead>
<tr>
<th>Program Title</th>
<th>CIP*</th>
<th>09/10</th>
<th>08/09</th>
<th>07/08</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCC - Accounting Technology Management</td>
<td>0507019903</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>CCC - Aquaculture Technology</td>
<td>0110103032</td>
<td>100%</td>
<td>No Grads</td>
<td>N/A</td>
</tr>
<tr>
<td>CCC - AutoCAD Foundations</td>
<td>0615020204</td>
<td>100%</td>
<td>90%</td>
<td>92%</td>
</tr>
<tr>
<td>CCC - Business Specialist</td>
<td>0506040103/0506040104</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>CCC - Cisco CCNA</td>
<td>0615040201</td>
<td>86%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>CCC - Unix/Linux System Administration</td>
<td>0507030406</td>
<td>100%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CCC - Emergency Medical Technician</td>
<td>0317020503</td>
<td>95%</td>
<td>100%</td>
<td>87%</td>
</tr>
<tr>
<td>CCC - Eye Care Technician</td>
<td>0317070103</td>
<td>0%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>CCC - Food and Beverage Management</td>
<td>0206079901</td>
<td>75%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CCC – Medical Information/Coder/Biller/Transcriber</td>
<td>0317050607/0507060305</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>CCC - Microcomputer Repairer/Installer</td>
<td>0615040202</td>
<td>100%</td>
<td>No Grads</td>
<td>No Grads</td>
</tr>
<tr>
<td>CCC - Microsoft Certified Database Adm.</td>
<td>0507030604</td>
<td>N/A</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>CCC - Office Management</td>
<td>0507060301</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>CCC - Office Support</td>
<td>0507060302</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>CCC - Office Administration</td>
<td>0507060300</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>CCC – Ophthalmic Laboratory Technician</td>
<td>0317070104</td>
<td>100%</td>
<td>100%</td>
<td>00%</td>
</tr>
<tr>
<td>CCC - Paramedic</td>
<td>0317020600</td>
<td>94%</td>
<td>91%</td>
<td>78%</td>
</tr>
<tr>
<td>CCC - Radiation Therapy Specialist</td>
<td>0317020903</td>
<td>92%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>CCC - Cable Installation</td>
<td>0615030304</td>
<td>100%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CCC - Culinary Arts</td>
<td>0620040101</td>
<td>67%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CCC – Information Technology Analysis/Support</td>
<td>0507030607/0507830606</td>
<td>100%-50%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CCC – Wireless Communication Support</td>
<td>0615030308</td>
<td>100%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*CIP (Classification of Instructional Programs) is a code used for State reporting to classify instructional programs. Placement rates are reported by the State-recognized CIP number for each program. Individual program options are not reported separately.

**N/A reflects one of the following: (1) No placement rates available-new program or, (2) No placement rates available-no graduates were located in the follow-up process.

### Postsecondary Adult Vocational Certificates

<table>
<thead>
<tr>
<th>Program Title</th>
<th>CIP*</th>
<th>09/10</th>
<th>08/09</th>
<th>07/08</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSAV - Automotive Collision Repair and Refinishing</td>
<td>0647060300</td>
<td>86%</td>
<td>No Grads</td>
<td>82%</td>
</tr>
<tr>
<td>PSAV - Bail Bonding</td>
<td>0743010903</td>
<td>64%</td>
<td>75%</td>
<td>66%</td>
</tr>
<tr>
<td>PSAV - Correctional Officer</td>
<td>0743010200</td>
<td>28%</td>
<td>100%</td>
<td>N/A</td>
</tr>
<tr>
<td>PSAV - Correctional Probation Officer</td>
<td>0743010202</td>
<td>N/A</td>
<td>N/A</td>
<td>100%</td>
</tr>
<tr>
<td>PSAV - Crime Scene Technician</td>
<td>0743010601</td>
<td>78%</td>
<td>70%</td>
<td>100%</td>
</tr>
<tr>
<td>PSAV – Dental Assisting</td>
<td>0317010100</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>PSAV - Early Childhood Education</td>
<td>0420020210</td>
<td>N/A</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>PSAV - Fire Fighter II</td>
<td>0743020300</td>
<td>97%</td>
<td>68%</td>
<td>74%</td>
</tr>
<tr>
<td>PSAV - Law Enforcement Officer</td>
<td>0743010700</td>
<td>99%</td>
<td>100%</td>
<td>97%</td>
</tr>
<tr>
<td>PSAV - Private Security Officer</td>
<td>0743010900</td>
<td>N/A</td>
<td>N/A</td>
<td>100%</td>
</tr>
<tr>
<td>PSAV - Public Safety Telecommunications</td>
<td>0709080100</td>
<td>N/A</td>
<td>N/A</td>
<td>100%</td>
</tr>
</tbody>
</table>

*CIP (Classification of Instructional Programs) is a code used for State reporting to classify instructional programs. Placement rates are reported by the State-recognized CIP number for each program. Individual program options are not reported separately.

**N/A reflects one of the following: (1) No placement rates available-new program or, (2) No placement rates available-no graduates were located in the follow-up process.
Course Information

Florida’s Statewide Course Numbering System

Courses in this catalog are identified by prefixes and numbers that were assigned by Florida’s Statewide Course Numbering System (SCNS). This numbering system is used by all public postsecondary institutions in Florida and 25 participating non-public institutions. The major purpose of this system is to facilitate the transfer of courses between participating institutions. Students and administrators can use the online SCNS to obtain course descriptions and specific information about course transfer between participating Florida institutions. This information is at the SCNS website at http://scns.fldoe.org.

Each participating institution controls the title, credit, and content of its own courses and recommends the first digit of the course number to indicate the level at which students normally take the course. Course prefixes and the last three digits of the course numbers are assigned by members of faculty discipline committees appointed for that purpose by the Florida Department of Education in Tallahassee. Individuals nominated to serve on these committees are selected to maintain a representative balance as to type of institution and discipline field or specialization.

The course prefix and each digit in the course number have a meaning in the SCNS. The list of prefixes and associated courses is referred to as the “SCNS taxonomy.” Descriptions of the content of courses are referred to as “statewide course profiles.”

Example of Course Identifier

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Level Code (first digit)</th>
<th>Century Digit (second digit)</th>
<th>Decade Digit (third digit)</th>
<th>Unit Digit (fourth digit)</th>
<th>Lab Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>No laboratory component in this course</td>
</tr>
<tr>
<td>English Composition</td>
<td>Lower (Freshman) Level at this institution</td>
<td>Freshman Composition</td>
<td>Freshman Composition Skills</td>
<td>Freshman Composition Skills I</td>
<td></td>
</tr>
</tbody>
</table>

General Rule for Course Equivalencies

Equivalent courses at different institutions are identified by the same prefixes and same last three digits of the course number and are guaranteed to be transferable between participating institutions that offer the course, with a few exceptions, as listed below in Exception to the General Rule for Equivalency.

For example, a freshman composition skills course is offered by 56 different postsecondary institutions. Each institution uses “ENC_101” to identify its freshman composition skills course. The level code is the first digit and represents the year in which students normally take the course at a specific institution. In the SCNS taxonomy, “ENC” means “English Composition,” the century digit “1” represents “Freshman Composition,” the decade digit “0” represents “Freshman Composition Skills,” and the unit digit “1” represents “Freshman Composition Skills I.”

In the sciences and certain other areas, a “C” or “L” after the course number is known as a lab indicator. The “C” represents a combined lecture and laboratory course that meets in the same place at the same time. The “L” represents a laboratory course or the laboratory part of a course that has the same prefix and course number but meets at a different time or place.

Transfer of any successfully completed course from one participating institution to another is guaranteed in cases where the course to be transferred is equivalent to one offered by the receiving institution. Equivalencies are established by the same prefix and last three digits and comparable faculty credentials at both institutions. For example, ENC 1101 is offered at a community college. The same course is offered at a state university as ENC 2101. A student who has successfully completed ENC 1101 at the community college is guaranteed to receive transfer credit for ENC 2101 at the state university if the student transfers. The student cannot be required to take ENC 2101 again since ENC 1101 is equivalent to ENC 2101. Transfer credit must be awarded for successfully completed equivalent courses and used by the receiving institution to determine satisfaction of requirements by transfer students on the same basis as credit awarded to the native students. It is the prerogative of the receiving institution, however, to offer transfer credit for courses successfully completed that have not been designated as equivalent.

NOTE: Credit generated at institutions on the quarter-term system may not transfer the equivalent number of credits to institutions on semester-term systems. For example, 4.0 quarter hours often transfers as 2.67 semester hours.

The Course Prefix

The course prefix is a three-letter designator for a major division of an academic discipline, subject matter area, or subcategory of knowledge. The prefix is not intended to identify the department in which a course is offered. Rather, the content of a course determines the assigned prefix to identify the course.
Authority for Acceptance of Equivalent Courses

Section 1007.24 (7), Florida Statutes states that any student who transfers among postsecondary institutions that are fully accredited by a regional or national accrediting agency recognized by the United States Department of Education and that participate in the statewide course numbering system shall be awarded credit by the receiving institution for courses satisfactorily completed by the student at the previous institutions. Credit shall be awarded if the courses are judged by the appropriate statewide course numbering system faculty committees representing school districts, public postsecondary educational institutions, and participating non-public postsecondary educational institutions to be academically equivalent to courses offered at the receiving institution, including equivalency of faculty credentials, regardless of the public or non-public control of the previous institution. The Department of Education shall ensure that credits to be accepted by a receiving institution are generated in courses for which the faculty possess credentials that are comparable to those required by the accrediting association of the receiving institution. The award of credit may be limited to courses that are entered in the statewide course numbering system. Credits awarded pursuant to this subsection shall satisfy institutional requirements on the same basis as credits awarded to native students.

Exceptions to the General Rule for Equivalency

Since the initial implementation of the SCNS, specific disciplines or types of courses have been excepted from the guarantee of transfer for equivalent courses. These include courses that must be evaluated individually or courses in which the student must be evaluated for mastery of skill and technique. The following courses are exceptions to the general rule for course equivalencies and may not transfer. Transferability is at the discretion of the receiving institution.

A. Courses not offered by the receiving institution.
B. For courses at non-regionally accredited institutions, courses offered prior to the established transfer date of the course in question.
C. Courses in the _900-999 series are not automatically transferable and must be evaluated individually. These include such courses as special topics, internships, apprenticeships, practica, study abroad, theses and dissertations.
D. College preparatory and vocational preparatory courses.
E. Graduate courses.
F. Internships, apprenticeships, practica, clinical experiences and study abroad courses with numbers other than those ranging from 900-999.
G. Applied courses in the performing arts (art, dance, interior design, music, and theatre) and skills courses in criminal justice (academy certificate courses) are not guaranteed as transferable. These courses need evidence of achievement (i.e., portfolio, audition, interview, etc.).

Courses at Non-regionally Accredited Institutions

The SCNS makes available on its home page (http://scns.fldoe.org) a report entitled “Courses at Non-regionally Accredited Institutions” that contains a comprehensive listing of all non-public institution courses in the SCNS inventory, as well as each course’s transfer level and transfer effective date. This report is updated monthly.

Questions about the SCNS should be directed to the Director of Information Management and Reporting, and appeals regarding course credit transfer decisions should be directed to Enrollment and Student Success Officer at Hillsborough Community College, P.O. Box 31127, Tampa, FL, or the Florida Department of Education, Office of Articulation, 1401 Turlington Building, Tallahassee, Florida 32399-0400. Special reports and technical information may be requested by calling the SCNS office at (850) 245-0427 or via the internet at http://scns.fldoe.org
<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course Offerings</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG</td>
<td>Accounting: General</td>
</tr>
<tr>
<td>ACR</td>
<td>Air Conditioning/Refrigeration: Technology</td>
</tr>
<tr>
<td>ADV</td>
<td>Advertising</td>
</tr>
<tr>
<td>AEB</td>
<td>Agricultural Economics and Business</td>
</tr>
<tr>
<td>AER</td>
<td>Automotive/Engine Repair</td>
</tr>
<tr>
<td>AFA</td>
<td>Afro American Studies</td>
</tr>
<tr>
<td>AFR</td>
<td>Aerospace Studies</td>
</tr>
<tr>
<td>AMH</td>
<td>American History</td>
</tr>
<tr>
<td>AML</td>
<td>American Literature</td>
</tr>
<tr>
<td>ANT</td>
<td>Anthropology</td>
</tr>
<tr>
<td>APA</td>
<td>Applied Accounting</td>
</tr>
<tr>
<td>ARC</td>
<td>Architecture</td>
</tr>
<tr>
<td>ARH</td>
<td>Art History</td>
</tr>
<tr>
<td>ARR</td>
<td>Autobody Repair and Refinishing</td>
</tr>
<tr>
<td>ART</td>
<td>Art</td>
</tr>
<tr>
<td>ASL</td>
<td>American Sign Language</td>
</tr>
<tr>
<td>AST</td>
<td>Astronomy</td>
</tr>
<tr>
<td>ATE</td>
<td>Animal Science Technology</td>
</tr>
<tr>
<td>BCA</td>
<td>Building Construction Apprenticeship</td>
</tr>
<tr>
<td>BCN</td>
<td>Building Construction</td>
</tr>
<tr>
<td>BCT</td>
<td>Building Construction Trades</td>
</tr>
<tr>
<td>BCV</td>
<td>Building Construction: Vocational</td>
</tr>
<tr>
<td>BOT</td>
<td>Botany</td>
</tr>
<tr>
<td>BRC</td>
<td>Banking: Related Course</td>
</tr>
<tr>
<td>BSC</td>
<td>Biological Science</td>
</tr>
<tr>
<td>BUL</td>
<td>Business Law</td>
</tr>
<tr>
<td>CAP</td>
<td>Computer Applications</td>
</tr>
<tr>
<td>CCJ</td>
<td>Criminology and Criminal Justice</td>
</tr>
<tr>
<td>CDA</td>
<td>Computer Design/Architecture</td>
</tr>
<tr>
<td>CEN</td>
<td>Computer Engineering</td>
</tr>
<tr>
<td>CET</td>
<td>Computer Engineering Tech</td>
</tr>
<tr>
<td>CGS</td>
<td>Computers: General Studies</td>
</tr>
<tr>
<td>CHD</td>
<td>Child Development</td>
</tr>
<tr>
<td>CHM</td>
<td>Chemistry</td>
</tr>
<tr>
<td>CIS</td>
<td>Computer and Information System</td>
</tr>
<tr>
<td>CJC</td>
<td>Corrections</td>
</tr>
<tr>
<td>CJD</td>
<td>Criminal Justice Development</td>
</tr>
<tr>
<td>CJE</td>
<td>Law Enforcement</td>
</tr>
<tr>
<td>CJK</td>
<td>Criminal Justice Basic Training</td>
</tr>
<tr>
<td>CJL</td>
<td>Law and Process</td>
</tr>
<tr>
<td>CLP</td>
<td>Clinical Psychology</td>
</tr>
<tr>
<td>CNT</td>
<td>Computer Networks</td>
</tr>
<tr>
<td>COP</td>
<td>Computer Programming</td>
</tr>
<tr>
<td>CRW</td>
<td>Creative Writing</td>
</tr>
<tr>
<td>CTS</td>
<td>Computer Technology and Skills</td>
</tr>
<tr>
<td>DAA</td>
<td>Dance Activities</td>
</tr>
<tr>
<td>DAN</td>
<td>Dance</td>
</tr>
<tr>
<td>DEA</td>
<td>Dental Assisting</td>
</tr>
<tr>
<td>DEH</td>
<td>Dental Hygiene</td>
</tr>
<tr>
<td>DEP</td>
<td>Developmental Psychology</td>
</tr>
<tr>
<td>DES</td>
<td>Dental Support</td>
</tr>
<tr>
<td>DIE</td>
<td>Dietetics</td>
</tr>
<tr>
<td>DSC</td>
<td>Domestic Security</td>
</tr>
<tr>
<td>EAP</td>
<td>English Academic Purposes</td>
</tr>
<tr>
<td>ECO</td>
<td>Economics</td>
</tr>
<tr>
<td>EDF</td>
<td>Education: Foundations</td>
</tr>
<tr>
<td>EDP</td>
<td>Educational Psychology</td>
</tr>
<tr>
<td>EEC</td>
<td>Education: Early Childhood</td>
</tr>
<tr>
<td>EET</td>
<td>Electronic Engineering Technology</td>
</tr>
<tr>
<td>EGS</td>
<td>Engineering: Support</td>
</tr>
<tr>
<td>EHD</td>
<td>Education: Hard of Hearing and Deaf</td>
</tr>
<tr>
<td>EME</td>
<td>Education: Technology and Media</td>
</tr>
<tr>
<td>EMS</td>
<td>Emergency Medical Services</td>
</tr>
<tr>
<td>ENC</td>
<td>English Composition</td>
</tr>
<tr>
<td>ENG</td>
<td>English: General</td>
</tr>
<tr>
<td>ENL</td>
<td>English Literature</td>
</tr>
<tr>
<td>ENT</td>
<td>Entrepreneurship</td>
</tr>
<tr>
<td>ESC</td>
<td>Earth Science</td>
</tr>
<tr>
<td>EST</td>
<td>Electronic Specialty Technology</td>
</tr>
<tr>
<td>ETD</td>
<td>Engineering Tech: Drafting</td>
</tr>
<tr>
<td>ETI</td>
<td>Engineering Tech: Industrial</td>
</tr>
<tr>
<td>ETM</td>
<td>Engineering Tech: Mechanical</td>
</tr>
<tr>
<td>EUH</td>
<td>European History</td>
</tr>
<tr>
<td>EVR</td>
<td>Environmental Studies</td>
</tr>
<tr>
<td>EVS</td>
<td>Environmental Science</td>
</tr>
<tr>
<td>FAS</td>
<td>Aquacultural Science</td>
</tr>
<tr>
<td>FFP</td>
<td>Fire Fighting and Protection</td>
</tr>
<tr>
<td>FIL</td>
<td>Film</td>
</tr>
<tr>
<td>FIN</td>
<td>Finance</td>
</tr>
<tr>
<td>FNR</td>
<td>Forestry and Natural Resources</td>
</tr>
<tr>
<td>FOS</td>
<td>Food Science</td>
</tr>
<tr>
<td>FRE</td>
<td>French Language</td>
</tr>
<tr>
<td>FSS</td>
<td>Food Service Systems</td>
</tr>
<tr>
<td>GCO</td>
<td>Golf Course Operations</td>
</tr>
<tr>
<td>GEB</td>
<td>General Business</td>
</tr>
<tr>
<td>GER</td>
<td>German and Germanic Language</td>
</tr>
<tr>
<td>GEY</td>
<td>Gerontology</td>
</tr>
<tr>
<td>GIS</td>
<td>Geography Information Science</td>
</tr>
<tr>
<td>GLY</td>
<td>Geology</td>
</tr>
<tr>
<td>GRA</td>
<td>Graphic Arts</td>
</tr>
<tr>
<td>GRC</td>
<td>Golf Course Operations</td>
</tr>
<tr>
<td>GSE</td>
<td>Graphic Design and Animation</td>
</tr>
<tr>
<td>HFT</td>
<td>Hotel and Restaurant</td>
</tr>
<tr>
<td>HIM</td>
<td>Health Information Management</td>
</tr>
<tr>
<td>HIS</td>
<td>History: General</td>
</tr>
<tr>
<td>HLP</td>
<td>Health, Leisure, Phys Ed</td>
</tr>
<tr>
<td>HOS</td>
<td>Horticultural Sciences</td>
</tr>
<tr>
<td>HSC</td>
<td>Health Science</td>
</tr>
<tr>
<td>HUM</td>
<td>Humanities</td>
</tr>
<tr>
<td>HUN</td>
<td>Human Nutrition</td>
</tr>
<tr>
<td>HUS</td>
<td>Human Services</td>
</tr>
<tr>
<td>IDH</td>
<td>Interdisciplinary Honors</td>
</tr>
<tr>
<td>IDS</td>
<td>Interdisciplinary Studies</td>
</tr>
<tr>
<td>INT</td>
<td>Sign Language Interpreting</td>
</tr>
<tr>
<td>IPM</td>
<td>Integrated Pest Management</td>
</tr>
<tr>
<td>ISC</td>
<td>Interdisciplinary Science</td>
</tr>
<tr>
<td>ISS</td>
<td>Interdisciplinary Social Science</td>
</tr>
<tr>
<td>ITA</td>
<td>Italian Language</td>
</tr>
<tr>
<td>JOU</td>
<td>Journalism</td>
</tr>
<tr>
<td>LAH</td>
<td>Latin American History</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>LDE</td>
<td>Landscape Design</td>
</tr>
<tr>
<td>LIN</td>
<td>Linguistics</td>
</tr>
<tr>
<td>LIS</td>
<td>Library Science</td>
</tr>
<tr>
<td>LIT</td>
<td>Literatures</td>
</tr>
<tr>
<td>MAC</td>
<td>Mathematics: Calculus and Pre calculus</td>
</tr>
<tr>
<td>MAD</td>
<td>Mathematics: Discrete</td>
</tr>
<tr>
<td>MAN</td>
<td>Management</td>
</tr>
<tr>
<td>MAP</td>
<td>Mathematics: Applied</td>
</tr>
<tr>
<td>MAR</td>
<td>Marketing</td>
</tr>
<tr>
<td>MAS</td>
<td>Mathematics: Algebraic Structures</td>
</tr>
<tr>
<td>MAT</td>
<td>Mathematics: General</td>
</tr>
<tr>
<td>MCB</td>
<td>Microbiology</td>
</tr>
<tr>
<td>MET</td>
<td>Meteorology</td>
</tr>
<tr>
<td>MGF</td>
<td>Mathematics: General and Finite</td>
</tr>
<tr>
<td>MKA</td>
<td>Marketing Applications</td>
</tr>
<tr>
<td>MMC</td>
<td>Mass Media Communication</td>
</tr>
<tr>
<td>MNA</td>
<td>Management: Applied</td>
</tr>
<tr>
<td>MSL</td>
<td>Military Science Leadership</td>
</tr>
<tr>
<td>MTB</td>
<td>Mathematics: Technical and Business</td>
</tr>
<tr>
<td>MUL</td>
<td>Music: Literature</td>
</tr>
<tr>
<td>MUM</td>
<td>Music: Commercial</td>
</tr>
<tr>
<td>MUN</td>
<td>Music: Music Ensembles</td>
</tr>
<tr>
<td>MUO</td>
<td>Music: Opera/Musical Theatre</td>
</tr>
<tr>
<td>MUS</td>
<td>Music</td>
</tr>
<tr>
<td>MUT</td>
<td>Music: Theory</td>
</tr>
<tr>
<td>MVB</td>
<td>Music: Brasses</td>
</tr>
<tr>
<td>MVK</td>
<td>Music: Keyboard</td>
</tr>
<tr>
<td>MVP</td>
<td>Music: Percussion</td>
</tr>
<tr>
<td>MVS</td>
<td>Music: Strings</td>
</tr>
<tr>
<td>MVV</td>
<td>Music: Voice</td>
</tr>
<tr>
<td>MVW</td>
<td>Music: Woodwinds</td>
</tr>
<tr>
<td>NMT</td>
<td>Nuclear Medical Technology</td>
</tr>
<tr>
<td>NUR</td>
<td>Nursing Practice and Theory</td>
</tr>
<tr>
<td>OCB</td>
<td>Oceanography: Biological</td>
</tr>
<tr>
<td>OPT</td>
<td>Ophthalmic Technology</td>
</tr>
<tr>
<td>ORH</td>
<td>Ornamental Horticulture</td>
</tr>
<tr>
<td>OST</td>
<td>Office Systems Technology</td>
</tr>
<tr>
<td>PCB</td>
<td>Process Biology: Cell and Molecular</td>
</tr>
<tr>
<td>PEL</td>
<td>Physical Education: Object Centered</td>
</tr>
<tr>
<td>PEM</td>
<td>Physical Education: Performance Centered</td>
</tr>
<tr>
<td>PEN</td>
<td>Physical Education: Water</td>
</tr>
<tr>
<td>PET</td>
<td>Physical Education Theory</td>
</tr>
<tr>
<td>PGY</td>
<td>Photography</td>
</tr>
<tr>
<td>PHI</td>
<td>Philosophy</td>
</tr>
<tr>
<td>PHY</td>
<td>Physics</td>
</tr>
<tr>
<td>PLA</td>
<td>Paralegal/Legal Asst/Legal Administration</td>
</tr>
<tr>
<td>PLS</td>
<td>Plant Science</td>
</tr>
<tr>
<td>PMT</td>
<td>Precision Metals Technology</td>
</tr>
<tr>
<td>POS</td>
<td>Political Science</td>
</tr>
<tr>
<td>PSC</td>
<td>Physical Sciences</td>
</tr>
<tr>
<td>PSY</td>
<td>Psychology</td>
</tr>
<tr>
<td>PTA</td>
<td>Precision Metals Technology</td>
</tr>
<tr>
<td>RAT</td>
<td>Radiation Therapy</td>
</tr>
<tr>
<td>REA</td>
<td>Reading</td>
</tr>
<tr>
<td>REL</td>
<td>Religion</td>
</tr>
<tr>
<td>RET</td>
<td>Respiratory Therapy</td>
</tr>
<tr>
<td>RTE</td>
<td>Radiologic Technology</td>
</tr>
<tr>
<td>RTV</td>
<td>Radio Television</td>
</tr>
<tr>
<td>SBM</td>
<td>Small Business Management</td>
</tr>
<tr>
<td>SCC</td>
<td>Security</td>
</tr>
<tr>
<td>SLS</td>
<td>Student Life Skills</td>
</tr>
<tr>
<td>SON</td>
<td>Sonography: Diagnostic Ultra</td>
</tr>
<tr>
<td>SOP</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>SOS</td>
<td>Soil Science</td>
</tr>
<tr>
<td>SPA</td>
<td>Speech Pathology and Audiology</td>
</tr>
<tr>
<td>SPC</td>
<td>Speech Communication</td>
</tr>
<tr>
<td>SPN</td>
<td>Spanish Language</td>
</tr>
<tr>
<td>STA</td>
<td>Statistics</td>
</tr>
<tr>
<td>SUR</td>
<td>Surveying and Related Areas</td>
</tr>
<tr>
<td>SYG</td>
<td>Sociology: General</td>
</tr>
<tr>
<td>TAR</td>
<td>Technical Architecture</td>
</tr>
<tr>
<td>TAX</td>
<td>Taxation</td>
</tr>
<tr>
<td>THE</td>
<td>Theatre</td>
</tr>
<tr>
<td>TPA</td>
<td>Theatre Production and Administration</td>
</tr>
<tr>
<td>TPP</td>
<td>Theatre Performance and Training</td>
</tr>
<tr>
<td>VIC</td>
<td>Visual Communication</td>
</tr>
<tr>
<td>WOH</td>
<td>World History</td>
</tr>
<tr>
<td>ZOO</td>
<td>Zoology</td>
</tr>
</tbody>
</table>

**Course Offerings by Subject Matter**

Accounting: General ........................................................... ACG
Advertising ............................................................................. ADV
Aerospace Studies .............................................................. AFR
Afro American Studies ......................................................... AFA
Agricultural Economics and Business ................................. AEB
Air Conditioning/Refrigeration: Technology ......................... ACR
American History .............................................................. AMH
American Literature ........................................................ AML
American Sign Language ..................................................... ASL
Animal Science Technology ................................................ ATE
Anthropology ................................................................. ANT
Applied Accounting .......................................................... APA
Aquacultural Science ....................................................... FAS
Architecture ................................................................... ARC
Art History .................................................................. ARH
Art ................................................................. ART
Astronomy ................................................................. AST
Autobody Repair and Refinishing ..................................... ARR
Automotive/Engine Repair ................................................ AER
Banking: Related Course .................................................. BRC
Biological Science ......................................................... BSC
Botany ........................................................................ BOT
Building Construction Apprenticeship ............................... BCA
Building Construction Trades ........................................... BCT
Building Construction ..................................................... BCN
Building Construction: Vocational .................................... BCV
Business Law .............................................................. BUL
Chemistry ................................................................. CHM
Child Development ......................................................... CHD
Clinical Psychology ......................................................... CLP
<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer and Information Systems</td>
<td>CIS</td>
</tr>
<tr>
<td>Computer Applications</td>
<td>CAP</td>
</tr>
<tr>
<td>Computer Design/Architecture</td>
<td>CDA</td>
</tr>
<tr>
<td>Computer Engineering Technology</td>
<td>CET</td>
</tr>
<tr>
<td>Computer Engineering</td>
<td>CEN</td>
</tr>
<tr>
<td>Computer Networks</td>
<td>CNT</td>
</tr>
<tr>
<td>Computer Programming</td>
<td>COP</td>
</tr>
<tr>
<td>Computer Technology and Skills</td>
<td>CTS</td>
</tr>
<tr>
<td>Computers: General Studies</td>
<td>CGS</td>
</tr>
<tr>
<td>Corrections</td>
<td>CJC</td>
</tr>
<tr>
<td>Creative Writing</td>
<td>CRW</td>
</tr>
<tr>
<td>Criminal Justice Basic Training</td>
<td>CJK</td>
</tr>
<tr>
<td>Criminal Justice Development</td>
<td>CJD</td>
</tr>
<tr>
<td>Criminal Justice Technology</td>
<td>CJT</td>
</tr>
<tr>
<td>Criminology and Criminal Justice</td>
<td>CCJ</td>
</tr>
<tr>
<td>Dance Activities</td>
<td>DAA</td>
</tr>
<tr>
<td>Dance</td>
<td>DAN</td>
</tr>
<tr>
<td>Dental Assisting</td>
<td>DEA</td>
</tr>
<tr>
<td>Dental Hygiene</td>
<td>DEH</td>
</tr>
<tr>
<td>Dental Support</td>
<td>DES</td>
</tr>
<tr>
<td>Developmental Psychology</td>
<td>DEP</td>
</tr>
<tr>
<td>Dietetics</td>
<td>DIE</td>
</tr>
<tr>
<td>Domestic Security</td>
<td>DSC</td>
</tr>
<tr>
<td>Earth Science</td>
<td>ESC</td>
</tr>
<tr>
<td>Economics</td>
<td>ECO</td>
</tr>
<tr>
<td>Education: Early Childhood</td>
<td>EEC</td>
</tr>
<tr>
<td>Education: Foundations</td>
<td>EDF</td>
</tr>
<tr>
<td>Education: General</td>
<td>EDG</td>
</tr>
<tr>
<td>Education: Hard of Hearing and Deaf</td>
<td>EHD</td>
</tr>
<tr>
<td>Education: Technology and Media</td>
<td>EME</td>
</tr>
<tr>
<td>Educational Psychology</td>
<td>EDP</td>
</tr>
<tr>
<td>Electronic Engineering Technology</td>
<td>EET</td>
</tr>
<tr>
<td>Electronic Specialty Technology</td>
<td>EST</td>
</tr>
<tr>
<td>Emergency Medical Services</td>
<td>EMS</td>
</tr>
<tr>
<td>Engineering Technology: Drafting</td>
<td>ETD</td>
</tr>
<tr>
<td>Engineering Technology: Industrial</td>
<td>ETI</td>
</tr>
<tr>
<td>Engineering Technology: Mechanical</td>
<td>ETM</td>
</tr>
<tr>
<td>Engineering: Support</td>
<td>EGS</td>
</tr>
<tr>
<td>English Academic Purposes</td>
<td>EAP</td>
</tr>
<tr>
<td>English Composition</td>
<td>ENC</td>
</tr>
<tr>
<td>English Literature</td>
<td>ENL</td>
</tr>
<tr>
<td>English: General</td>
<td>ENG</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>EVS</td>
</tr>
<tr>
<td>Environmental Studies</td>
<td>EVR</td>
</tr>
<tr>
<td>European History</td>
<td>EUH</td>
</tr>
<tr>
<td>Film</td>
<td>FIL</td>
</tr>
<tr>
<td>Finance</td>
<td>FIN</td>
</tr>
<tr>
<td>Fire Fighting and Protection</td>
<td>FFP</td>
</tr>
<tr>
<td>Food Science</td>
<td>FOS</td>
</tr>
<tr>
<td>Food Service Systems</td>
<td>FSS</td>
</tr>
<tr>
<td>Forestry and Natural Resources</td>
<td>FNR</td>
</tr>
<tr>
<td>French Language</td>
<td>FRE</td>
</tr>
<tr>
<td>General Business</td>
<td>GEB</td>
</tr>
<tr>
<td>Geography Information Science</td>
<td>GIS</td>
</tr>
<tr>
<td>Geology</td>
<td>GLY</td>
</tr>
<tr>
<td>German and Germanic Language</td>
<td>GER</td>
</tr>
<tr>
<td>Gerontology</td>
<td>GEY</td>
</tr>
<tr>
<td>Golf Course Operations</td>
<td>GCO</td>
</tr>
<tr>
<td>Graphic Arts</td>
<td>GRA</td>
</tr>
<tr>
<td>Health Information Management</td>
<td>HIM</td>
</tr>
<tr>
<td>Health Science</td>
<td>HSC</td>
</tr>
<tr>
<td>Health, Leisure, Phys Ed</td>
<td>HLP</td>
</tr>
<tr>
<td>History: General</td>
<td>HIS</td>
</tr>
<tr>
<td>Home Economics Vocational</td>
<td>HEV</td>
</tr>
<tr>
<td>Horticultural Sciences</td>
<td>HOS</td>
</tr>
<tr>
<td>Hotel and Restaurant</td>
<td>HFT</td>
</tr>
<tr>
<td>Human Nutrition</td>
<td>HUN</td>
</tr>
<tr>
<td>Human Services</td>
<td>HUS</td>
</tr>
<tr>
<td>Humanities</td>
<td>HUM</td>
</tr>
<tr>
<td>Integrated Pest Management</td>
<td>IPM</td>
</tr>
<tr>
<td>Interdisciplinary Honors</td>
<td>IDH</td>
</tr>
<tr>
<td>Interdisciplinary Science</td>
<td>ISC</td>
</tr>
<tr>
<td>Interdisciplinary Social Science</td>
<td>ISS</td>
</tr>
<tr>
<td>Interdisciplinary Studies</td>
<td>IDS</td>
</tr>
<tr>
<td>Italian Language</td>
<td>ITA</td>
</tr>
<tr>
<td>Journalism</td>
<td>JOU</td>
</tr>
<tr>
<td>Landscape Design</td>
<td>LDE</td>
</tr>
<tr>
<td>Latin American History</td>
<td>LAH</td>
</tr>
<tr>
<td>Law and Process</td>
<td>CJL</td>
</tr>
<tr>
<td>Law Enforcement</td>
<td>CJE</td>
</tr>
<tr>
<td>Library Science</td>
<td>LIS</td>
</tr>
<tr>
<td>Linguistics</td>
<td>LIN</td>
</tr>
<tr>
<td>Literatures</td>
<td>LIT</td>
</tr>
<tr>
<td>Management</td>
<td>MAN</td>
</tr>
<tr>
<td>Management: Applied</td>
<td>MNA</td>
</tr>
<tr>
<td>Marketing Applications</td>
<td>MBA</td>
</tr>
<tr>
<td>Marketing</td>
<td>MAR</td>
</tr>
<tr>
<td>Mass Media Communication</td>
<td>MMC</td>
</tr>
<tr>
<td>Mathematics: Algebraic Structures</td>
<td>MAS</td>
</tr>
<tr>
<td>Mathematics: Applied</td>
<td>MAP</td>
</tr>
<tr>
<td>Mathematics: Calculus and Pre-calculus</td>
<td>MAC</td>
</tr>
<tr>
<td>Mathematics: Discrete</td>
<td>MAD</td>
</tr>
<tr>
<td>Mathematics: General and Finite</td>
<td>MGF</td>
</tr>
<tr>
<td>Mathematics: General</td>
<td>MAT</td>
</tr>
<tr>
<td>Mathematics: Technical and Business</td>
<td>MTB</td>
</tr>
<tr>
<td>Mathematics: Topology and Geometry</td>
<td>MTG</td>
</tr>
<tr>
<td>Meteorology</td>
<td>MET</td>
</tr>
<tr>
<td>Microbiology</td>
<td>MCB</td>
</tr>
<tr>
<td>Military Science Leadership</td>
<td>MSL</td>
</tr>
<tr>
<td>Music</td>
<td>MUS</td>
</tr>
<tr>
<td>Music: Brasses</td>
<td>MVB</td>
</tr>
<tr>
<td>Music: Commercial</td>
<td>MUM</td>
</tr>
<tr>
<td>Music: Keyboard</td>
<td>MVK</td>
</tr>
<tr>
<td>Music: Literature</td>
<td>MUL</td>
</tr>
<tr>
<td>Music: Music Ensembles</td>
<td>MUN</td>
</tr>
<tr>
<td>Music: Opera/Musical Theatre</td>
<td>MUO</td>
</tr>
<tr>
<td>Music: Percussion</td>
<td>MVP</td>
</tr>
<tr>
<td>Music: Strings</td>
<td>MVS</td>
</tr>
<tr>
<td>Music: Theory</td>
<td>MUT</td>
</tr>
<tr>
<td>Music: Voice</td>
<td>MVV</td>
</tr>
</tbody>
</table>
Music: Woodwinds ..................................................... MVW
Nuclear Medical Technology ............................................ NMT
Nursing Practice and Theory ............................................ NUR
Oceanography: Biological ............................................. OCB
Office Systems Technology ............................................ OST
Ophthalmic Technology .................................................. OPT
Ornamental Horticulture .................................................. ORH
Paralegal/Legal Asst/Legal Administration ....................... PLA
Philosophy ....................................................................... PHI
Photography ..................................................................... PGY
Physical Education Theory .............................................. PET
Physical Education: Object Centered ............................... PEL
Physical Education: Performance Centered ...................... PEM
Physical Education: Water ............................................... PEN
Physical Sciences .......................................................... PSC
Physics ............................................................................ PHY
Plant Science ................................................................. PLS
Political Science ............................................................. POS
Precision Metals Technology ........................................... PMT
Precise Metals Technology ............................................. PTA
Process Biology: Cellular and Molecular ......................... PCB
Psychology ....................................................................... PSY
Radiation Therapy ........................................................... RAT
Radio  Television ................................................................ RTV
Radiologic Technology .................................................... RTE
Reading .............................................................................. REA
Religion .............................................................................. REL
Respiratory Therapy ......................................................... RET
Security .............................................................................. SCC
Sign Language Interpreting ............................................. INT
Small Business Management ........................................... SBM
Social Psychology ............................................................ SOP
Sociology: General .......................................................... SYG
Soil Science ...................................................................... SOS
Sonography: Diagnostic Ultra ......................................... SON
Spanish Language ............................................................ SPN
Speech Communication .................................................... SPC
Speech Pathology and Audiology ...................................... SPA
Statistics ............................................................................ STA
Student Life Skills .......................................................... SLS
Surveying and Related Areas .......................................... SUR
Taxation .............................................................................. TAX
Technical Architecture ..................................................... TAR
Theatre Performance and Training .................................... TPP
Theatre Production and Administration ......................... TPA
Theatre .............................................................................. THE
Visual Communication ..................................................... VIC
World History ................................................................. WOH
Zoology ............................................................................. ZOO
Credit Course Descriptions

ACG 2021
Financial Accounting
3 Credits
Covers theory and logic that underlie accounting procedures. Course content includes an introduction to accounting concepts, procedures for reading business transactions, preparation of financial statements, accounting for merchandising concerns, corporations, bonds, and other procedures to calculate and maintain accounting information. Prerequisites: College level reading, writing and math skills are required.

ACG 2071
Managerial Accounting
3 Credits
Focuses on analyzing accounting records and using the results in making management decisions. College level reading, writing and math skills are required. Prerequisite: ACG 2021

ACG 2100
Intermediate Accounting I
3 Credits
Covers basic accounting theory and processes, with an emphasis on balance sheets, income and related earnings statements, investments, cash flow, inventory and estimating. Prerequisite alternative: equivalent training. Prerequisite: ACG 2071

ACG 2110
Intermediate Accounting II
3 Credits
Covers long term investments, tangible fixed assets, acquisitions, utilization retirement, depreciation, depletion and re-statement, intangible assets, deferred charges, insurance, special purpose funds, liabilities, accounting for bonds, pensions and leases, corporations, contributed capital at formation and retained earnings. Prerequisite: ACG 2100

ACG 2340
Cost Accounting I
3 Credits
Covers basic cost concepts of goods and labor, with an emphasis on standard cost. Prerequisite alternative: Cost Accounting is taken after two courses of Financial Accounting.

ACG 2350
Cost Accounting II
3 Credits
Covers cost planning, control, reports and analysis, with an emphasis on the relationship between planning and control. Prerequisite: ACG 2340

ACG 2450
Microcomputers in Accounting
3 Credits
Provides an overview of microcomputer accounting and its application in the business environment. The student will work through a complete accounting cycle using a full featured accounting software package in the preparation, interpretation and use of the computer information in financial decision making and problem solving. Prerequisites: ACG 2021, CGS 1000

ADV 2000
Advertising
3 Credits
Covers the psychology of advertising and the preparation of an advertising campaign from research to evaluation.

AEB 1949
Agriculture/Business Internship
3 Credits
Focuses on hands on field experiences and class work. Students will be assigned to businesses or agencies to gain practical experience in business skills in indoor and outside activities. Activities will include, but not limited to using tools, machinery and equipment, sampling, collecting and recording data. This course may be repeated six times for credit. Credit for this course does not apply toward an associate in arts degree.

AFA 1000
Introduction to Black Studies
3 Credits
Includes the nature and meaning of the Afro-American experience from its beginning to the present, with an emphasis on visual arts, music, literature, philosophic thought and social history.

AFA 1001
Introduction to Black Culture
3 Credits
Examines the black person's interactions in the American culture, with emphasis on social values, attitudes, behaviors and processes that identify black Americans as an ethnic group.

AFR 1101
The Foundation of the U.S. Air Force, Part I
1 Credit
This course serves as an introduction to the Air Force Reserve Officer Training Corps (AFROTC) and U.S. Air Force (USAF) lessons in officerhood/professionalism and an introduction to communications skills. Enrollment is limited to students who are also enrolled in the USF ROTC program.

AFR 1120
The Foundation of the U.S. Air Force, Part II
1 Credit
A study of Air Force installations, core values, leadership, team building, and diversity within the armed forces. Enrollment is limited to students who are also enrolled in the USF ROTC program.
AFR 2001
Air Force ROTC Leadership Laboratory
0 Credit
This course is required for each of the AFR courses. Instruction is conducted within the framework of an organized cadet corps with progression of experiences designed to develop each student’s leadership potential. Leadership laboratory involves a study of Air Force customs and courtesies; drill and ceremonies; career opportunities in the Air Force; and the life and work of an Air Force junior officer. Students develop their leadership potential in a practical laboratory which typically includes field trips to Air Force installations. Enrollment is limited to students who are also enrolled in the USF ROTC program.

AFR 2130
The Evolution of USAF Aerospace Power, Part I
1 Credit
A study of air power from balloons and dirigibles through the jet age. Emphasis is on the employment of air power in WWI and WWII and how it affected the evolution of air power concepts and doctrine. Enrollment is limited to students who are also enrolled in the USF ROTC program.

AFR 2140
The Evolution of USAF Aerospace Power, Part II
1 Credit
An historical review of air power employment in military and non-military operations in support of national objectives. Emphasis is placed on the period from post WWII to present. Enrollment is limited to students who are also enrolled in the USF ROTC program.

AMH 1010
Early American History
3 Credits
Provides an overview of United States history including discovery, colonial foundations, movement for independence, and the early years of the republic through the Civil War and Reconstruction, with an emphasis on North American geography. Prerequisites: College level reading and writing skills are required.

AMH 1010H
Honors Early American History
3 Credits
Same as AMH 1010 with honors content. Honors Institute permission required. Prerequisites: College level reading and writing skills are required.

AMH 1020
Modern American History
3 Credits
Provides a study of United States development from the period of Reconstruction to the present. Topics include politics, economics, geography, social issues and reforms as related to contemporary society. Prerequisites: College level reading and writing skills are required.

AMH 1020H
Honors Modern American History
3 Credits
Same as AMH 1020 with honors content. Honors Institute permission required. Prerequisites: College level reading and writing skills are required.

AMH 1070
Florida History
3 Credits
Provides an overview of Florida history and government from the time of the early Indians to the present with an emphasis on how developments relate to contemporary problems, government, and society.

AML 2010
American Literature to 1885
3 Credits
Focuses on American writers from the Colonial, Federal and Romantic periods. Topics include major trends in Puritanism, Transcendentalism and Romanticism. Prerequisites: College level reading and writing skills are required.

AML 2010H
Honors American Literature to 1885
3 Credits
Same as AML 2010 with honors content. Honors Institute permission required. Prerequisites: College level reading and writing skills are required.

AMH 2051
U.S. Military History
3 Credits
Examines the conflicts of the nation from its beginning to the present with an emphasis on military action, political aspects and historical significance. Prerequisites: College level reading and writing skills are required.

AMH 2090
History of Women in the United States
3 Credits
This course explores the history of women’s experience in American Society. The focus will be to examine the construction of womanhood throughout United States history and the experience of gender, ethnicity, class and sexual orientation from/upon women’s experiences. Students will study the contribution of various individual women and groups of women in creating the modern United States, and will analyze social, political, economic and cultural forces affecting women to both join and resist movements for social change from pre-contact to the present. Prerequisites: College level reading and writing skills are required.
AML 2020
American Literature: 1885 to Present
3 Credits
Focuses on American writers since 1865. Topics include major trends in realism, naturalism and primitivism in the 19th and 20th centuries.
Prerequisites: College level reading and writing skills are required.

AML 2020H
Honors American Literature: 1885 to Present
3 Credits
Same as AML 2020 with honors content. Honors Institute permission required.
Prerequisites: College level reading and writing skills are required.

AML 2050
Studies in American Literature
3 Credits
Relates current national concerns with contemporary literature. Course content may vary with the instructor; designed for the non literature majors.
Prerequisites: College level reading and writing skills are required.

AML 2600
Introduction to African American Literature
3 Credits
Provides an overview of African American literature and cultural expression in the United States from the pre discursive period to the present. Through reading, discussion, lectures, and films the historical forces that have influenced the voice of African-American literature will be discussed. The politics of African-American literature will also be explored.
Prerequisite: ENC 1101

APA 1111
Basic Accounting
3 Credits
Covers basic accounting procedures and concepts and business terminology; designed for students with no financial training. Credit for this course does not apply to the associate in arts degree.

APA 1321
Hospitality Accounting
3 Credits
This course introduces the use of accounting information in managing a restaurant or hotel organization. It provides a basis for understanding hospitality accounting procedures and explores how this information supports and enhances management’s decision making. Credit for this course does not apply to the associate in arts degree.
Prerequisites: College level reading, writing and math skills required.

ARC 1211
The Building Arts
3 Credits
Focuses on design of the building environment, design critique and history of design. College level reading and writing skills are required.
Prerequisites: College level reading, writing skills required.

ARC 1301
Architectural Design I
4 Credits
Provides an introduction to architectural design, with an emphasis on the tools of architectural communications.
Prerequisite: College level reading, writing skills are required.
Corequisite: ARC 1701

ARC 1302
Architectural Design II
4 Credits
Focuses on organizational systems and space, with an emphasis on freehand drawing, mechanical drawing, one point perspectives and model making. College level reading, writing and math skills are required.
Prerequisites: ARC 1301, ARC 1701

ARC 1701
Survey of Architectural Design I
3 Credits
Focuses on the effects of social, political and cultural forces on architecture from the earliest times through the Baroque era, with an emphasis on design and architectural expression.
Prerequisites: College level reading and writing skills are required.
Corequisite: ARC 1301
ARC 2201
Theory of Architecture
3 Credits
Focuses on the critical study of architecture with an emphasis on gaining an educated perspective of design methods. College level reading, writing and math skills are required.
Prerequisites: ARC 1301, ARC 1701
Corequisite: ARC 2303

ARC 2303
Architectural Design III
5 Credits
Focuses on diagramming, design response and decision making. College level reading, writing and math skills are required.
Prerequisites: ARC 1301, ARC 1302 and ARC 1701
Corequisite: ARC 2201

ARC 2304
Architectural Design IV
5 Credits
Focuses on how human action, structure, enclosure systems, geography and history influence architectural design. Completion of ARC 1301, ARC 1701, ARC 2201 and ARC 2303 strongly recommended. Completion of BCN 1250, TAR 1120 and TAR 1122C strongly recommended for AS.ADCT program. Enrollment in ARC 2501 strongly recommended.

ARC 2461
Materials and Methods I
3 Credits
Provides an introduction to materials and construction processes as they influence building and environmental design. Completion of ARC 1301 and ARC 1701 strongly recommended for the AA.ARC program. Completion of BCN 1210 and BCN 2272 strongly recommended for the AS.ADCT program. Enrollment in ARC 1302 or TAR 1120 strongly recommended. College level reading and writing skills are required.

ARC 2501
Architectural Structures I
4 Credits
An introduction into structural theory and analysis of planner trusses, beams and columns subjected to gravity loads. Topics include shear and moment diagrams and the determination of section properties, internal stresses, deflection and internal forces. Completion of ARC 2461 strongly recommended. Enrollment in ARC 2304 strongly recommended.

ARH 1050
Art History I
3 Credits
Presents a historical review of Western art from the prehistoric period through the Renaissance with an examination of representative works in painting, sculpture, architecture and the minor arts. To insure student success, it is highly recommended that ENC 1101 be taken either prior to or in conjunction with this class.
Prerequisites: College level reading and writing skills are required.

ARH 1051
Art History II
3 Credits
Covers the major representative works of art from the Baroque through the 20th century, with an examination of painting, sculpture and architecture. To insure student success, it is highly recommended that ENC 1101 be taken either prior to or in conjunction with this class.
Prerequisites: College level reading and writing skills are required.

ART 1202C
Design Foundations
3 Credits
An introduction to basic visual art studio concepts. This course includes fundamentals of art making, the elements of two and three dimensional forms, modes of representation and visual art theory. Studio assignments are supplemented by class critique, discussion and hands on experimentation with various media. Emphasis is placed on creative expression and examination of visual elements.

ART 1203C
Three Dimensional Design
3 Credits
The visual elements: unity, balance, color, etc., used in both two and three dimensional design remain the same but their application to three dimensions changes radically because of the unique effects created by light and shadow. The student will be subjected to many lectures and projects concerning these effects. The lectures are intended to cover those elements that occur in every three dimensional discipline. Projects will be assigned individually in order to satisfy all interests. Students will then be able to develop aesthetic values in all disciplines.
Prerequisite: ART 1202C

ART 1300C
Drawing I
3 Credits
Covers the basic principles of drawing tangibles such as still life, landscape and the nude figure. The course deals with black and white media such as pencil and charcoal. The class topics include composition, line, value, volume, negative space, directional forces, perspective and proportion. Drawing I is recommended before taking upper level courses: painting, computer graphics, photography, sculpture, ceramics and printmaking.
ART 2301C  
**Drawing II**  
3 Credits  
Covers advanced problems in color media and the exploration of a variety of media and formats. Topics include investigation of contemporary personal direction and the development of a portfolio.  
Prerequisite: ART 1300C

ART 2400C  
**Printmaking I**  
3 Credits  
Provides an introduction to printmaking, including the basic techniques of lithography, etching and silk screen. A special fee will be charged for this course.  
Prerequisite: ART 1202C

ART 2401C  
**Printmaking II**  
3 Credits  
Covers advanced printmaking techniques, such as multiple printing, registration and chemical reversals, with an emphasis on creativity and the development of a personal style. A special fee will be charged for this course.  
Prerequisite: ART 2400C

ART 2406C  
**Printmaking III**  
3 Credits  
Emphasizes individual style in printmaking and the development of personal exhibit. A special fee will be charged for this course.  
Prerequisite: ART 2401C

ART 2500C  
**Painting I**  
3 Credits  
Covers basic painting techniques with an emphasis on classic and contemporary applications of oil and acrylic media. Topics include the use of composition, color, texture, form and value through still life, landscape, portrait, figure and old masters reproduction.  
Prerequisite: ART 1300C

ART 2501C  
**Painting II**  
3 Credits  
Emphasizes the development of a personal and creative use of painting media through an exploration of contemporary imagery. Students will pursue personal imagery or select eight options from contemporary art movements.  
Prerequisite: ART 2500C

ART 2600C  
**Introduction to Digital Art**  
3 Credits  
This course is intended to introduce students to basic digital imaging manipulation skills within the fine art context of creative expression. Focus on digital imaging manipulation techniques learned within a raster-based environment, primarily including the fundamentals of various special effects, filters, layers and masks used to explore the creation of artistically expressive images. Students will use current computer imaging software to create original art in a variety of final output formats. Hardware and image input processes are also discussed.  
Prerequisite: ART 1202C or PGY 2801C

ART 2701C  
**Sculpture I**  
3 Credits  
Covers the problems and techniques of applied three-dimensional design, with an emphasis on the use of materials and tools. Topics include clay, plaster, stone, wood, metal and wax. A special fee will be charged for this course.  
Prerequisite: ART 1203C

ART 2702C  
**Sculpture II**  
3 Credits  
Provides continued experience with expression in three-dimensional forms. This course will require students to conduct independent investigations in the design and creation of several sculpture projects. Techniques may include metal fabrication, glass casting, stone carving, woodworking, installations, wax and metal casting. A special fee will be charged for this course.  
Prerequisite: ART 2701C or permission of instructor.

ART 2750C  
**Ceramics I**  
3 Credits  
An introductory course emphasizing the total ceramic process from moist clay to fired ware. A special fee will be charged for this course.

ART 2751C  
**Ceramics II**  
3 Credits  
Emphasizes the processes of casting, wheel-thrown forms, hand building and glaze formulation. A special fee will be charged for this course.  
Prerequisite: ART 2750C

ART 2901  
**Directed Independent Study: Ceramics**  
3 Credits  
This course is designed to establish a framework for further self-learning in various areas of ceramics for the advanced student. The student will shape the course to fit their needs by planning activities and preparing a contract coordinated with an art faculty member. The contract will specifically outline a specific project, or a particular set of goals and requirements that the student wishes to achieve. The contract must be satisfactorily completed and reviewed by the assigned faculty member. May be taken four times for credit.
ART 2902
Directed Independent Study: Drawing
3 Credits
This course is designed to establish a framework for further self-learning in various areas of drawing for the advanced student. The student will shape the course to fit their needs by planning activities and preparing a contract coordinated with an art faculty member. The contract will specifically outline a specific project, or a particular set of goals and requirements that the student wishes to achieve. The contract must be satisfactorily completed and reviewed by the assigned faculty member. May be taken four times for credit.

ART 2903
Directed Independent Study: Painting
3 Credits
This course is designed to establish a framework for further self-learning in various areas of painting for the advanced student. The student will shape the course to fit their needs by planning activities and preparing a contract coordinated with an art faculty member. The contract will specifically outline a specific project, or a particular set of goals and requirements that the student wishes to achieve. The contract must be satisfactorily completed and reviewed by the assigned faculty member. May be taken four times for credit.

ART 2904
Directed Independent Study: Sculpture
3 Credits
This course is designed to establish a framework for further self-learning in various areas of sculpture for the advanced student. The student will shape the course to fit their needs by planning activities and preparing a contract coordinated with an art faculty member. The contract will specifically outline a specific project, or a particular set of goals and requirements that the student wishes to achieve. The contract must be satisfactorily completed and reviewed by the assigned faculty member. May be taken four times for credit.

ART 2905
Directed Independent Study: Art
3 Credits
Designed to establish a framework for further self-learning in various areas of visual arts for the advanced student. The student will shape the course to fit their needs by planning activities and preparing a contract coordinated with an art faculty member. The contract will specifically outline a specific project, or a particular set of goals and requirements that the student wishes to achieve. The contract must be satisfactorily completed and reviewed by the assigned faculty member. May be taken four times for credit.

ART 2930C
Selected Topics in Art
3 Credits
Selected Topics in Art is a studio course centered around topics of special interest to the class and professor. Topics or focus will be based on the needs and areas of interest, which may vary from semester to semester. Exceptions to the prerequisite will be considered by the instructor. Transfer credit is the prerogative of the receiving institution. May be taken eight times for credit.
Prerequisites: ART 1202C or ART 1300C or ART 2500C

ART 2950C
Professional Art Practices
3 Credits
This class is designed to provide students with the opportunity to learn professional art practices through hands on experience. Skill sets taught will revolve around the development of a personal artist's portfolio, intended as an aid for college placement submissions as well as for proposals for personal exhibitions. Additional skill sets will also revolve around learning the practices of gallery operations.
Prerequisite: ART 1202C

ASL 1140C
American Sign Language I
4 Credits
Provides an overview of the American Sign Language and deafness in America with an emphasis on the linguistics and vocabulary of ASL and the development of conversational sign language skills. Laboratory time is incorporated to reinforce material presented and to emphasize practice.

ASL 1150C
American Sign Language II
4 Credits
Focuses on the development of intermediate conversational American Sign Language skills with an emphasis on basic expression and reception including laboratory time designed to reinforce material presented through the use of directed practice to improve receptive and expressive signing skills and intermediate level receptive and expressive ASL conversation.
Prerequisites: ASL 1140C or ASL 1140 and ASL 1140L

ASL 1300C
American Sign Language Applied Linguistics
4 Credits
Focuses on the semantics, idiomatic usage and syntax of the American Sign Language.
Prerequisite: ASL 2160C or ASL 2130 and ASL 2130L

ASL 1430
Fingerspelling
2 Credits
Focuses on receptive and expressive finger spelling using the American Manual Alphabet, with an emphasis on improving basic receptive proficiency as well as clarity and rhythm of expression.
Prerequisite: ASL 1140

ASL 1510
Introduction to Deaf Culture
3 Credits
Provides an overview of American deaf culture with an emphasis on the impact of deafness on the individual and the family, social patterns of the deaf community and historical and changing attitudes toward people with disabilities.
Prerequisites: College level reading and writing skills required.
ASL 2160C
American Sign Language III
4 Credits
Focuses on advanced skills in American Sign Language structure and regional idiomatic use of ASL with an emphasis on non-voiced conversational signed sentences. Includes laboratory time designed to reinforce in a lab setting material presented through directed practice. Access to laboratory materials will provide opportunities for students to practice and improve receptive and expressive signing skills, reinforcing advance level spontaneous ASL conversation.
Prerequisites: ASL 1150C or ASL 1150 and ASL 1150L

ASL 2210C
American Sign Language IV
4 Credits
Focuses on the development of advanced conversational American Sign Language skills with an emphasis on complex grammar, metaphorical and idiomatic vocabulary and facial expressions. Includes laboratory time designed to reinforce in a lab setting material presented through the use of directed practice. Access to laboratory materials will provide opportunities for students to practice and improve receptive and expressive sign skills, reinforcing advanced level spontaneous ASL conversation.
Prerequisites: ASL 2160C or ASL 2160 and ASL 2160L

AST 1002C
Astronomy
3 Credits
An introductory course in astronomy which presents a survey of the current knowledge of our universe as well as the contemporary, prevailing scientific viewpoint of its nature, its origins, and the evolution and development of its constituents. Topics include our own solar system, other star systems (including planetary systems), stars in general, galaxies, quasars, the universe itself, and the prospects of intelligent life elsewhere. Where appropriate, lectures will be supplemented by hands-on student activities as well as demonstrations and audio visual presentations. A special fee will be charged for this course.
Prerequisites: College level reading, writing and math skills required.

AST 1002H
Honors Astronomy
3 Credits
Same as AST 1002C with honors content. Honors Institute permission required. A special fee will be charged for this course.
Prerequisites: College level reading, writing and math skills required.

ATE 1001
Introduction to Veterinary Technology
1 Credit
An introductory course for students accepted in the Veterinary Technology Program. Provides the legal and ethical standards or veterinary technicians, workplace professional conduct, resources for current issues, work environment safety, zoonotic disease risks and career opportunities.
Prerequisites: College level reading, writing and math skills required.

ATE 1110
Animal Anatomy
3 Credits
This course covers the basic gross and microscopic anatomy of domestic animals, especially the canine and feline with emphasis on locating and identifying anatomical regions and landmarks and applications. The student will be introduced to the descriptive and topographical terms needed to communicate to the professional staff.
Prerequisites: Admission to the Veterinary Technology Program. College level reading, writing and math skills required.
Corequisites: ATE 1110L, ATE 1211

ATE 1110L
Animal Anatomy Laboratory
1 Credit
This course is designed to acquaint the student with the fundamental techniques involved in anatomic dissection as well as necropsy procedures. This laboratory will correlate with ATE 1110 lecture material and will help visualize concepts.
Prerequisites: College level reading, writing and math skills required.
Corequisites: ATE 1110, ATE 1211

ATE 1211
Animal Physiology
3 Credits
This course is designed to acquaint the student with physiology of domestic animals. Emphasis is placed on the functions of organ systems relevant to veterinary technology. Aspects of physiology relating to the pathogenesis of certain diseases will be discussed.
Prerequisite: Admission to the Veterinary Technology Program.
Corequisites: ATE 1110, ATE 1110L

ATE 1311L
Veterinary Office Procedure Lab
1 Credit
Designed to acquaint the student with office procedures, client education, mathematics and veterinary computer applications.
Prerequisite: Admission to the Veterinary Technology Program.

ATE 1630
Pharmacology for Vet Techs
2 Credit
Designed to explain the drug classifications pertaining to animal use, methods of calculating appropriate drug dosage, routes of administration and evaluation of drug efficacy.
Prerequisites: ATE 1944, ATE 2639 and ATE 2639L with a minimum grade C.
ATE 1650L  
Veterinary Clinical Practice Lab I  
1 Credit  
Acquaints the student with basic laboratory and nursing skills, including restraint, history taking, exam room techniques, administration of medication, basic parasitology, and clinical pathology procedures.  
Prerequisite: Admission to the Veterinary Technology Program.

ATE 1741  
Veterinary Medical Terminology  
1 Credit  
Introduces the student to medical terms, laymen's terms and abbreviations utilized by veterinarians and their clients. It includes canine and feline breed identification.  
Prerequisites: College level reading, writing and math skills required.

ATE 1943  
Veterinary Work Experience I  
1 Credit  
A course consisting of supervised clinical experience in a workplace approved and monitored by the instructor. Skills emphasized in curriculum up to this point will be reinforced.  
Prerequisites: ATE 1650L, ATE 1311L, ATE 1110, ATE 1110L, ATE 1211 and ATE 1741 with a minimum grade of C.

ATE 1944  
Veterinary Work Experience II  
1 Credit  
A course consisting of supervised clinical experience in a workplace approved and monitored by the instructor. Skills emphasized in curriculum up to this point will be reinforced.  
Prerequisites: ATE 1943, ATE 2639L, ATE 2639L, ATE 2636, ATE 2661 and ATE 2671L with minimum grade of C.

ATE 2020  
Contemporary Clinical Issues  
3 Credits  
Focuses on the contemporary and anticipated developments in veterinary medicine, surgery, dentistry and behavior. Students will become familiar with related medical terms, protocols and needed materials and supplies.  
Prerequisites: ATE 1630, ATE 2050, ATE 2611, ATE 2631, ATE 2651L, ATE 2722, and ATE 2945 with a minimum grade of C.

ATE 2050  
Small Animal Breeds and Behavior  
1 Credit  
This course introduces the student to normal canine and feline behavior, obedience training, and feline training. Discussion topics include normal canine and feline behavior and cause of behavior problems in dogs and cats. The student will train a dog and cat, will discuss or apply corrections for common behavioral problems, and will learn about the different canine and feline breeds.  
Prerequisites: ATE 1944, ATE 2639, ATE 2639L with a minimum grade of C.

ATE 2501  
Veterinary Professional/Development Ethics Seminar  
1 Credit  
This course introduces the student to the laws and agencies governing the care, use and movement of animals. Veterinary ethics, resume writing and employment skills, and current trends in veterinary practice will also be described.  
Prerequisite: College level reading, writing, and math skills are required.

ATE 2611  
Animal Medicine I  
3 Credits  
Designed to acquaint the student with concepts in microbiology, virology and immunology and vaccinology.  
Prerequisites: ATE 1944, ATE 2639 and ATE 2639L with a minimum grade of C.

ATE 2612  
Small Animal Nursing II  
3 Credits  
A study of the basic concepts of nutrition, obstetric, and pediatric care, as well as the important aspects regarding zoonotic diseases, public health and animal behavior. The student will also be introduced to alternative medicine, including holistic concepts, homeopathic, acupuncture, chiropractic and other emerging specialties.  
Prerequisites: ATE 1630, ATE 2050, ATE 2611, ATE 2631, ATE 2651L, ATE 2722 and ATE 2945 with a minimum grade of C.

ATE 2614  
Animal Medicine II  
3 Credits  
Designed to acquaint the student with concepts in causes and nature of disease, toxicology, and an overview of pathologies of major systems.  
Prerequisites: ATE 1630, ATE 2050, ATE 2611, ATE 2631, ATE 2651L, ATE 2722, and ATE 2945 with a minimum grade of C.

ATE 2631  
Small Animal Nursing I  
3 Credits  
The student will master the technical skills of medicating animals, anesthetizing animals and taking and processing radiographs. This course also covers general care, including grooming and bathing, feeding and watering, nail trimming, ear cleaning, expressing anal sacs, and determining vital signs.  
Prerequisites: ATE 1944, ATE 2639 and ATE 2639L with a minimum grade of C.

ATE 2636  
Large Animal Clinical and Nursing Skills  
2 Credits  
Designed to acquaint the student with the fundamentals of large animal breed identifications, restraint, reproductive and lactation physiology, nutrition and the technician's role in veterinary care.  
Prerequisites: ATE 1110, ATE 1110L, ATE 1211, ATE 1311L, ATE 1650L and ATE 1741 with a minimum grade of C.
ATE 2638
Animal Clinical Pathology I
3 Credits
This course is designed to introduce the veterinary technician to hematology, the hematopoietic and serology. Emphasis is placed on normal blood smears and common changes seen during disease stages of the domestic animals. Blood chemistry, complete blood count analyzers, and collection systems are discussed.
Prerequisites: ATE 1110, ATE 1110L, ATE 1211, ATE 1311L, ATE 1650L and ATE 1741, with a minimum grade of C.
Corequisite: ATE 2638L

ATE 2638L
Animal Clinical Pathology Lab I
2 Credits
This course is designed to acquaint the student with clinical laboratory procedures covered in ATE 2638. Areas of emphasis include hematology, complete blood counts and coagulation as well as general laboratory etiquette.
Prerequisites: ATE 1110, ATE 1110L, ATE 1211, ATE 1311L, ATE 1650L and ATE 1741, with a minimum grade of C.
Corequisite: ATE 2638

ATE 2639
Animal Clinical Pathology II
3 Credits
This course covers selected topics in clinical parasitology, fecal analysis urinalysis and cytology.
Prerequisites: ATE 1943, ATE 2636, ATE 2638, ATE 2638L, ATE 2652L, ATE 2661 and ATE 2671L, with a minimum grade of C.
Corequisite: ATE 2639L

ATE 2639L
Animal Clinical Pathology Lab II
2 Credits
This course is designed to acquaint the student with clinical laboratory procedures covered in ATE 2639. Areas of emphasis include parasitology, urine and fecal analysis, cytology bacterial and fungal cultures.
Prerequisites: ATE 1943, ATE 2636, ATE 2638, ATE 2638L, ATE 2652L, ATE 2661 and ATE 2671L with a minimum grade of C.
Corequisite: ATE 2639

ATE 2651L
Small Animal Nursing Lab
2 Credits
This course is designed to acquaint the student with exam room and restraining techniques, anesthesia and surgical protocols and diagnostic imaging procedures used in veterinary hospitals.
Prerequisites: take ATE 1944, ATE 2639 ATE 2639L with a minimum grade of C.

ATE 2652L
Veterinary Clinical Practice Lab II
1 Credit
Acquaints the student with the basic knowledge of skills used in veterinary practice for anesthesia induction and monitoring, patient preparation for surgery, surgical assistance and radiographic technique.
Prerequisites: ATE 1110, ATE 1110L, ATE 1211, ATE 1311L and ATE 1650L, and ATE 1741 with a minimum grade of C.

ATE 2661
Large Animal Diseases
1 Credit
This course is designed to acquaint the student with the fundamentals of preventive medicine and common diseases present in large animals.
Prerequisites: ATE 1110, ATE 1110L, ATE 1211, ATE 1311L, ATE 1650L and ATE 1741 with a minimum grade of C.

ATE 2671L
Medicine of Laboratory Animals
2 Credits
A study of the technical and clinical aspects of laboratory animal care, including restraint and handling, common diseases, and nutrition.
Prerequisites: ATE 1110, ATE 1110L, ATE 1211, ATE 1311L, ATE 1650L and ATE 1741 with a minimum grade of C.

ATE 2710
Animal Emergency Medicine
2 Credits
This course is designed to acquaint the student with fundamentals of emergency veterinary medicine, including veterinary first aid, toxicology and specialized medical techniques and procedures.
Prerequisites: ATE 1630, ATE 2050, ATE 2722, ATE 2611, ATE 2631, ATE 2651L and ATE 2945 with a minimum grade of C.

ATE 2722
Avian and Exotic Pet Medicine
1 Credit
Describes exotic animal and avian medical care. Veterinary technicians will understand the idiosyncrasies of these species in order to become proficient and useful to the exotic and avian practitioner.
Prerequisites: ATE 1944, ATE 2639 and ATE 2639L with a minimum grade of C.

ATE 2945
Veterinary Work Experience III
1 Credit
A course consisting of supervised clinical experiences in a workplace approved and monitored by the instructor. Skills emphasized in curriculum up to this point will be reinforced.
Prerequisites: ATE 1944, ATE 2639, and ATE 2639L with a minimum grade of C.

ATE 2946
Veterinary Work Experience IV
1 Credit
A course consisting of supervised clinical experiences in a workplace approved and monitored by the instructor. Skills emphasized in curriculum up to this point will be reinforced.
Prerequisites: ATE 1630, ATE 2050, ATE 2611, ATE 2631, ATE 2651L, ATE 2722 and ATE 2945 with a minimum grade of C.
BCN 1001  
**Introduction to Building Construction**  
3 Credits  
This course is designed to give the student an overview of the construction industry and its various methods, materials, participants, safety, codes, equipment, documents, agencies and laws. Both residential and commercial construction will be addressed. The role that engineers, architects and contractors play in a project design and construction are also introduced. Credit for this course does not apply to the associate in arts degree or the AS/AAS degree in Architectural Design and Construction Technology.  
Prerequisites: College level reading, writing and math skills are required.

BCN 1210  
**Construction Materials and Processes**  
3 Credits  
Provides a basic understanding of materials and manufacturing processes consistent with sound engineering principles; focuses on ferrous and non-ferrous metals, stainless steel, molten metal, heat treatment, powder metallurgy, inspection and quality control, machine tool elements, numerical control, turning, boring and milling machines. Topics include gears and thread cutting, methods of processing plastics, welding, soldering, braising and the process of classifying woods.

BCN 1250  
**Introduction Graphic Technology**  
3 Credits  
Introduces the principles of industrial graphics. Topics include the care and use of drawing instruments, lettering, multi view projections and sketching techniques. Designed for the student without drawing experience.

BCN 2272  
**Blueprint Reading**  
3 Credits  
Includes the principles of interpreting blueprints and specifications common to the building trades. Focuses on reading details for grades, foundations, floor plans, elevations, walls, doors, windows and roofs of residential, light and heavy construction.

BCN 2291C  
**Construction Materials Testing**  
3 Credits  
Studies the techniques of testing construction materials to determine their physical properties, with an emphasis on soils, Portland cement, concrete and asphalt. A special fee will be charged for this course.  
Prerequisite: BCN 1210

BCN 2405  
**Structural Design**  
3 Credits  
Structural Design is an introduction to the physical science of applied mechanics. Emphasis is placed on sizing wood and steel members for light construction.

Prerequisites: BCN 1210, EVS 2893C, MGF 1106, PHY 1025, and PHY 1025L

BCN 2939C  
**Construction Capstone**  
3 Credits  
The construction capstone course will allow the student to demonstrate the required skill sets acquired throughout the AS degree Architectural Design and Construction Technology program and will prepare the student for transition into the designing and construction industries. All aspects of design, material and building component selection, estimating and use of computer-aided design and drafting will be evaluated. This course is presented in an independent study format with assigned due dates and meeting times.

BCN 2942  
**Construction Internship**  
3 Credits  
Student works a minimum of 140 hours during one term in a pre-approved industrial job; also attends a weekly seminar.

BCT 1040  
**Introductory Blueprint Reading**  
3 Credits  
This introductory class is a survey of the various types of drawings and other documents commonly used in the construction industry. It includes topics such as terminology, abbreviations, symbols, notation, scales, dimensions, meanings of lines, technical and orthographic projections, types of construction, and trade information. Credit for this course does not apply to the associate in arts degree or the AS/AAS degree in Architectural Design and Construction Technology.  
Prerequisites: College level reading, writing and math skills are required.

BCT 1081  
**Introduction to Materials and Methods**  
3 Credits  
This course provides an in-depth study of building materials and introduces building terminology and methods of construction with emphasis placed on site work, concrete, masonry, metal, wood, plastic, thermal moisture protection, and finishes. The topics presented will focus on characteristics of the materials and products regarding their strength, heat flow, weathering qualities and how these will affect their use in construction projects. Credit for this course does not apply to the associate in arts degree or the AS/AAS degree in Architectural Design and Construction Technology.  
Prerequisites: College level reading, and writing skills are required.

BCT 1120  
**Leveling Instruments, Site Preparation and Layout**  
3 Credits  
Topics include the importance of accurate work in laying out buildings with the use of different leveling instruments and the many aspects of site preparation and layout of buildings and houses. Credit for this course does not apply to the asso-
ciate in arts degree or the AS/AAS degree in Architectural Design and Construction Technology. Prerequisites: College level reading, writing, and math skills are required.

**BCT 1720 Construction Methods**

3 Credits

The construction methods course is an introduction to systems, methods, equipment, and construction practices available and commonly used to perform the major elements of a light construction project. A typical project is followed from contract to occupancy in classroom discussion and field trips. Numerous field trips to current construction sites are taken during the term. Emphasis is placed on sequence of activities and scheduling the project. Scheduling the construction project is an integral part of this course. Students will complete a bar graph and Gantt chart using the critical method of scheduling. Prerequisite: BCN 1210

**BCT 1760 Building Codes and Safety Regulations**

3 Credits

Emphasis is on the Florida Building Code and to understand other applicable regulations in order to organize and manage a construction project with regulations and regulatory agencies in mind. Contract documents are created to reflect these regulations. Prerequisite: BCN 1210

**BCT 1773 Building Construction Estimating, Scheduling and Cost Control**

3 Credits

This course introduces the student to techniques used to estimate the cost of structures, schedule labor and materials and to analyze actual and estimated costs of construction to facilitate efficient management and administration. Credit for this course does not apply to the associate in arts degree or the AS/AAS degree in Architectural Design and Construction Technology. Prerequisites: College level reading, writing and math skills are required.

**BCT 2705 Construction Management**

3 Credits

Construction management is an introduction to basic legal skills and practices needed to manage a construction office. Emphasis is on the business organization, Florida construction licensing law, the general and special conditions of construction contracts and subcontracts, the Florida mechanics lien law, workers compensation and liability insurance coverage and state and federal tax reporting requirements. Prerequisite: ENC 1101

**BCT 2730 Construction Supervision**

3 Credits

This course examines techniques of supervision and management of human and other resources necessary to complete a construction project. Construction industry organization and management structure in relation to scheduling, material procurement, and equipment management. Human resource topics include labor and human relations, safety, morale, motivation. Leadership, delegation of authority in management of skilled and unskilled labor, technical, professional and administrative personnel topics are also covered. Prerequisite: BCT 2705

**BCT 2743 Construction Law**

3 Credits

This course is intended to provide a general overview of the legal issues and the applicable laws relating to the construction industry in the State of Florida. Students will be introduced to the basic legal concepts and their applications in order to succeed in the construction business. Students will build knowledge and interpretation skills through the identification and discussion of basic legal issues, and will gain a clear understanding of the function and purpose of these skills in the construction industry. Prerequisites: BCT 2750, BCT 1760

**BCT 2750 Building Construction Contracts and Finance**

3 Credits

A study of building construction, contracting and finance and related contract requirements. Topics include construction loans, permanent building mortgages, construction bids and contracts, penalty and incentive provisions, progress payments and retention, escalation provisions, cost extras, performance and bid bonds, company profits, cash flow and business loans. Prerequisite: BCT 1760

**BCT 2761 Structural Systems in Construction**

3 Credits

To familiarize students with structural terminology, practices, methods, code requirements and safety and health criteria in construction. Credit for this course does not apply to the associate in arts degree or the AS/AAS degree in Architectural Design and Construction Technology. Prerequisites: College level reading, writing and math skills are required.

**BCT 2770C Construction Estimating**

3 Credits

Deals with the computation of building costs for typical construction projects and the computation of labor and materials from take off to the final estimates. Completion of BCN 1210 and ARC 2461 strongly recommended. Enrollment in ARC 2304 and ARC 2501 strongly recommended.
BOT 1000
Plant Physiology and Growth  
3 Credits  
Focuses on the processes which occur in plants. Topics include photosynthesis, respiration, mineral nutrition, transpiration and plant growth regulations.

BRC 1301
Introduction to Financial Institutions  
3 Credits  
An introduction to the U.S. banking system, the role of banks, credit unions and thrifts as financial service providers. Banking principles, various products/services, and the laws and regulatory agencies governing the different types of financial institutions will be discussed.

BRC 1321
Principles of Credit and Collections  
3 Credits  
This course is designed for people planning a career in credit union management and is approved by the credit union national association for certification as a credit union executive. Topics include, the nature and role of credit decision; decision making and salesmanship in consumer credit; numerical scoring systems, collections policies, practices and systems; business and government credit functions; and control of credit operations.

BSC 1005
Biological Foundations  
3 Credits  
Designated for non-science majors. Topics include the introduction of general biological concepts, genetics, and a brief survey of living organisms.  
Prerequisites: College level reading, writing and math skills are required.  
Corequisite: BSC 1005L

BSC 1005L
Biological Foundations Lab  
1 Credit  
Laboratory intended to accompany BSC 1005 lecture. A special fee will be charged for this course.  
Prerequisites: College level reading, writing and math skills are required.  
Corequisite: BSC 1005

BSC 1010
Biological Science I  
3 Credits  
Intended for science majors. Introduces students to the science of biology. Topics include aspects of biochemistry, cytology, cellular metabolism, and genetics. College level reading, writing and math skills are required.  
Corequisite: BSC 1010L, CHM 1045

BSC 1010L
Biological Science I Lab  
1 Credit  
A special fee will be charged for this course. College level reading, writing and math skills are required.  
Prerequisites: College math skills required.  
Corequisite: BSC 1010

BSC 1011
Biological Science II  
3 Credits  
Intended for science majors. Emphasizes a phylogenetic survey of the five kingdoms of living organisms, together with an introduction to ecology and behavior.  
Prerequisites: BSC 1010, BSC 1010L  
Corequisite: BSC 1011L

BSC 1011H
Honors Biological Science II  
3 Credits  
Same as BSC 1011 with honors content. Honors Institute permission required.  
Prerequisites: BSC 1010, BSC 1010L  
Corequisite: BSC 1011L

BSC 1011L
Biological Science II Lab  
1 Credit  
College level reading skills required. A special fee will be charged for this course.  
Prerequisite: BSC 1010L  
Corequisite: BSC 1011

BSC 1025C
Nutrition and Drugs  
3 Credits  
Primarily intended for non-science majors. Focuses on basic nutrients and their roles in human nutrition. Topics include the problems and possible solutions of deficiency diseases, world food shortages, obesity, commonly used drugs, drug effects on the body and drug addiction. Combined and integrated with a hands-on laboratory component. A special fee will be charged for this course.  
Prerequisites: College level reading, writing and math skills required.

BSC 1085
Human Anatomy and Physiology I  
3 Credits  
Intended for Allied Health and science majors. Encompasses both anatomy and physiology; includes cell structure and function. Focuses on the study of human systems, particularly the integumentary, skeletal, muscular and nervous systems.  
Prerequisites: College level reading, writing and math skills required.  
Corequisite: BSC 1085L
BSC 1085L
Human Anatomy and Physiology Lab
1 Credit
A special fee will be charged for this course.
Prerequisites: College level reading and writing and math skills are required.
Corequisite: BSC 1085

BSC 1086
Human Anatomy and Physiology II
3 Credits
Focuses on cardiovascular, respiratory, digestive, endocrine, immune, lymphatic, urinary and reproductive systems.
Prerequisite: BSC 1085
Corequisite: BSC 1086L

BSC 1086L
Human Anatomy and Physiology II Lab
1 Credit
College level reading and writing skills are required. A special fee will be charged for this course.
Prerequisite: BSC 1085L
Corequisite: BSC 1086

BSC 1092
Human Biology
3 Credits
Intended for those not majoring in the biological sciences or allied health fields. Provides introductory material in human anatomy and physiology to focus on understanding the body organization and the interrelations of body organs systems.
Prerequisites: College level reading, writing and math skills required.
Corequisite: BSC 1092L

BSC 1092L
Human Biology Lab
1 Credit
Laboratory to accompany BSC 1092. A special fee will be charged for this course.
Prerequisites: College level reading, writing and math skills required.
Corequisite: BSC 1092

BSC 1420C
Introduction to Biotechnology
3 Credits
This course provides an introduction to the basic foundations of biotechnology, and the techniques used in research and industry environments. This course will integrate historical background, current concepts, and techniques in DNA and RNA technology and their role in cell and genetic disorders. Students will demonstrate knowledge of the scientific method, lab safety, and best laboratory practices. Students will demonstrate competency with various instrumentation, including pH meters, centrifuge, spectrophotometer, chromatography, and gel electrophoresis.

BSC 2420
Biotechnology I
3 Credits
This course expands on topics introduced in BSC 1420C, focusing on recombinant DNA and RNA technology, and genetic engineering. The course will present the basics of genomics and proteomics with DNA protein structure function. There will be a strong emphasis on biomedical biotechnology including the human genome, pharmacogenomics, regenerative medicine, gene therapy, cloning and stem cell applications and implications. Practical applications of biotechnology will be explored.
Prerequisites: BSC 1010, BSC 1010L, BSC 1420C, CHM 1045, CHM 1045L
Corequisite: BSC 2420L

BSC 2420L
Biotechnology I Laboratory
2 Credits
This laboratory course will provide practical hands-on experience in basic biotechnology laboratory methods and techniques.
Prerequisites: BSC 1010, BSC 1010L, BSC 1420C, CHM 1045, CHM 1045L
Corequisite: BSC 2420

BSC 2427
Biotechnology II
3 Credits
This course will provide a relatively in-depth exploration of modern biotechnology as required for the study, development, and application of genetic engineering and biomedical biotechnology. There will be emphasis on pharmacogenomics, stem cell technology, and immunobiology. The practical applications of forensics, bioremediation, and medical, animal, plant biotechnology will be examined.
Prerequisites: BSC 2420, BSC 2420L
Corequisite: BSC 2427L

BSC 2427L
Biotechnology II Laboratory
2 Credits
This laboratory course will continue the study of modern molecular and cell biology with focus on advanced methods and techniques of biotechnology, emphasizing genomics, proteomics, genetic engineering and recombinant DNA technology.
Prerequisites: BSC 2420, BSC 2420L
Corequisite: BSC 2427

BSC 2943
Biotechnology Internship
3 Credits
The objective of this course is to provide students with meaningful work experience. This is a practical application of procedures and professionalism in real world settings with biotechnology and closely related fields.
Prerequisites: BSC 2427, BSC 2427L
BUL 2241
Business Law I
3 Credits
Covers the main concepts of legal institutions, the legal environment, business ethics, public and private business law, contracts, business regulations the UCC (Uniform Commercial Code) and related laws. Prerequisites: College level reading and writing skills required.

BUL 2242
Business Law II
3 Credits
Covers commercial paper, agency, partnerships, corporations, secured transactions, bankruptcy, securities regulations, real and personal property, trusts, wills and associated legal problems. Prerequisite: BUL 2241

CAP 1023
Introduction to Game Development
3 Credits
Survey of the various aspects of game development including: game programming and scripting, design, modeling and rendering. Students will work on projects involving design and storyboarding, computer programming and scripting, as well as multimedia presentations and artwork. Aspects of the gaming industry will be covered to include human computer interaction, mathematical and physics consideration, and the business of game production and distribution. Prerequisites: CGS 1000

CAP 2042
Game Design and Development
3 Credits
In this hands-on course the student will practice creating 2D and 3D graphics using game and simulation software. The student will perform polygonal as well as nurbs modeling to create programmable 3D objects able to be rendered for simulation software and computer games, projects include creating objects ad performing subdivision modeling to include splitting and extruding surfaces. Also, students will practice various animation techniques using software rendering as well as programming code. Prerequisite: CAP 1023

CAP 2043
Advanced Game Design and Development
3 Credits
In this hands-on course the student will continue to create animations for computer games and simulation software. The student will perform projects that include using ray tracing rendering, animating motion along a path, programming animation, rendering scenes and apply lighting and shading. Other projects allow the student to apply movement along nurbs and splines, as well as applying dynamics with particles and emitters. Rendering objects for use in computer game engines will also be covered. Prerequisite: CAP 2042

CAP 2816
Database Management II
1 Credit
Focuses on advanced data file techniques. Prerequisite: CGS 1540

CAP 2840
Personal Financial Management
1 Credit
Focuses on using a computer to manage personal finances, with an emphasis on determining a budget, entering checkbook information, preparing a personal net worth statement and keeping a record of monthly expenses.

CAP 2939
Digital Media/Multimedia Technology Capstone
3 Credits
The capstone course is designed for the student to demonstrate his/her knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project based experience. The student's project requirements will be designed in concern with his/her area of curriculum emphasis. Permission from instructor required.

CCJ 1010
Introduction Criminology
3 Credits
Focuses on the complex factors related to crime in America, including basic issues, scope and economic impact.

CCJ 1020
Introduction to Criminal Justice
3 Credits
Covers the historical and philosophical backgrounds of criminal justice agencies and examines the development of the courts, correctional agencies, and law enforcement processes. Topics include the Supreme Court, the 14th Amendment, individual rights, and requirements and opportunities in the law enforcement and correctional fields.

CCJ 1488
Ethics in Criminal Justice
3 Credits
This course is a practical overview of key issues, questions, and concepts in applied ethics in the field of criminal justice. The course will include the historical development of ethical theories, morality and law, and ethical decision making in law enforcement, courts, and corrections.

CCJ 2013
Introduction to Victimology
3 Credits
This course is about victims of crime. It provides an introductory level review of the many facets of criminal victimization and the efforts to assist crime victims. The course covers a wide range of topics including trends and interpretations of victimization research, laws, programs, and services, the emotional and social impact of crime, victim rights and restitution and the extent of participation by victims in the criminal justice process.
CCJ 2111
Introduction to Theories of Criminal Behavior
3 Credits
This course presents the major theoretical explanations of crime and criminal behavior. It focuses on the historical development of criminological theory based on various definitions of crime. The primary purpose of this course is to provide a clear overview of the major academic explanations (or theories) that dominate criminology in an effort to clarify what is known about crime based upon empirical research. To this end, this course is designed to provide students with a basic understanding of historical and current criminological perspectives, as these are the foundations upon which both criminological research and public policy are based.

CCJ 2191
Introduction to Human Behavior in Criminal Justice
3 Credits
This course provides a study of human nature and the peculiarities of human behavior and how it relates to crime and delinquency with emphasis on how this behavior relates to the duties and responsibilities of the criminal justice practitioner. The course will emphasize abnormal behavior and how criminal justice practitioners should react with primary emphasis on the behavioral aspects of people in crisis situations and how criminal justice practitioners should respond. The course will deal with issues of police crisis intervention and crisis management.

CCJ 2600
Criminal Deviant Behavior in Society
3 Credits
Studies the various deviant behaviors with which criminal justice practitioners interact daily. Topics include the nature of deviance, sexual deviance, alcoholism, drug addiction, mental illness, violence, and suicide.

CCJ 2610
Introduction to Criminal Typologies
3 Credits
The primary goal of this course is for students to recognize and understand the utility of constructing typologies as a precursor to understanding criminal behavior. Students will review the differences in varying patterning of criminality.

CCJ 2618
Forensic Psychology
3 Credits
This course is an examination of the psychology of human behavior as it relates to crime. The student will be introduced to psychopathology, the sexually violent offender, and serial murderers. The student will also examine violent juvenile offenders and the process of psychological conditioning which allows them to commit violent criminal acts. The student will also be introduced to criminal profiling.

CCJ 2648
Organized Crime
3 Credits
This course involves an examination of organized crime, including its history, structures, activities and government efforts to control it.

CCJ 2671
Race, Gender, and Ethnicity in Criminal Justice
3 Credits
Discrimination and disparities have long been points of interest and discontent in the field of criminal justice. This course looks on the impact of race and ethnicity, class, gender, and sexuality in criminal justice. These four factors affect the administration of justice for offenders, and also impact the career of the criminal justice professional. The goal of the course is to broaden our understanding of diversity and discrimination in criminal justice.

CCJ 2685
Domestic and Sexual Violence
3 Credits
This course is designed to examine the various expressions of violence within the family structure including child, spouse, partner, and elder abuses. Topics will also include sexual abuse, sexual assault, stalking, and domestic homicide. Also included will be topics on the psychological and social causes of domestic and sexual violence, recognizing its signs, and studying its effect on its victims as well as programs and policies for prevention and treatment.

CCJ 2720
Introduction to Criminal Justice Research Methods
3 Credits
The primary goal of this course is for students to recognize and understand the basics of research structure within the criminal justice and criminology disciplines. Upon successful completion of this course, students will have an understanding of the social scientific approach which includes the fundamental concepts of ethics, research design, data collection and analysis, and finally interpretation.

CCJ 2910
Directed Research
3 Credits
An individualized study project which applies the objective approach in the observation and reporting of information relating to social problems, with a focus on understanding and interpreting data, as well as basic statistics. Documented research paper required and must relate to a criminal justice subject area in which internship is being done. College level reading and writing skills required. Prerequisites: Restricted to Criminal Justice majors only.

CCJ 2934
Contemporary Issues in Criminal Justice
3 Credits
This course will offer an extensive examination of selected contemporary issues in criminal justice.
**CCJ 2935**
**Seminar on Criminal Justice Issues**
3 Credits  
Focuses on selected topics and issues not usually covered in other courses.

**CCJ 2940**
**Criminal Justice Internship**
3 Credits  
Provides an opportunity for the student with no criminal justice experience to observe the criminal justice system in operation. The student will be expected to compare classroom theory with the day-to-day operation of the criminal justice agency and the roles and responsibilities of the professional in the field. The student will be required to spend a total of 100 clock hours, spread over the semester, in the agency.  
Prerequisites: Restricted to Criminal Justice majors only.

**CCJ 2949**
**Criminal Justice Field Studies**
3 Credits  
This course will provide students with an opportunity to learn about and observe the operations of various criminal justice agencies. Students will be expected to compare classroom theory with the day-to-day operations of various criminal justice agencies and the roles and responsibilities of their professionals in the field. The course will include classroom lectures and projects, agency ride-alongs, facility tours, court observations, and interviewing and shadowing agencies members. In addition to limited classroom meetings the student will also be required to spend a total of 100 clock hours spread over the semester in the field observing various agencies.

**CEN 2939**
**Network Administrator Capstone**
3 Credits  
The capstone course is designed for the student to demonstrate his/her knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project-based experience. The student’s project requirements will be designed in concern with his/her area of curriculum emphasis. Permission from instructor required.

**CET 1112C**
**Basic Digital Systems**
3 Credits  
This course is an introduction to basic digital electronics and is for the student who has previously taken EET 1083C or will be taking both classes in the same semester. Topics covered in this course are computer number systems, Boolean algebra, combinational logic circuits, logic family characteristics, and flip flops. Laboratory exercises will be assigned to reinforce the major concepts covered in the lecture segment of the course.

**CET 1123C**
**Introduction to Microprocessors**
3 Credits  
Presents introductory material on microprocessing. Topics include the microprocessor chip and its architecture, bus systems, memory map, input/output devices, interface devices, machine and assembly languages, instructions and addressing modes. Laboratory exercises are included.  
Prerequisite: CET 1112C

**CET 1172C**
**Computer Upgrading and Repair**
3 Credits  
Covers the knowledge and skills necessary for upgrading and repairing the hardware of a typical personal computer (PC). Includes the study of microprocessors, basic bus and input/output (I/O) interface types, and the types of semiconductor memories found in a typical PC. Also studied is the layout of the drives set up by a disk operating system and how the operating system works with the hardware. This course will further prepare the student for the A+ Certification test. Laboratory exercises are included.  
Prerequisite: CGS 1000

**CET 1174C**
**Advanced Computer Repair**
3 Credits  
This course is for someone working in a computer-related field or has completed CET 1172C. Provides hands-on PC repair experience, based on A+ certification. Covers advanced Windows PC software, hardware, and the most common problems that occur in PCs. IRQs, conflicts, registry, network, and browser problems are covered. Computer service business concepts are introduced. Laboratory exercises are included.  
Prerequisite: CET 1172C

**CET 1556C**
**Structured Cabling**
3 Credits  
Provides the student with the basic concepts in a complete cabling system. Topics include cable types and their characteristics, connector types, cable layouts for a simulated system backbone, cross connects, etc. and cable installation, testing and troubleshooting of a cable system. The course includes lab work and a lab fee requirement.  
Prerequisites: CTS 1305 or permission of instructor.

**CET 1600**
**Cisco Network Fundamentals**
3 Credits  
Prepares a student to apply and understand the basics of networking hardware. Course covers the OSI model and industry standards; network topologies; IP addressing, including subnet masks; and basic network design. This is the first of a four-part series designed to prepare students for the Cisco Certified Networking Associate examination.

**CET 1610**
**Cisco Router Technology**
3 Credits  
Designed to prepare a student to apply and understand the basics of networking hardware. The course covers beginning router configurations; routed and routing protocols; and introduction to LAN switching. This is the second of a four-part series to prepare students for the Cisco Certified Networking
Associate examination. The first part of this series is covered in CTS 1305.
Prerequisite: CET 1600

**CET 2113C**  
**Digital Systems Analysis**  
3 Credits  
This course is a continuation of the basic digital electronics covered in CET 1112C. The analysis of combinational logic and sequential logic circuits is covered in the lecture segment of the course. Circuits include adder/subtractor, registers, counters, multiplexors, and others. Laboratory exercises will be assigned to reinforce these major concepts and circuits.  
Prerequisite: CET 1112C

**CET 2152C**  
**Advanced Microprocessors**  
3 Credits  
Covers the communications between the microprocessor and external devices. Topics include writing and debugging communications programs, analyzing and building interface circuits. Laboratory exercises are included.  
Prerequisites: CET 1123C, CET 2113C

**CET 2335C**  
**Microcomputer Systems**  
3 Credits  
Covers the hardware of a typical personal microcomputer (PC). It includes the study of a 16-bit microprocessor, basic bus and input/output (I/O) interfaces, and the interfacing of semi-conductor memories found in a typical PC. Devices such as programmable interface adapters, programmable interrupt and direct memory access (DMA) controllers, and serial communications interface adapters are studied. The student will use the schematics of a PC and diagnostic tests to troubleshoot faults in an actual system. Laboratory work is required.  
Prerequisites: CET 1123C, CET 2113C

**CET 2615**  
**Cisco Advanced Router Technology**  
3 Credits  
Designed to prepare a student to apply and understand the advanced principles and applications of networking hardware. The course covers advanced router configurations; LAN switching; network management; and advanced network design. This is the third of a four-part series to prepare students for the Cisco Certified Networking Associate examination.  
Prerequisites: CET 1610

**CET 2939**  
**Computer Engineering Capstone**  
3 Credits  
The capstone course is designed for the student to demonstrate his/her knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project-based experience. The student's project requirements will be designed in concert with his/her area of curriculum emphasis. Credit for this course does not apply to the associate in arts degree. Permission from instructor required.

**CGS 1000**  
**Introduction to Computers and Technology**  
3 Credits  
Provides students with an introductory overview of the Internet, World Wide Web, impact of computer on society and business, historic development of data processing, basic functions and use of word processing, spreadsheet, database, and presentation system and desktop publishing software applications, basic skills using a Web browser and search engine, and careers in the field of computer science.

**CGS 1103**  
**Project Management**  
3 Credits  
This course introduces the student to the basics of project management in particular as project management applies to Web development. They learn to plan a project, create a project schedule, assign resources and costs, track projects, and share information across projects, applications and the World Wide Web.  
Prerequisites: CGS 1000

**CGS 1107**  
**Introduction to Computers**  
1 Credit  
An introductory computer literacy course for the general student population with emphasis on current technology and the implications for and the effects on our society. Topics will include cyber space; communications, including the impact of the Internet and World Wide Web; ethical, privacy, environmental, and health related issues. Software applications will include a brief introduction to Windows, word processing, spreadsheets, and graphics. Students will complete a variety of short cross curricular projects, integrating critical thinking skills and cooperative learning.

**CGS 1160**  
**Desktop Information Management**  
1 Credit  
A general introduction to the basic capabilities of a desktop information management program, such as Outlook. Topics covered include organizing information, managing your time and schedule, and communicating with other people.

**CGS 1500**  
**Applied Word Processing**  
1 Credit  
Focuses on basic word processing applications, with an emphasis on term papers, reports and resumes. Prerequisite for
this course are OST 1142 or ability to type 20 wpm or permission of instructor.

**CGS 1510**  
**Spreadsheet Applications I**  
1 Credit  
Focuses on basic spreadsheet applications such as replication, automatic recalculation, financial modeling, analysis and projection, and general mathematical calculations.  
Prerequisites: CGS 1000 or OST 1142 or permission of the instructor.

**CGS 1520**  
**Business Graphics I**  
1 Credit  
Focuses on graphic applications, with an emphasis on developing charts, displaying data in histograms, critical ratio graphs and scatter charts. Topics include line, vertical bar, horizontal single-sided and double-sided bar charts, as well as regression and mean calculations.  
Prerequisites: CGS 1000

**CGS 1521**  
**Adobe Photoshop Elements**  
1 Credit  
Introduces Adobe Photoshop Elements program. Focuses on simple editing techniques and manipulating and modifying objects.  
Prerequisite: CGS 1000

**CGS 1540**  
**Database Management I**  
1 Credit  
Teaches how to work effectively with a data management application, with an emphasis on assembling and organizing data in manageable records and files.  
Prerequisites: CGS 1000

**CGS 1554**  
**Internet Basics**  
1 Credit  
An introductory course designed to teach the basics of navigating the Internet and the World Wide Web. Topics include internetiquette, using search engines and file transfer protocols. A special fee will be charged for this course.  
Prerequisite: CGS 1000

**CGS 1555**  
**Introduction to Internet**  
3 Credits  
An introductory course designed to teach the basics of navigating the Internet and the World Wide Web. Students participate in online and offline activities such as accessing the Internet, sending electronic mail, browsing newsgroups, and completing research activities. Also discussed is Internetiquette acceptable behaviors and standards of conduct. A special fee will be charged for this course.  
Prerequisite: CGS 1000

**CGS 1577**  
**Presentation Systems**  
3 Credits  
Students in this course learn how to design and develop multimedia presentations using linear design. Students learn the differences between a presentation program and an authoring program. Project components will include text, graphics, sound, video, and animation. Students will learn to create, import, and scan these components.  
Prerequisite: CGS 1000

**CGS 1761**  
**Computer Operating Systems**  
3 Credits  
This course provides a basic history and overview of computer operating systems. Basic theories, concepts and terminology, and evolution of computer operating systems are covered. Development, function, and comparisons of common operating systems such as DOS, Windows 9x, Windows NT/2000, Unix/Linux, AS/400, and Mac OS are discussed. In particular, this class is meant to introduce processes such as the processing unit, file systems, process management, synchronization, memory management and I/O management.  
Prerequisite: CGS 1000

**CGS 1871**  
**Multimedia Authoring I**  
3 Credits  
Introduces the student to multimedia basics, application structure, and organization. Focus is on the conceptual elements of multimedia implementation and authoring basics.  
Prerequisites: CGS 1000

**CGS 1936**  
**Perl and CGI**  
3 Credits  
Introduces students to the programming language Perl and its use with CGI. Topics include understanding the basics of programming in Perl and performing tasks such as information processing, data formatting and its retrieval. Additional topics may include using CGI scripts in client server systems such as the Internet, processing HTML web forms, and accessing database servers.  
Prerequisites: CGS 1000

**CGS 2091**  
**Information Technology: Ethical/Legal Issues**  
3 Credits  
After taking this course the student will be able to identify different types of computer crime and distinguish the various types of law applicable. Existing and emerging legislation pertaining to computer crime will be presented. The student will be exposed to various types of incidents and the proper evidence handling techniques. Ethics codes will be presented and discussed.
CGS 2301
Management Information Systems
3 Credits
Focuses on the role of information systems in the management process, with emphasis on the various aspects of processing data, characteristics of communication and information, and problem solving.
Prerequisite: CGS 1000

CGS 2511
Spreadsheet Applications II
1 Credit
Emphasizes advanced spreadsheet techniques.
Prerequisite: CGS 1510

CGS 2512
Spreadsheets III
1 Credit
This is a continuation of CGS 2511, Spreadsheets II. More advanced concepts and macro programming are emphasized.
Prerequisite: CGS 2511

CGS 2525
Business Graphics II
1 Credit
This is a continuation of CGS 1520, Business Graphics I. Advanced concepts are emphasized.
Prerequisite: CGS 1520

CGS 2541
Database Design
3 Credits
Focuses on the use and development of a database program, with an emphasis on loading, modifying and querying capabilities. Topics include storage devices, data design, administration, analysis and implementation, data structures, indexed and direct file organizations, and hierarchical network and relational models. Students enrolled in a degree or college credit certificate program must complete all prerequisites.
Prerequisite: CGS 1000

CGS 2585
Desktop/Internet Publishing
3 Credits
Covers principles and techniques of document and internet publishing using an industry standard software program(s). Topics include design principles, document creation and layout, and publishing techniques for print and the web.
Prerequisite: CGS 1000

CGS 2786
Web 2.0 Applications
3 Credits
This course will cover various Web 2.0 applications. Topics include forms, blogs, wikis, calendars, slideshows and web hosting.
Prerequisite: CGS 2822
CGS 2876
Digital Audio/Video Design
3 Credits
Introduces the student to the essential software, tools, and techniques commonly used by Web and multimedia designers to produce digital audio and video. Various audio/video programs such as Real Player, MusicMatch, CakeWalk, Adobe Premiere, and After Effects may be used in this course. Prerequisite: CGS 1871

CGS 2877
Digital Animation Design
3 Credits
Introduces the student to the essential software, tools, and techniques commonly used by Web and multimedia authors and designers to produce digital animation effects. Various animation programs such as gif animators, 3D animation applications, Adobe Fireworks, Flash, and Shockwave may be used in this course as well as multimedia authoring programs such as Adobe Director or Toolbook. Prerequisites: CGS 1871

CGS 2939
Internet Services Technology Capstone
3 Credits
The capstone course is designed for the student to demonstrate his/her knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project-based experience. The student’s project requirements will be designed in concern with his/her area of curriculum emphasis. Permission from instructor required.

CGS 2940
Web Technology Internship
3 Credits
A coordinated work-study course involving class work and field experience. Students will participate in hands on activities by assisting with web page development and/or web server implementation. Objectives determined by the student and faculty/coordinator will be used to evaluate the student. This should be one of the last courses the student takes in the Internet Services Technology A.S. Degree program. The student will attend a minimum of 3 clock hours per week in the internship experience.

CGS 2942
Database Services Internship
3 Credits
A coordinated work study course involving class work and field experience. Students will participate in hands-on activities by assisting with database design and development. Objectives determined by the student and teacher coordinator will be used to evaluate the student. This should be one of the last courses the student takes in the Database Technology A.S. degree. Prerequisites are determined by the instructor.

CHD 1800
Introduction Early Childhood Administration
3 Credits
Designed to provide potential and current early child administrators with the opportunity of satisfying one of the educational requirements for the Foundational Level Child Care and Education Administrator Credential and one of the three courses required for the Level Two Administrator Credential as defined by the State of Florida. It is intended to introduce the needed skills and information in the following areas: developmentally appropriate childcare environments, leadership for childcare settings, financial and legal issues of childcare, and developmentally appropriate education curriculum. Prerequisites: High School Diploma or equivalent, 30 hour Florida Introduction Child Care Course, 10 hours DAP Special Needs, CDA or equivalent.

CHM 1020C
Chemistry and Society
3 Credits
A study of how chemicals directly affect our lives, including drugs, biocides, food additives, detergents, cosmetics, and plastics. Laboratory experimentation will be included. A special fee will be charged for this course. Prerequisites: College level reading, writing and math skills are required.

CHM 1025
Modern Chemistry
3 Credits
Covers an elementary treatment of mathematical tools of the chemist, atomic theory, periodic arrangement of the elements, chemical bonding, nomenclature of compounds, chemical reactions, and stoichiometry. Designed for students with no chemistry background. Prerequisites: College level reading, writing and math skills are required. Corequisite: CHM 1025L

CHM 1025L
Modern Chemistry Lab
1 Credit
Accompanies CHM 1025. Topics include laboratory techniques, measurement, chemical reactions, abbreviated qualitative analysis, quantitative chemistry techniques and gas law applications. College level reading, writing and math skills are required. A special fee will be charged for this course. Prerequisites: College level reading, writing and math skills are required. Corequisite: CHM 1025
CHM 1032  
Chemistry for Health Sciences  
3 Credits  
A chemistry course designed for allied health programs. Focuses on basic chemical and physical principles applied to the life process. Topics include inorganic, organic, and physiological chemistry. Mathematics applications are minimal.  
Prerequisites: College level reading, writing and math skills are required.  
Corequisite: CHM 1032L  

CHM 1032L  
Chemistry for Health Sciences Lab  
1 Credit  
Accompanies CHM 1032. Topics include laboratory techniques, measurement, chemical bonding, radioactivity, gases, and examples of common inorganic, organic, and biological reactions.  
Corequisite: CHM 1032  

CHM 1045  
College Chemistry I  
3 Credits  
First part of a two-semester sequence. Topics include advanced treatment of stoichiometry, atomic theory, chemical bonding, liquid and solid behavior, solutions and thermochemistry. College level reading, writing and math skills are required.  
Prerequisites: CHM 1025 or satisfactory grade on the chemistry placement test and MAC 1105.  
Corequisite: CHM 1045L  

CHM 1045L  
College Chemistry I Lab  
1 Credit  
Accompanies CHM 1045. Topics include analytical techniques, physical property determinations, gas laws and thermochemical processes. College level reading, writing and math skills are required. A special fee will be charged for this course.  
Corequisite: CHM 1045  

CHM 1046  
College Chemistry II  
3 Credits  
Second part of a two-semester sequence. Topics include liquid and solid behavior, physical properties of solutions, kinetics, chemical equilibria, electrochemistry and chemical thermodynamics. College level reading, writing and math skills are required.  
Prerequisite: CHM 1045 and CHM 1045L with a minimum grade of C.  
Corequisite: CHM 1046L  

CHM 1046L  
College Chemistry II Lab  
1 Credit  
This course accompanies CHM 1046. Topics include spectrophotometric determinations, chemical kinetics, electrochemistry, inorganic qualitative analysis and chemistry equilibria. College level reading, writing and math skills are required. A special fee will be charged for this course.  
Prerequisite: CHM 1045L  
Corequisite: CHM 1046  

CHM 2132C  
Chemical Instrumentation  
3 Credits  
An introduction to a variety of chemical analysis methods and corresponding instrumentation commonly employed in a chemical laboratory or industry setting. The course will combine lecture/discussion with chemical laboratory experiences to give both a foundation in the principles behind the methods and extensive hands-on laboratory experience geared to the workplace. Fundamentals of instruments are demonstrated but the emphasis is placed on the applications in which the instruments are used.  
Prerequisites: CHM 1046, CHM 1046L  

CHM 2210  
Organic Chemistry I  
4 Credits  
First part of a two-semester sequence. Focus is on the chemistry of hydrocarbons. Topics include nomenclature, chemical bonding, synthetic methods, characteristic reactions, spectroscopic analyses, reaction mechanisms and structure determinations. College level reading, writing and math skills are required.  
Prerequisites: CHM 1046, CHM 1046L  
Corequisite: CHM 2210L  

CHM 2210L  
Organic Chemistry I Lab  
1 Credit  
Accompanies CHM 2210. Topics include organic separations, synthesis, spectroscopy, chromatography and identification of organic compounds. College level reading, writing and math skills are required. A special fee will be charged for this course.  
Prerequisites: CHM 1046, CHM 1046L  
Corequisite: CHM 2210  

CHM 2211  
Organic Chemistry II  
4 Credits  
Second part of a two-semester sequence. Focus is on the chemistry of hydrocarbon derivatives. College level reading and math skills are required.  
Prerequisites: CHM 2210, CHM 2210L  
Corequisite: CHM 2211L
CHM 2211L
Organic Chemistry II Lab
1 Credit
Accompanies CHM 2211. Topics include the analysis of NMR spectra, multi-step synthesis and organic qualitative analysis. College level reading and math skills are required. A special fee will be charged for this course.
Prerequisite: CHM 2210L
Corequisite: CHM 2211

CIS 1931
Microcomputer Concepts
3 Credits
Focuses on using microcomputers to solve business problems, evaluate personal computers and software, and complete a wide range of office tasks.

CIS 2321
Systems Analysis
3 Credits
Focuses on the systems development life cycle, with an emphasis on identifying and assessing system requirements, analyzing and designing new systems in relation to use in business.
Prerequisites: CGS 2301, CGS 2541

CIS 2352C
Ethical Hacking I
3 Credits
Hands-on course teaches students how to hack into information systems using ethical standards. The student will learn system and network penetration testing, the tools and techniques used to exploit vulnerabilities such as social engineering, buffer overflows, etc., and how to defend against attacks.
Suggested prerequisite: CTS 2301
Prerequisite: CNT 1401

CIS 2353
Security Management and Computer Auditing
3 Credits
In this course the student will learn the steps necessary to perform a computer audit. The student will create an audit project plan based on various information technology scenarios and then practice performing fieldwork, analyzing data to draw conclusions and preparing an audit report offering recommendations. Suggested prerequisite: CTS 2301
Prerequisite: CNT 1401

CIS 2359C
Ethical Hacking II
3 Credits
A continuation of Ethical Hacking I with emphasis on advanced techniques.
Prerequisite: CIS 2352C

CIS 2381C
Computer Forensics/Incident Response
3 Credits
The student will design and develop strategies for inspecting potentially corrupted servers, networks and workstations. In this hands-on course the student will practice detecting possible intrusion inspecting log files, tracking violators. Students will practice computer forensic exercises using detection tools and tracking methodologies. Suggested prerequisite: CTS 2301
Prerequisites: CNT 1401

CIS 2939
Computer Information Administration Capstone
3 Credits
The capstone course is designed for the student to demonstrate his/her knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project-based experience. The student's project requirements will be designed in concern with his/her area of curriculum emphasis. Permission from instructor required.

CIS 2941
Computer Information Internship
3 Credits
A coordinated work-study course involving class work and field experience. Students will participate in hands-on activities by assisting with PC support, help desk, and/or microcomputer specialist. Objectives determined by the student and teacher/coordinator will be used to evaluate the student. This should be one of the last courses the student takes in the Computer Administrator Information AS degree. Prerequisites determined by the instructor.

CIS 2945
Information Technology Security Capstone
3 Credits
The capstone course is designed for the student to demonstrate his/her knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project based experience. The student's project requirements will be designed in concern with his/her area of curriculum emphasis.
Prerequisites: CIS 2353, CIS 2359C, CTS 2333

CJC 1000
Introduction to Corrections
3 Credits
Provides an introduction to the historical, theoretical and objective understanding of crime, the offender and the correctional process in society. Topics include custodial procedures and theory, correctional treatment, and basic social systems in relation to crime problems.

CJC 2162
Probation and Parole
3 Credits
Explores the history, functions, purposes and operations of community corrections programs within the criminal justice system which provide diversion, supervision and treatment of offenders. This course reviews the theories and practices of probation and parole within a community setting. The principles and methods of probation and parole systems at federal, state and local levels, court procedures, the role of the probation and parole officers and their associates in the rehabilitation process will be covered.
CJE 1000
Introduction to Law Enforcement
3 Credits
This course covers the history and philosophy of law enforcement in America including the organization and objectives of local, state and federal agencies. Areas covered will include contemporary problems facing modern law enforcement. The course will also cover the various approaches to modern law enforcement and the selection of and training of career officers to enforce the laws in a democratic society. Topics covered will include law enforcement as a balance of social, historical, political, legal, individual and organizational forces.

CJE 1640
Introduction to Criminalistics
3 Credits
This course explains and discusses the crime laboratory and its procedures, functions and duties. Crime scene procedures and techniques for locating, preserving and security evidence will also be discussed. Selected laboratory techniques and procedures such as comparison and identification of tool markings, blood, hair, fibers, drugs, chemicals, photographs, firearms, ballistics and documents will be explained.

CJE 1642C
Introduction Crime Scene Technology
3 Credits
This course explains and discusses the basic scientific techniques used in criminal investigation with emphasis on the role of the crime scene investigator. This course will focus on such areas as recording the crime scene, collecting and preserving physical evidence, and the examination of evidence. The techniques used by the crime scene investigator to collect, protect, process, and analyze crime scene evidence will be explored.

CJE 1643C
Advanced Crime Scene Technology
3 Credits
This course explains and discusses advanced principals and theories in crime scene technology. This course will cover specialized collection procedures for biological evidence, weapons, traffic crash evidence, arson evidence; gunshot residue, blood spatter and bodies.
Prerequisites: CJE 1640, CJE 1642C

CJE 1653
Crime Analysis and Intelligence
3.00 Credits
This course involves an introduction to the field of crime analysis. The course will provide the student with an overview of basic criminal intelligence and investigative analysis techniques in modern law enforcement. The course will include geographic information systems and crime mapping techniques.

CJE 1680
Introduction to Computer Crime
3 Credits
Provides the student with an overview of crimes involving the use of computer technology and the Internet. It will cover how computer related crimes are committed and how they are investigated. Topics covered will include computer crime scene management and the legal issues involved in the prosecution of computer crimes.

CJE 2004
Career Choices Criminal Justice
1 Credit
This course will expose the students to the diversity of requirements and career opportunities within the criminal justice system. This course will provide the students with an understanding of the different agencies within the criminal justice system including police, courts and corrections. This course will cover all levels of agencies including city, county, state and federal. The course will also cover careers related to criminal justice including juvenile justice, private investigation and security, and bail bonds agents. The course will cover the roles of these agencies and employment opportunities. The course will also provide students with information on law enforcement academies and strategies for job searching, resumes and job interviews.

CJE 2170
Comparative Police and Criminal Justice Systems
3 Credits
This course will survey contemporary foreign law enforcement and criminal justice systems. This course will compare and contrast selected foreign systems with those of the United States. This course will include a study of the operational and philosophical differences between the various cultural and legal systems studied.

CJE 2233
Drug Abuse and Crime
3 Credits
This course will introduce students to the negative effects of drugs, alcohol, and other substance abuse. This course will cover the problems created by the illegal use of narcotics and other dangerous substances and its relationship to criminal behavior. This course will emphasize the criminal implications and control of drug and substance abuse as well as touching on the social and historical implications.

CJE 2300
Police Administration and Organization
3 Credits
Provides an introduction to the principles of law enforcement, organization and supporting services as they apply to staff functions, personnel recruiting, training, promotions, planning, research, inspection, control, and policy formation. Topics include functions of patrol, criminal investigation, vice control units, juvenile bureau, intelligence, sections, detention facilities, supply and transportation.
CJE 2400  
Community Relations  
3 Credits  
Focuses on the relationship of criminal justice agencies to the community and how social change affects law enforcement, corrections and the courts.

CJE 2600  
Criminal Investigation  
3 Credits  
Covers methods of investigation, interviews, interrogation, electronic equipment, surveillance and sources of information, with an emphasis on case preparation and problems in criminal investigations.

CJE 2603  
The investigative Cycle from Crime Scene to Court  
3 Credits  
The course covers the evidence and investigative cycle, from processing the crime scene, to testimony about the evidence. It first examines the fundamentals of protecting and processing crime scenes and the handling of evidence. Students then would become familiar with the components of the investigative report. The course would then cover how the evidence and testimony are presented in the courtroom.

CJE 2614  
Serial Killers  
3 Credits  
This course involves an examination of serial killers and mass murderers, including the history, profiling of the offenders, and techniques for the investigation. Special issues that will be covered include media coverage and punishment.

CJE 2664  
Advanced Crime and Intelligence Analysis  
3 Credits  
This course is an advanced course in crime and intelligence analysis. The course will build upon the principles learned in CJE 1653 and will give the student an in-depth look into crime analysis computer applications and GIS mapping software. Prerequisite: CJE 1653

CJE 2671C  
Latent Fingerprint Development  
2 Credits  
This course explains and discusses the techniques involving detection, enhancement and recovery of latent fingerprints from physical evidence. This course will cover mechanical and chemical methods and surfaces will be analyzed and evaluated for application in both theory and practice.

CJL 1062  
Constitutional Law  
3 Credits  
Provides an in-depth study of criminal law, with an emphasis on the role of the Supreme Court and constitutional law as it applies to law enforcement and civil rights.

CJL 1100  
Criminal Law  
3 Credits  
Focuses on the classification and analysis of criminal acts, such as homicide, rape, assault, robbery, larceny, burglary, and auto thefts, with an emphasis on specific cases and selected court decisions. Topics include court organization, court orders, writs, warrants, and other papers.

CJL 1500  
Introduction to the Court System  
3 Credits  
This course examines the history, traditions and philosophy of the American court system. Emphasis will be placed on the roles of the prosecutor, the judge, the defense attorney, the jurors, the defendants and the public. The course will focus on the general themes of law on the books, law in action and law in controversy. Course content will include an overview of the
structure and operations of the court system with special emphasis on the Florida Court System.

**CJL 2072**  
Civil Rights Liability in Criminal Justice  
3 Credits  
This course will provide students with an overview of federal civil rights legislation and state federal tort law as it applies to criminal justice. Topics covered will include practitioner and supervisor liability, 1983 actions, 241 crimes, wrongful death actions, and various personnel laws including ADA, EEOC, age and sex discrimination and sexual harassment.

**CJL 2130**  
Criminal Evidence and Procedure  
3 Credits  
Provides an introduction to criminal procedures such as arrest, search and seizure, use of force and handling evidence. Topics include the legal use and degree of force, rights of suspects and arrested persons, types of evidence, admissibility, proof and competence of evidence as related to criminal law and recent court decisions.

**CJL 2202**  
Legal Research in Criminal Justice  
3 credits  
This course covers the historical development of criminal law and case precedent. The course will emphasize the development and study of case law and criminal statutes and the significance of law as a social force. The course will emphasize how to read and evaluate cases and how to do legal research.

**CJL 2400**  
Criminal Court Litigation  
3 Credits  
This course involves the practical observation and study of the criminal trial process through lecture, readings, and direct observation of criminal trials. Students will study the various aspects of the criminal court process from arrest through conviction and sentencing. Course topics will include bail and pre-trial incarceration, discovery and other pre-trial procedures, prosecutorial discretion, plea bargaining and the conduct of trial proceedings.

**CJL 2610**  
Courtroom Presentation of Science Evidence  
3 Credits  
This course explains and discusses how to present physical, documentary, and scientific evidence in the courtroom. The course will cover proper dress, speaking, listening, and stress. The student will understand how to present courtroom testimony, especially in areas of scientific evidence. The course will also include how to prepare and present visual aids and exhibits collected at crime scenes. The course will include mock trial exercises.

**CLP 1000**  
Psychology of Personal Growth  
3 Credits  
Covers the origin and development of individual needs and personality patterns, approaches to self management, and self control and assessment of personal value systems. Emphasis is on personal awareness and experientially based activities. Is not acceptable as a prerequisite for other psychology courses.

**CLP 2001**  
Advanced Psychology Personal Growth  
3 Credits  
An existential experimental approach to human behavior which focuses on awareness of ourselves, effective communication and problem solving skills involved in human interactions.  
Prerequisite: CLP 1000

**CLP 2140**  
Abnormal Psychology  
3 Credits  
This course examines the historical and current perspectives of the science of abnormal behavior. Topics include classification, diagnosis, theories, assessment methods, treatment, prevention, and legal and ethical issues. The course will also discuss the importance of empirically-based treatments. The impact of mental illness on the individual, family, and society are explored. Permission from instructor required.  
Prerequisites: PSY 2012, College level reading and writing skills are required.

**CNT 1401**  
Introduction to Network Security  
3 Credits  
Basic computer and network security theory, concepts and terminology are presented. The CIA triad, basic threats, intrusion techniques, vulnerabilities and their various countermeasures are included. Students will also discuss ethical behaviors and basic security practices for authentication, encryption and secure network topologies.  
Prerequisites: CET 1600 or CTS 1305

**CNT 2510**  
Wireless Networking  
3 Credits  
This course presents an overview of common wireless technologies such as 802.11a, 802.11g, cellular, PCS, Infrared, and Bluetooth, including theories, concepts of their operation, installation, and basic troubleshooting. Basic computing and common wireless technologies such as analog, AMPS, CDMA, TDMA GSM, 2G, 3G, PCS and ESMR are discussed as well as new trends as they develop. Wireless local area networks and integration with wired networks are also included.  
Prerequisite: CTS 1305

**CNT 2941**  
Networking Services Internship  
3 Credits  
A coordinated work-study course involving class work and field experience. Students will participate in hands-on activi-
ties by assisting with network support, and networking installation and development. Objectives determined by the student and teacher/coordinator will be used to evaluate the student. This should be one of the last courses the student takes in the Networking Services Administrator AS degree.
Prerequisites: Determined by the instructor.

COP 1000
Programming Logic
3 Credits
Introduces programming logic, with an emphasis on problem definition, flow charts, tables, control breaks, and multi-record single processing programs. Topics include read process writeln, array creation and retrieval, and documentation standards.
Prerequisite: CGS 1000

COP 1120
COBOL, Beginning
3 Credits
Introduces the computer programming for business, with an emphasis on program design and development, generating reports and creating files. Topics include structured programming, testing, implementation and documentation, file structures, input and output devices, table processing and operating system facilities. A special fee will be charged for this course.
Prerequisite: COP 1000

COP 1220
Programming in "C"
3 Credits
Introduces programming in the "C" language with an emphasis on basic input/output functions. Topics include interactive programming, style and methodology, top-down design and structured programming.
Prerequisite: COP 1000

COP 1332
Visual BASIC, Beginning
3 Credits
Provides a basic overview of Windows programming and applications. Students enrolled in a degree or college credit certificate program must complete all prerequisites.
Prerequisite: COP 1000

COP 1812
Introduction XML Authoring
3 Credits
This course teaches students how to use XML to create customized tags for Web pages and to work effectively with XML. Students will develop Web sites integrating XML into their projects.
Prerequisite: COP 1000

COP 1821
Visual BASIC, Advanced
3 Credits
Advanced course focusing on the development of Windows applications using an event driven programming system. Topics include arrays, data structures, and developing PEN applications.
Prerequisite: COP 1332

COP 2224
Programming in C++
3 Credits
Focuses on advanced programming in the "C" language, with an emphasis on small and large object-oriented programs using C++. Topics include inheritance, information hiding and operator overloading. Students must take the prerequisite listed or have permission of instructor.
Prerequisites: COP 1000, COP 1220

COP 2344
Shell Scripting
3 Credits
This course is intended for students who have mastered the basic Linux/Unix operating environment and who would like to read and understand the various administrative scripts, and to write scripts to automate day to day tasks. This course is designed to teach students skills they need to effectively read, write and debug shell scripts. This course explores in detail the shell scripting language. Major topics covered include reading, writing, modifying, and debugging shell scripts, the shell environment, regular expressions, text filtering with grep, sed, and the awk commands, conditional control statements and loops, interactive scripts, the use of other shell features such as variables, parameters, argument lists, shell functions, shell traps.
Prerequisites: COP 1000, CTS 1106

COP 2360
Programming in C#
3 Credits
An introductory course to programming in the C# language. Emphasis is placed on the basic data, methods and classes of the C# language. Additionally, object oriented programming concepts will be introduced. Programming style and object oriented methodology will be stressed throughout the course.
Prerequisite: COP 1000

COP 2654
iPhone/iPad/iPod Touch Applications Development
3 Credits
This is an introductory course in application development for iPhone, iPad, and iPod Touch devices. Students will use the iOS Software Development Kit (SDK) and the Objective-C programming language to develop applications for iOS platforms. Students will study the fundamental design patterns designed by iOS applications as well as the role of objects in an iOS application. Students will also learn how to provision applications for both Ad Hoc as well as Apple App Store distribution.
Prerequisite: COP 1220 or COP 2224 or COP 2360 or COP 2800
COP 2800  
**JAVA Programming**  
3 Credits  
Introduces programming in JAVA. Focus is on object oriented programming to create stand alone applications for enhancing Web pages.  
Prerequisite: COP 1000 or permission of instructor.

COP 2805  
**JAVA Advanced**  
3 Credits  
A continuation of COP 2800. The focus is on the development of client-server applications, applets, and advanced GUI. Topics include advanced object orientated programming in Java, multi-threading, files, multimedia, database use, and networking concepts used for client server applications.  
Prerequisite: COP 2800

COP 2830  
**Scripting for the Web**  
3 Credits  
Introduces scripting languages used to enhance WEB documents. Focus is on the use of scripts and how they relate to the Web environment. Students will develop applications using a scripting language such as Visual Basic, Java Script, and/or Perl.  
Prerequisites: CGS 2820, COP 1000

COP 2833  
**Database-driven Web Programming: Client**  
3 Credits  
The student will be introduced to techniques for coding Web pages that interact with back-end databases. The emphasis in this class is to develop code that runs on the client computer and to develop techniques for balancing the client-side code with server-side code. Topics covered will be specific programming language fundamentals and logic, and an introduction to data maintenance using data manipulation coding techniques. Other topics include writing secure Web code, error handling and data validation.  
Prerequisite: COP 2836, Database-driven Web Programming: Server

COP 2836  
**Database-driven Web Programming: Server**  
3 Credits  
The student will be introduced to techniques for coding Web pages that interact with back-end databases. The emphasis in this class is to develop code that runs on back-end servers with back-end database. Topics covered will be specific programming language fundamentals and logic, and an introduction to data maintenance using data manipulation code such as SQL, as well as an introduction to back-end DBMS concepts and terminology. Other topics include writing secure Web code, error handling and data validation.  
Prerequisites: CGS 2820, COP 1000

COP 2939  
**Computer Programming Capstone**  
3 Credits  
The capstone course is designed for the student to demonstrate his/her knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project-based experience. The student's project requirements will be designed in concern with his/her area of curriculum emphasis. Permission from instructor required.

CRW 1001  
**Creative Writing I**  
3 Credits  
Focuses on analyzing creative writing through class discussions and readings. Works by students and others will be critiqued. Participation on the staff of the College's literary magazine is encouraged. Prerequisite waiver by permission of instructor required.  
Prerequisite: ENC 1101

CRW 1001H  
**Honors Creative Writing I**  
3 Credits  
Same as CRW 1001 with honors content. Further critical analysis of both the student's own writing and the wiring of others combined with the readings and discussion of the process of creative writing. Honors Institute permission required.  
Prerequisites: ENC 1101 or ENC 1101H

CRW 1002  
**Creative Writing II**  
3 Credits  
Further critical analyses of both the student's own writings and the writings of others combined with the readings and discussions of the process of creative writing. Continuation of the skills developed from CRW 1001. College level reading and writing skills are required.  
Prerequisite: CRW 1001

CRW 1002H  
**Honors Creative Writing II**  
3 Credits  
Same as CRW 1002 with honors content. Further critical analysis of both the student’s own writing and the writing of others combined with the readings and discussion of the process of creative writing. Continuation of skills developed from CRW 1001H. Honors Institute permission required.  
Prerequisite: CRW 1001 or CRW 1001H or permission of instructor.

CTS 1106  
**Introduction to Unix**  
3 Credits  
This course is designed to teach the Unix operating system. Emphasis will be on the Unix utility commands, the kernel software, and the shell programs. The two Unix text editors will be covered. This course will be project oriented. Additional topics include Linux and using the X Window GUI.  
Prerequisite: CGS 1000
CTS 1302  
**Microsoft Windows Applications Infrastructure**  
3 Credits  
Provides students with the knowledge and skills necessary to design a MS Windows applications infrastructure in an enterprise network. In addition, this course provides the skills and knowledge necessary to manage and install Web services infrastructure, Windows media server, Microsoft Windows SharePoint Services server, and Windows Server 2008 Terminal Services Remote App.  
Prerequisite: CTS 1306 or permission of instructor.

CTS 1303  
**Microsoft Windows Configuring Active Directory**  
3 Credits  
This course is designed to provide students with the knowledge and skills necessary to install, configure and administer Microsoft Windows directory services in an enterprise environment.  
Prerequisite: CTS 1303 or permission of instructor.

CTS 1305  
**Introduction to Networking**  
3 Credits  
Introduces the students to the basics of local area networks. Provides an overview of networking, including a history of development and the uses and benefits of networks. Students are introduced to major network components with a discussion of critical selection considerations. Covers the prerequisite concepts necessary for the Microsoft program and will provide background information for the Cisco certification program.  
Prerequisites: CGS 1000 or permission of instructor.

CTS 1306  
**Microsoft Windows Server Configuring Network Infrastructure**  
3 Credits  
This course provides students with the knowledge and skills necessary to manage and install network services and resources, such as messaging, file and print services, a firewall, the Internet, an intranet, remote access, and to support a network infrastructure that uses the MS Windows Server products.  
Prerequisite: CTS 1303 or permission of instructor.

CTS 1327  
**MS Windows Client Operating System**  
3 Credits  
This course is to provide individuals who are new to MS Windows with the knowledge necessary to understand and identify the tasks involved in supporting Windows networks. This is an introductory course designed to provide an overview of client operating system concepts. Students should have a working knowledge of the MS Windows interface.  
Prerequisite: CTS 1305

CTS 1328  
**MS Windows Server**  
3 Credits  
This course provides students with the knowledge and skills necessary to install and configure MS Windows as a small to mid-sized domain. In addition, this course provides the skills and knowledge necessary to manage the server operating system, directory services, software distribution, and updates.  
Prerequisite: CTS 1302

CTS 1330  
**Implementing and Supporting MS Exchange Server**  
3 Credits  
This course provides Microsoft Exchange Server support professional with in-depth product information on installing, configuring and administering exchange server.  
Prerequisite: CTS 1306

CTS 1342  
**MS Windows Enterprise Administrator**  
3 Credits  
Provides students with the knowledge and skills necessary to plan for large-scale network and application services. The enterprise administrator is responsible for infrastructure design and global configuration. Thus, the student will learn how to design Active Directory forests, domains and IT administrative structure while planning for business continuity.  
Prerequisite: CTS 1303

CTS 2203  
**Introduction Adobe Acrobat**  
1 Credit  
Provides students with the knowledge and skills necessary to create, post to the Internet, and distribute PDF files.  
Prerequisite: CGS 1000

CTS 2301  
**Unix/Linux Administration I**  
3 Credits  
This course is a continuation of CTS 1106 (Introduction to Unix). The focus is hands-on Linux system administration. Topics include system administration concepts, system installation and configuration. Additional topics include understanding the Unix file system, configuring basic system hardware and services, managing user accounts, basic system security and backups. Major Unix variants will also be covered. This course continues with CTS 2322, Unix/Linux Administration II. Student must have prerequisite or permission of instructor.  
Prerequisite: CTS 1106
CTS 2310

Windows Security
3 Credits
The student will design and develop strategies for securing a windows-based network both server and workstation. In this hands on course the student will practice implementing security on windows servers to include configuring security for application servers and administration servers. Students will practice using monitoring, auditing and performance tools. Prerequisite: CNT 1401

CTS 2311

Unix/Linux Security
3 Credits
This course covers the concepts and administration of system and network security on Unix and Linux systems. Students will gain the skills needed to protect Unix and Linux servers from various types of threats. Students will understand, plan and implement security on Unix servers including developing security policies, local system security, network security, monitoring systems and networks, basic firewall setup and the use of various security related tools (e.g., PAM, sudo). College level reading and writing skills are required. Prerequisite: CTS 1305, CTS 2322

CTS 2322

Unix/Linux Administration II
3 Credits
This course is a continuation of CTS 1106 (Unix Administration I). The focus is on Unix and Linux administration. Topics include creating shell scripts and using scripting tools, software development tools (such as 'make' and RCS/CVS), managing documentation and creating 'man' pages with 'nroff', configuring services including email, printing, file sharing, logging, DNS and FTP. Also covered will be building and configuring custom kernels, kernel modules, patching and updating the kernel and applications, and basic system security. Students will gain hands on experience installing, configuring and using Linux. Prerequisite: CTS 2301

CTS 2333

Unix/Linux Networking
3 Credits
This course covers the concepts and administration of networking services on Unix and Linux systems. Topics include Windows network integration with SMB (Samba), DNS, email services and other common network services such as DHCP, FTP, LDAP and NTP (network time protocol). Students will receive basic network concepts such as network models and LANs, IPv4, IPv6 and PPP. Students will also gain hands-on experience with basic network security, and network configuration and troubleshooting using common network management tools. Prerequisites: CTS 1305, CTS 2322. College level reading and writing skills are required.

CTS 2440

Database Programming - SQL
3 Credits
This course covers the concepts of both relational and object relational databases using the SQL programming language. Students are taught to create and maintain database objects and to store, retrieve and manipulate data. Students learn to retrieve data by using advanced techniques, grouping operations and navigational retrieval. They also learn to write SQL queries to generate report-like output. Hands-on practice using assigned projects reinforce the fundamental concepts. Prerequisite: CGS 1000

CTS 2441

Database Administration I
3 Credits
Provides students with the knowledge and skills required to install, configure, administer and troubleshoot a specific database management system (DBMS) in a client/server environment. Topics such as backing up and restoring a database, as well as scheduling, monitoring and performance will be covered. Sizing database objects such as tables and indexes will be covered, as well as database security. The course may be repeated one time for purposes of preparing the student as an administrator on a second database platform. Permission of instructor is required. Prerequisite: CGS 2541

CTS 2442

Database Administration II
3 Credits
Provides students with the knowledge and skills required to install, configure, administer and troubleshoot a specific database management system (DBMS) in a client/server environment. Topics such as complex restoring of a database will be covered. Advanced concepts such as data warehousing, data mining and transaction processing will be covered. The course may be repeated one time for purposes of preparing the student as an administrator on a second database platform. Permission of instructor is required. Prerequisite: CTS 2441

CTS 2445

Database Programming Advanced
3 Credits
This course covers advanced coding concepts of a specific DBMS. For example, if the student is studying MS Access, this course covers coding using Visual Basic for Applications (VBA). If the student is studying MS SQL Server, this course introduces advanced concepts using Transact SQL (TSQL). If the student is studying Oracle DBMS, the student will code in PL/SQL. Students will be taught to code programs to perform error handling and create triggers. Students will program stored procedures and custom functions, and learn to call those reusable programs. The course may be repeated one time for purposes of preparing the student as an administrator on a second database platform. Permission of instructor is required. Prerequisite: CTS 2440
**DAA 1100**
**Modern Dance Basics for Non-Majors**
1 Credit
Modern Dance Basics is a studio course designed to introduce students with no training to the basic concepts of modern dance. The emphasis in this class will be placed upon attaining correct body alignment, learning the positions of the arms and feet, and the use of time, space, weight and energy. Students will learn basic dance vocabulary while developing flexibility, strength and musicality. This is a studio course and may be repeated 2 times for credit.

**DAA 1101**
**Modern Dance I**
2 Credits
Elementary level modern dance training is for those with entry level skills in modern dance. The course will offer students the opportunity to develop an understanding of the basic principles and concepts of modern dance technique through several movement experiences and explorations. Students explore and develop awareness of body alignment, dance vocabulary, self awareness, coordination, strength and musicality. Attendance at and written critiques of dance performances provide an enhanced view of the scope of the dance field. This course may be taken twice for credit.

**DAA 1102**
**Modern Dance Basics for Pre-Majors**
1 Credit
Modern Dance Basics is a studio course designed to introduce students who plan to further pursue dance with a foundation knowledge of modern dance. The emphasis in this class will be placed upon attaining correct body alignment, ~ the use of time, space, weight and energy and the ability to accurately learn dance combinations and phrase work. Students will learn dance vocabulary while developing flexibility, strength and musicality. This is a studio course and may be repeated 2 times for credit.

**DAA 1104**
**Modern Dance II**
2 Credits
This studio course will serve as a continuation of Modern Dance I and will further explore basic principles of modern dance technique. It will broaden students' awareness of dance concepts such as momentum, weight shift, rebound and release. It will further develop dance vocabulary, body alignment, and develop an introductory framework for dance aesthetics. Attendance at and written critiques of dance performances will provide deeper insight into the dance field. This course may be taken twice for credit.

**DAA 1200**
**Ballet I**
2 Credits
Elementary level ballet training for those with entry level skills in ballet. Emphasis is on correct placement and alignment of the body, a knowledge of basic ballet terminology, and the development of spatial awareness as it applies to the execution of ballet exercises, positions and steps. Attendance at written critiques of dance performances provide an enhanced view of the scope of the dance field. This is a studio course and may be repeated twice for credit.

**DAA 1201**
**Ballet Basics for Non-Majors**
1 Credit
Ballet Basics is a studio course designed to introduce students with no training to the basic concepts of ballet technique. The emphasis in this class will be placed upon attaining correct body alignment, learning the positions of the arms and feet, and the understanding of the sequence of the ballet class. Students will learn basic dance vocabulary while developing strength and musicality. This is a studio course and may be repeated 2 times for credit.

**DAA 1202**
**Ballet Basics for Pre-Majors**
1 Credit
Ballet Basics is a studio course designed to introduce students who plan to further pursue dance with a foundation knowledge of ballet. The emphasis in this class will be placed upon attaining correct body alignment, positions of the arms and legs, and ability to properly execute ballet steps. Students will learn ballet vocabulary while developing flexibility, strength and musicality. This is a studio course and may be repeated 2 times for credit.

**DAA 1204**
**Ballet II**
2 Credits
Ballet II is a continuation of Ballet I. Student experiences an intensification of barre work through the use of more complex coordination of the arms and legs. Intensified center work includes more complex floor patterns to develop the use of space in movement sequences. Introduction to steps requiring an advanced beginning expertise in ballet. Leotards, tights and ballet shoes are required. Attendance at and written critiques of dance performances will provide deeper insight into the dance field. May be repeated for credit for a maximum of 4 credit hours.

**DAA 1610L**
**Dance Composition I**
2 Credits
This creative studio course examines basic tools of the choreographic craft. Students gain experience in structural movement
from simple phrases to complex organizational units through motif development, exploration of shape, space, time, transitions and basic compositional forms. The student will explore solo, partner and group structures and use various devices to create their own artistic expressions. Reading, writing and critical analysis of dance included.

**DAA 1680L**
**Dance Ensemble**  
1 Credit  
This creative studio course provides an opportunity for dance performers to work in a repertory company and to explore the various devices and skills of ensemble performance. Culminates in a stage performance. This course is repeatable for elective credit.  
Prerequisite: Audition required.

**DAA 1750**
**Dance Conditioning**  
2 Credits  
Conditioning for strength, tone, flexibility and posture in dance in order to enhance optimal performance. The class serves as a laboratory for movement theory, body alignment and somatic techniques. May be repeated with a change of modality (e.g. pilates, Body Mind Centering, Yoga) up to six credits.

**DAA 1900**
**Dance Practicum**  
1 Credit  
This activity/analysis course provides for the expansion of the student's range of expression and performance/production or pre-professional skills through a directed study experience. Working with a dance faculty advisor, the student will choose, refine, develop, document and present a project whose intent will be the increase of the student's mastery of selected skills from the coursework attempted to date.  
Prerequisite: Audition or consent of instructor.

**DAA 1931-9**
**Special Topics in Dance**  
1 Credit  
This course is designed to allow flexibility for presenting a variety of selected topics related to dance. Topics will require both an applied and theoretical approach. Examples of topics include: labanotation, technology, dance pedagogy, etc.

**DAA 2105**
**Modern Dance III**  
2 Credits  
This studio course is intended to further the understanding of the principles of modern dance technique through more complex exercises and exploration of movement dynamics while developing speed in movement analysis and synthesis. Intricate rhythmical structures and increased spatial awareness will challenge students. Continuing critical analysis will be expected, along with a sharpening of both the student's overall dance knowledge and aesthetic understanding of the dance form. This course may be taken twice for credit.  
Prerequisite: Audition or Instructor Permission

**DAA 2106**
**Modern Dance IV**  
2 Credits  
This studio course is a continuation of Modern Dance III. Emphasis is on expanding the technical training of the student by increasing complexity of movement capabilities. More emphasis will be placed spatial awareness, rhythmical structures, exploration and on partnering. Continuing critical analysis will be expected, along with a sharpening of both the student's overall knowledge and aesthetic understanding of the dance form. The course will focus more attention on the student's individual dance preparation. Attendance at and written critiques of dance performances will provide deeper insight into the dance field. This course may be taken twice for credit.  
Prerequisite: Audition or Instructor Permission

**DAA 2205**
**Ballet III**  
2 Credits  
The continuation of ballet training at the beginning of the intermediate level. Emphasis is on strength and technical development through the skilled execution of intermediate level steps and center floor combinations. Uses the technical demands of ballet to further develop stamina and to increase expertise in spatial awareness. Attendance at and written critiques of dance performances increase the student observation and analytical skills.  
Prerequisite: Audition or Instructor Permission

**DAA 2206**
**Ballet IV**  
2 Credits  
Ballet IV is a continuation of Ballet III. Student experiences an intensification of barre work through the use of more complex coordination of the arms and legs. Intensified center work includes more complex floor patterns to develop the use of space in movement sequences. Introduction to steps requiring an advanced beginning expertise in ballet. Introduction of pointe work if student proficiency is met. Attendance at and written critiques of dance performances will provide deeper insight into the dance field. This course may be taken twice for credit.  
Prerequisite: Audition or Instructor Permission

**DAA 2500L**
**Jazz Dance**  
1 Credit  
Jazz dance is a studio course designed to introduce the student to the historical development of modern jazz dance, its technique, and methods of expression through exercise, locomotion, and non locomotion. Emphasis is placed on technique, terminology, movement combination and historical information. This course may be taken twice for elective credit.

**DAA 2611**
**Dance Improvisation**  
2 Credits  
Dance Improvisation is a studio course that challenges students to explore movement through spontaneous problem-solving. The course will evoke the students' creative individuality and sense of ensemble. Students are guided through a
series of exercises that uses sensorial and kinesthetic engagement. Essential tools of improvisation will be acquired. This course is repeatable twice for credit.

**DAN 1600C**  
**Music for Dance**  
2 Credits  
The study of music and its relationship to the dancer. In addition to basic rhythmic structures the student will learn to use them as a tool in teaching dance and in choreography. The student will further gain insight into the process of selecting appropriate music for various choreographic projects.

**DAN 2100**  
**Introduction to Dance**  
3 Credits  
A lecture/activity course devoted to the study of dance in its many cultural and societal contexts. The course is designed to heighten student awareness of an appreciation of the aesthetic, socio-cultural, and vocational roles played by dancers from the art form’s historical roots to contemporary trends. Reading, writing, critical analysis and some physical activity are included. Prerequisites: College level reading and writing skills are required.

**DEH 1002**  
**Dental Hygiene Instrumentation**  
1 Credit  
Dental Hygiene Instrumentation introduces the student to the theory and practical skills necessary for basic instrumentation. Laboratory sessions are included to demonstrate proficiency in utilizing dental hygiene instruments and dental charting. Additional topics that will be covered in lecture include professionalism and ethics, communication skills, asepsis and maintenance of hand instruments and hand pieces, patient assessment, oral prophylactic procedures, and dental charting. Credit for this course does not apply to the associate in arts degree. Corequisites: DEH 1002L, DES 1020C

**DEH 1002L**  
**Dental Hygiene Instrumentation Lab**  
2 Credits  
Dental Hygiene Instrumentation Lab introduces the student to the practical skills necessary for basic instrumentation. Laboratory sessions are included to demonstrate proficiency in utilizing dental hygiene instruments and dental charting. Additional topics that will be covered in laboratory include professionalism and ethics, communication skills, asepsis and maintenance of hand instruments and hand pieces, patient assessment, oral prophylactic procedures, and dental charting. Credit for this course does not apply to the associate in arts degree. Corequisites: DEH 1002, DES 1020C

**DEH 1130**  
**Embryology and Histology**  
1 Credit  
A comprehensive study of the embryonic, fetal, and postnatal development, and microanatomy of the cells and tissues that comprise the head, neck and oral cavity. Lecture topics include development and histology of the structures of the head, neck, and oral cavity; development and histology of teeth development and histology of the tooth supporting structures; and development and histology of orofacial structures. Credit for this course does not apply to the associate in arts degree. Prerequisite: DES 1020C

**DEH 1720**  
**Preventive Dentistry**  
1 Credit  
This is a one hour credit course designed to introduce the student to the practice and philosophy of preventive dentistry. The student will learn the roles of the dental hygienist, methods of dental biofilm control, formation of tooth deposits, stains, and dental caries, oral physiotherapy, inter dental care, oral health care products and the use of fluorides and sealants. Proper communication and behavior modification skills are emphasized to facilitate the role of the dental hygienist as an educator.

**DEH 1800C**  
**Clinical Dental Hygiene I**  
5 Credits  
Clinical Dental Hygiene I is the first term for direct patient care. Students apply the principles and perform clinical activities for the prevention of oral disease, including data collection, prophylaxis, application of prevention agents, and oral home care instructions. This is a combined course with classroom interactions and clinical experience. Students are required to successfully complete a number of procedures. Credit for this course does not apply to the associate in arts degree. Prerequisites: DEH 1002, DEH 1002L, DES 1800 and DES 1800L

**DEH 1802C**  
**Clinical Dental Hygiene II**  
3 Credits  
DEH 1802C is a continuation of DEH 1800C. It is a combined course that provides discussion of clinical activities along with clinical experience. This is the second term for direct patient care. Students apply the principles and perform clinical activities for the prevention of oral disease, including patient assessment, treatment planning, scaling, debridement, root planning, application of preventive agents, oral irrigation and antimicrobial agents, treatment of hypersensitivity, and oral home care instructions. Additional topics include oral communication skills, instrument sharpening, pulp vitality testing, special needs patients, nutritional counseling, ultrasonics, and air polishing. Students are required to successfully complete a number of procedures. Credit for this course does not apply to the associate in arts degree. Prerequisite: DEH 1800C  
Corequisites: DES 1100, DES 1100L
DEH 1811  
**Dental Ethics, Jurisprudence**  
1 Credit  
This course is designed to provide knowledge of professional ethics and legal responsibilities, professional organizations, state and dental practice acts and continuing education regulations and requirements. Dental office management will be introduced to provide dental hygiene students with the business and professional skills necessary to practice in an office and/or alternate practice setting. Emphasis will be placed on the student’s ethical and legal roles as a dental hygienist and on the business aspects of the profession. In addition, preparation for the National Board examination and test taking skills will be covered. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: DEH 2804C, DEH 2702  
Corequisite: DEH 2702L  

DEH 2300  
**Pharmacology and Oral Medicine**  
2 Credits  
Pharmacology, oral medicine, anesthesiology, and dental emergencies introduces principles of basic pharmacology as they pertain to the practice of dentistry and dental hygiene. It emphasizes actions and reactions of medications commonly used in the dental office or taken by dental patients. Topics include terminology, pharmaceutical references, prescriptions and abbreviations, pharmacokinetics, drugs used in dentistry and their pharmacokinetics, drugs that may alter dental treatment and their pharmacokinetics, drugs used in dental emergencies, drug abuse, and nitrous oxide monitoring (as mandated in the Florida State Administrative Code Chapter 64B 14). Credit for this course does not apply to the associate in arts degree.  
Prerequisites: DEH 1802C, DEH 2400  
Corequisites: DEH 2804C, DES 2934  

DEH 2400  
**General and Oral Pathology**  
3 Credits  
General and Oral Pathology presents the principles of general pathology in relation to diseases of the teeth, soft tissue, and supporting structures of the oral cavity, as well as general pathologic conditions affecting the head and neck. Topics include terminology and diagnostic procedures, variants of normal conditions, benign conditions of unknown cause, inflammation and repair, caries and pulpal pathology, immune response, oral diseases with immunological pathogenesis, autoimmune diseases, infectious diseases, embryology of the head and neck, developmental disorders of the soft tissues and teeth, developmental cysts, neoplasia, odontogenic tumors, other tumors of oral structures, genetics, genetic syndromes and diseases of the head and neck, general pathologic conditions affecting the oral structures, TMJ disorders, and dental implants. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: DEH 1130, MCB 1000 and MCB 1000L  
Corequisites: DEH 1800C, DEH 2602  

DEH 2602  
**Periodontology**  
2 Credits  
This course provides information on the principles of periodontology pertinent to dental hygiene practice. Topics include tissues of the periodontium, epidemiology of periodontal diseases, classification of periodontal diseases, disease prevention, disease treatment and management, drug therapy, immunology and host defense mechanisms, microorganisms associated with periodontology, surgical and nonsurgical treatment, implantology and maintenance, and periodontal endodontic emergencies. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: DEH 1130, MCB 1000 and MCB 1000L  
Corequisites: DEH 1800C, DEH 2400  

DEH 2604  
**Periodontology II**  
1 Credits  
This course provides information on the principles of periodontology pertinent to dental hygiene practice. Topics include periodontal care modifications for systemic conditions, decision making during treatment planning, helping patients change behavior, periodontal surgical concepts, periodontal maintenance, periodontal/endodontic emergencies, implantology and maintenance, and future directions of periodontal patients.  
Prerequisite: DEH 2602  

DEH 2702  
**Community Dental Health**  
2 Credits  
This course is designed to provide knowledge of attitudes, skills, and behaviors necessary to promote dental health and prevent disease through organized community based programs. Students will be responsible for assessing, planning, implementing, and evaluating procedures in a community oral health program. Credit for this course does not apply to the associate in arts degree.  
Prerequisite: DEH 2602  
Corequisites: DEH 2804C, DES 2934  

DEH 2702L  
**Community Dental Health Practicum**  
1 Credit  
This course is designed to provide the student with community based experiences in public health settings for the promotion of dental health and the prevention of dental disease. Students will apply principles of program assessment, implementation, and evaluation procedures for all sites visited. Credit for this course does not apply to the associate in arts degree.  
Prerequisite: DEH 2702  
Corequisites: DES 2502, DEH 1811  

DEH 2804C  
**Clinical Dental Hygiene III**  
5 Credits  
Clinical Dental Hygiene III, a continuation of DEH 1802C, is a combined course that provides discussion of clinical activities
along with clinical experience. This is the third term for direct patient care. Students apply the principles and demonstrate improved patient care skills while performing clinical activities for the prevention of oral disease, including patient assessment, treatment planning, scaling, debridement, root planning, ultrasonics, and air polishing application of preventive agents, oral irrigation and antimicrobial agents, and oral home care instructions. Credit for this course does not apply to the associate in arts degree.
Prerequisites: DEH 1802C, DES 1830C
Corequisites: DEH 2300, DES 2934

DEH 2806C
Clinical Dental Hygiene IV
6.00 Credits
Clinical Dental Hygiene IV is a continuation of DEH 2804C. This course combines advanced clinical activities with previous clinical experience. This is the fourth term for direct patient care, which emphasizes quality patient care, time constraints, and communication skills. Students will continue to perform clinical activities for the prevention of oral disease, including patient assessment, treatment planning, scaling, debridement, root planning, ultrasonics, and air polishing application of preventive agents, oral irrigation and antimicrobial agents, and oral home care instructions. Additional experience will include office management, legal aspects, ethics, dental hygiene practice settings, dentistry and dental hygiene regulation, and general office procedures. Students are required to successfully complete an advanced number of procedures. Credit for this course does not apply to the associate in arts degree.
Prerequisites: DEH 2804C and DES 2934
Corequisites: DEH 1811 and DES 2502

DEP 1004
Developmental Psychology of the Life Span
3 Credits
Emphasizes developmental and psycho social growth from conception to death. Topics include Piaget's stages of cognitive development, Erickson's "Eight Ages," the concept of maturity, changing personalities in later adulthood, theories of aging and death and dying.
Prerequisite: College level reading and writing skills are required.

DEP 1004H
Honors Developmental Psychology of the Life Span
3 Credits
Same as for DEP 1004 with honors content. Emphasizes developmental and psycho social growth from conception to death. Topics include Piaget's stages of cognitive development, Erickson's "Eight Ages," the concept of maturity, changing personalities in later adulthood, theories of aging and death and dying. Honors Institute permission required. College level reading and writing skills are required.

DEP 2102
Child Development
3 Credits
Focuses on the development and psychosocial aspects of the child through adolescence. Topics include heredity, maturity and social determinants of child behavior. College level reading and writing skills are required.

DES 1020C
Oral, Head and Neck Anatomy
2 Credits
Oral, Head and Neck Anatomy is a detailed study of the gross anatomy of the head and neck, and the external and internal morphologic of the primary and permanent dentition. Anatomical models of the skull and teeth along with videos and workbooks allow the student to apply didactic information in the laboratory setting. Credit for this course does not apply to the associate in arts degree.
Corequisites: DEH 1002, DEH 1002L

DES 1100
Dental Materials
2 Credits
Dental Materials focuses on the nature, qualities, composition, and manipulation used in dentistry. The primary goal of this course is to enhance the student's ability to make clinical judgments regarding the use and care of dental materials based on how these materials react in the oral environment. Lecture topics include dental material standards, dental material properties, impression materials, gypsum products, mouth guards and whitening systems, dental bases, liners and cements, temporary restorations, classifications for restorative dentistry, direct restorative materials, indirect restorative materials, polishing procedures for dental restorations, removable dental prostheses, sealants and implants. Students will have hands on laboratory experience in the proper manipulation of dental materials commonly employed in dentistry. Some of the material taught in DES 1100C provides didactic, practical, and clinical experience necessary for the dental hygiene student to perform expanded functions as required by, and outlined in Florida Statute Title XXXII, Chapter 466, Section 466.024, and in the Florida Administrative Code Chapter 64, Sections B5 16.001, B5 16.002, and B5 16.006 through B5 16.010. Credit for this course does not apply to the associate in arts degree.
Prerequisites: CHM 1032, CHM 1032L, MCB 1000, MCB 1000L
Corequisites: DES 1100L

DES 1100L
Dental Materials Lab
1 Credit
This course is designed to provide basic knowledge and laboratory practice necessary for the proper manipulation of dental materials commonly employed in dentistry. Credit for this course does not apply to the associate in arts degree.
Prerequisites: CHM 1032, CHM 1032L
Corequisites: DES 1100, DES 1830C
DES 1200  
**Dental Radiology**  
2 Credits  
This course provides the student with fundamental knowledge of the nature, physics and biological effects of radiation to maximize understanding of proper control and safety precautions to be used in exposing, processing, mounting, and evaluating diagnostically acceptable radiographs. Credit for this course does not apply to the associate in arts degree.  
Corequisites: DES 1020C, DES 1200L

DES 1200L  
**Dental Radiology Lab**  
1 Credit  
This course provides the student with laboratory experience in exposing, processing, mounting, and critiquing diagnostically acceptable intraoral and extra-oral radiographs. Credit for this course does not apply to the associate in arts degree.  
Corequisites: DES 1020C, DES 1200

DES 1800  
**Introduction to Clinical Procedures**  
2 Credits  
This core course introduces the dental hygiene student to the basic concepts of clinical practice. Topics include the history of dentistry, dental health team members, professional organizations, medical/dental history, vital signs, operation and maintenance of dental equipment, operator/patient, four-handed techniques, oral evacuation, dental charting, cleaning of removable appliances, coronal polishing, and fluoride application techniques. Credit for this course does not apply to the associate in arts degree.  
Corequisites: DES 1020C, DES 1200

DES 1800L  
**Introduction Clinical Procedures Lab**  
1 Credit  
This course is designed for the practical application of professionalism and clinical procedures. Development of introductory skills is practiced in the clinical setting. Demonstration of required procedures is evaluated using preset standards. Credit for this course does not apply to the associate in arts degree.  
Corequisites: DES 1800, DEH 1002, DEH 1002L

DES 1830C  
**Expanded Duties for Dental Hygienists**  
2 Credits  
Expanded Duties for Dental Hygienists is a combined lecture and clinical course designed to provide didactic, practical, and clinical experience necessary for the dental hygiene student to perform expanded functions as required by, and outlined in Florida Statute Title XXXII, Chapter 466, Section 466.024, and in the Florida Administrative Code Chapter 64, Sections B5 16.001, B5 16.002, and B5 16.006 through B5 16.010. Credit for this course does not apply to the associate in arts degree.  
Prerequisite: DEH 1800C  
Corequisites: DES 1100, DES 1100L, DEH 1802C

DES 2502  
**Office Management**  
1 Credit  
This course enables the student to gain knowledge and proficiency in all procedures necessary for office management. The course includes telephone techniques, ordering supplies, recall system, appointment control, bookkeeping, billing, and insurance procedures. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: DES 2934, DEH 2804C  
Corequisite: DEH 2702L

DES 2934  
**Advanced Clinical Procedures**  
1 Credit  
Advanced Clinical Procedures is a lecture course that is a continuation of concepts and clinical procedures introduced in previous clinical courses. This course provides discussion of case based studies and the application of specialized care treatment procedures. Students develop critical thinking skills based on the application of theory and advanced dental hygiene procedures. Topics include dietary surveys, recall systems and applied techniques with an emphasis on patients having specialized needs and unusual case factors that may complicate routine care. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: DEH 1802C, DEH 2400  
Corequisites: DEH 2300, DEH 2804C

DIE 2000  
**Introduction to Dietetics**  
3 Credits  
This course provides an in-depth introductory study of dietetics, the normal nutritional principles and the application of these principles, the professional opportunities for registered dieticians (RDs), and dietetic technicians (DTRs) and the role of the American Dietetic Association in dietetics education and practice.  
Prerequisite: HUN 2201

DIE 2129  
**Quality Control in Food/Nutrition**  
3 Credits  
Students will be introduced to quality assessment and control in foods and nutrition. Topics will include review of laws, regulations and standards relating to the practice of dietetics.

DIE 2270  
**Clinical Nutrition I**  
3 Credits  
This course provides an in-depth introductory study of dietetics; in depth review of nutrition science; the normal nutritional principles and the application of these principles throughout the life cycle.  
Prerequisites: HUN 2201, DIE 2000
DIE 2271
Clinical Nutrition II
3 Credits
This course provides and advanced study of dietetics and the application of the science of nutrition to various disease states. Prerequisite: DIE 2270

DIE 2401
Nutritional Education and Interviewing
3 Credits
Provides information on the nutritional habits of various cultural groups, educational methods which have an impact on food purchases and interviewing techniques. Prerequisite: DIE 2000, HUN 2201
Corequisite: DIE 2419

DIE 2419
Nutritional Education Counseling Practicum
2 Credits
Provides the student with a practical application of nutrition education counseling. Actual interviews and customer needs records will reinforce the theories taught and the development and planning of menus. Prerequisite: DIE 2000, HUN 2201
Corequisite: DIE 2401

DIE 2533
Clinical Practicum
2 Credits
This course provides a supervised practice experience in a clinical acute care setting. This course is coordinated with and taught concurrently with Clinical Nutrition II. Didactic instruction and the supervised practicum are coordinated to allow the student to apply medical nutrition therapy and develop the specific competencies of a dietetic technician in an acute care hospital clinical setting. Prerequisite: DIE 2271

DSC 1002
Introduction to Terrorism
3 Credits
This course teaches the foundations of national security as it relates to international and domestic terrorism and the United States engagement in the war against terrorism. This course is a survey of the history and development of terrorist organizations and extreme political militancy both in the United States and the world.

DSC 1003
Introduction to Homeland Security
3 Credits
This course provides an introspective review of the history U.S. Homeland Defense Initiative and will explore the evolution of homeland security in the United States including an overview of the government agencies and laws involved.

DSC 2033
Introduction to Terrorist Tactics and Weapons
3 Credits
This course introduces students to various types of weapons of mass destruction. The student will be introduced to basic principles of weapons of mass destruction, recognition, identification, decontamination, and treatment protocols. The student will understand the importance of personal protective equipment and its proper uses and understand the toxicology, physical and chemical properties associated with weapons of mass destruction.

EAP 0100
Speech/Listening I
3 Credits
An introductory level listening and speaking course in which students develop the ability to understand and participate in brief conversations on familiar topics and begin to develop their pronunciation. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

EAP 0120
Reading I
3 Credits
Introductory course for EAP students with emphasis on comprehension of limited written materials. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

EAP 0140
Writing I
3 Credits
An introductory level writing course in which students develop the ability to write grammatically correct sentences and learn basic organizational skills for paragraph writing. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

EAP 0160
Grammar I
3 Credits
Introductory grammar course for EAP students with emphasis on basic verb tenses and simple sentence patterns. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

EAP 0200
Speech/Listening II
3 Credits
A high beginning/low intermediate level listening and speaking course in which students continue to develop their ability to understand and participate in conversations and further develop their pronunciation skills. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework. Prerequisite: EAP 0100
EAP 0220
Reading II
3 Credits
A high introductory level reading course for EAP students with emphasis on developing reading skills and vocabulary. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.
Prerequisite: EAP 0120.

EAP 0240
Writing II
3 Credits
A high beginning to low intermediate level writing course in which students continue to develop writing skills in the context of guided discourse with an emphasis on logical organization and mechanics. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.
Prerequisite: EAP 0140

EAP 0260
Grammar II
3 Credits
A high introductory grammar course for EAP students with emphasis on basic grammatical structures and statement/question patterns. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.
Prerequisite: EAP 0160

EAP 0300
Speech/Listening III
3 Credits
An intermediate level listening/speaking course in which students continue to develop their ability to understand and participate in conversations and discussions, and further improve their pronunciation. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.
Prerequisite: EAP 0200

EAP 0320
Reading III
3 Credits
An intermediate level reading course for EAP students with emphasis on vocabulary expansion and application of critical reading skills. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.
Prerequisite: EAP 0220

EAP 0340
Writing III
3 Credits
An intermediate level writing course in which students continue to develop the writing skills necessary to produce organized paragraphs on a variety of academic topics. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.
Prerequisite: EAP 0240

EAP 0360
Grammar III
3 Credits
Intermediate grammar course for EAP students with emphasis on increasing the accuracy of grammatical structures appropriate to classroom discussion and the writing of academic paragraphs. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.
Prerequisite: EAP 0260

EAP 0400
Speech/Listening IV
3 Credits
A high intermediate level listening/speaking course in which students continue to develop their ability to understand and participate in more complex classroom discussions. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.
Prerequisite: EAP 0300

EAP 0420
Reading IV
3 Credits
A high intermediate reading course for EAP students with emphasis on extensive reading and the enhancement of critical reading skills. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.
Prerequisite: EAP 0320

EAP 0440
Writing IV
3 Credits
A high intermediate writing course in which students further develop their writing skills by acquiring the ability to write more sophisticated structured academic paragraphs and essays. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.
Prerequisite: EAP 0340

EAP 0460
Grammar IV
3 Credits
A high intermediate grammar course for EAP students with emphasis on verb tenses and complex syntactic structures. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.
Prerequisite: EAP 0360

EAP 1500
Speech/Listening V
3 Credits
Students develop communication, organization, and pronunciation skills necessary for effective academic presentation and discussion with an introduction to lecture note taking.
Prerequisite: EAP 0400
Corequisite: EAP 1500L
EAP 1500L  
Speech/Listening Lab V  
1 Credit  
Students develop communication, organization, and pronunciation skills necessary for effective academic presentation and discussion with an introduction to lecture note taking.  
Prerequisites: EAP 0400  
Corequisites: EAP 1500

EAP 1520  
Reading V  
3 Credits  
A high intermediate college level reading skills course in which students will be equipped with the skills necessary for the efficient processing of general academic texts.  
Prerequisite: EAP 0420  
Corequisite: EAP 1520L

EAP 1520L  
Reading Lab V  
1 Credit  
A high intermediate college level reading skills lab designed to increase students' active and passive vocabulary.  
Prerequisite: EAP 0420  
Corequisite: EAP 1520

EAP 1540  
Writing V  
3 Credits  
Advanced writing course for EAP students in which students begin to write basic, structured academic essays with an emphasis on accuracy and cohesiveness. Students also learn to execute other related writing tasks.  
Prerequisites: EAP 0440, EAP 0460  
Corequisite: EAP 1540L

EAP 1540L  
Writing Lab V  
1 Credit  
Advanced grammar lab for EAP students designed to comprehensively review and expand the grammatical structures necessary to write academic English.  
Prerequisites: EAP 0440, EAP 0460  
Corequisite: EAP 1540

EAP 1560  
Grammar V  
3 Credits  
Students will develop the ability to use complex grammatical structures appropriate to effective academic presentations, discussions and essays.

EAP 1600  
Speech/Listening VI  
3 Credits  
Students further develop communication skills necessary for full participation in mainstream college classrooms including comprehension of extensive discourse.  
Prerequisites: EAP 1500, EAP 1500L  
Corequisite: EAP 1600L

EAP 1600L  
Speech/Listening Lab VI  
1 Credit  
Students further develop communication skills necessary for full participation in mainstream college classrooms, including comprehension of extensive discourse.  
Prerequisites: EAP 1500, EAP 1500L  
Corequisite: EAP 1600

EAP 1620  
Reading VI  
3 Credits  
An advanced level reading skills course in which students will further develop the skills necessary for the efficient processing of general academic texts.  
Prerequisites: EAP 1520, EAP 1520L  
Corequisite: EAP 1620L

EAP 1620L  
Reading Lab VI  
1 Credit  
An advanced college level reading skills lab designed to further increase the active and passive vocabulary of the student.  
Prerequisites: EAP 1520, EAP 1520L  
Corequisite: EAP 1620

EAP 1640  
Writing VI  
3 Credits  
Advanced writing course for EAP students in which students develop the ability to write a variety of college level essays with sophistication, fluency, and accuracy and execute other academic writing tasks.  
Prerequisites: EAP 1540, EAP 1540L  
Corequisite: EAP 1640L

EAP 1640L  
Writing Lab VI  
1 Credit  
Advanced grammar lab for EAP students designed to comprehensively review and expand the grammatical structures necessary to write academic English.  
Prerequisites: EAP 1540, EAP 1540L  
Corequisite: EAP 1640

ECO 2013  
Principles of Macroeconomics  
3 Credits  
Introduction to the theory of national income determination with emphasis on fiscal and monetary policies. This course includes analysis of full employment, price stability and economic growth.  
Prerequisites: College level reading, writing and math skills are required.
ECO 2023  
Principles of Microeconomics  
3 Credits  
Introduction to the theory of the market system with emphasis on supply and demand. This course includes analysis of price and output decisions under different market structures. Prerequisites: College level reading, writing and math skills are required.

EDF 1005  
Introduction to the Teaching Profession  
3 Credits  
This is a survey course including historical, sociological and philosophical foundations of education, governance and finance of education, education policies, legal, moral and ethical issues and the professionalism of teaching. Students will be provided information on the Florida Educator Accomplished Practices, Sunshine State Standards, and the Professional Educator Competencies. Students are required to complete a minimum of 15 hours of field-based experience with children and youth in schools or similar settings and not via virtual modes of film or Internet. Prerequisites: College level reading and writing skills are required.

EDF 2085  
Introduction to Diversity for Educators  
3 Credits  
Designed for the prospective educator, this course provides the opportunity to explore issues of diversity, including an understanding of the influence of exceptionalities, culture, family, gender, sexual orientation, and socioeconomic status, religion, languages of origin, ethnicity and age upon the education experience. Students will explore personal attitudes toward diversity and exceptionalities. Students will be provided information on the Florida Educator Accomplished Practices, Sunshine State Standards, and the Professional Educator Competencies. A minimum of 15 hours of field-based experience working with diverse populations of children and youth in schools or similar settings is required. The field experience should not be via virtual modes of film or Internet. College level reading and writing skills are required. Prerequisite: EDF 1005

EDP 2002  
Educational Psychology  
3 Credits  
Focuses on the teaching/learning process, including the conditions and determinants necessary for efficiency and the application of related psychological principles. College level reading and writing skills are required. Prerequisite: PSY 2012

EEC 1300  
Planning Early Childhood Program  
3 Credits  
Introduces planning strategies for creating significant learning experiences for children 3 to 5 years of age. Emphasis is on maturity levels, daily activities, assessment and development of personal teaching techniques.

EEC 1308  
Enhancing Intellectual Development in Early Childhood  
3 Credits  
Covers the theory of specific teaching skills in languages, mathematics, social studies and problem solving.

EEC 1311  
Crafts in Early Childhood  
3 Credits  
Focuses on using crafts to promote physical and mental development, with an emphasis on clay, paint, chalk and crayons.

EEC 1401  
Family and Early Childhood Education  
3 Credits  
Addresses professional responsibilities in working with parents, with an emphasis on sharing information, joint problem solving, home visits and parents meetings.

EEC 1521  
Early Childhood Center Management  
3 Credits  
Covers the management and delivery of educational services, with an emphasis on planning, equipment, space, security, and educational goals.

EEC 1721  
Physical Development in the Early Childhood Setting  
3 Credits  
Focuses on teaching techniques for helping students develop large and small motor coordination, and improve balance. Topics include maturational changes and growth patterns.

EEC 1941  
Child Care Practicum I  
3 Credits  
Presents the opportunity to practice skills and translate theoretical knowledge into developmentally appropriate early childhood education experiences (240 clock hours). Prerequisite waiver by permission of instructor required. Prerequisite: EEC 1521 Corequisite: EEC 1300

EEC 1943  
Child Care Practicum II  
3 Credits  
A continuation of EEC 1941; presents the opportunity to practice skills and translate theoretical knowledge into developmentally appropriate early childhood education experiences (240 clock hours). Prerequisites: EEC 1941

EEC 2270  
Language/Cultural Needs  
3 Credits  
Focuses on the special language and cultural needs of preschool disadvantaged students. Emphasis is on the strategies for increasing communication between children and adults,
communication as part of the socialization process, and the pros and cons of English as a second language.

EEC 2271  
**Children with Special Needs**  
3 Credits  
Focuses on identifying and understanding the needs of children with cultural differences, the handicapped, gifted and talented. Emphasis is on mainstreaming in the classroom setting.

EET 1036C  
**Basic AC and DC**  
3 Credits  
This course is for the student who has previously taken EET 1083C, Electronic Orientation, or is taking both classes in the same semester. It covers voltage, current, resistance, and power concepts in DC and AC circuits. It also includes problem solving in AC and DC circuits using Ohm's Law with an emphasis on constructing, measuring performance, troubleshooting, and repairing circuits. Laboratory exercises are included.  
Prerequisites: EET 1036C, MTB 1327

EET 1037C  
**Circuit Analysis**  
3 Credits  
Covers electronic filters, resonance, and RC and RL time constants concepts. Also covers AC and DC theorems used to analyze complex circuits. Laboratory activities such as constructing AC and DC circuits, verifying calculated circuit performance, and identifying and repairing circuit faults are included.  
Prerequisites: EET 1036C, MTB 1327

EET 1083C  
**Electronics Orientation**  
3 Credits  
Provides an introduction to computer operating systems, and to computer programs used in the analysis of electronic circuits. Also covers the use of electronics laboratory equipment such as digital multi meters, oscilloscopes, function generators, breadboards and trainers used in the program. Basic soldering skills included. Laboratory exercises are included.  
Prerequisite: EET 1036C

EET 1141C  
**Solid State Devices**  
3 Credits  
Covers the basic concepts of solid state devices used in electronics with an emphasis on semiconductor materials, diodes, transistors, (bipolar and FET), thyristors, basic operational amplifiers and related test equipment. Laboratory exercises are included.  
Prerequisite: EET 1036C

EET 1142C  
**Solid State Circuits**  
3 Credits  
Covers the basic concepts of analog circuits. Topics include multistage amplifiers, linear integrated circuits, basic power supplies and filters, audio amplifiers, oscillators, motor controls, cathode ray tubes, optoelectronic devices and related test equipment.  
Prerequisite: EET 1141C

EET 1949  
**Electronics Internship**  
3 Credits  
A coordinated work-study course involving class work and field experience. Objectives determined by the student and teacher coordinator will be used to evaluate the student.

EET 2155C  
**Linear Integrated Circuits**  
3 Credits  
Covers analog integrated circuits, operational amplifiers, power supply regulator feedback, waveform generators, special amplifiers and frequency response. Laboratory exercises are included. A special fee will be charged for this course.  
Prerequisite: EET 1142C

EET 2215L  
**Electronics Instruments**  
3 Credits  
Covers basic concepts and theory concerning electronic instruments used in testing situations, with an emphasis on practical applications of electronic measuring devices.  
Prerequisite waiver by permission of instructor required.  
A special fee will be charge for this course.  
Prerequisites: CET 2113C, EET 1142C

EET 2326C  
**Communications Systems I**  
3 Credits  
Provides an introduction to the communications field. Topics include AM, FM, television and single sideband multiplexing. Laboratory exercises are included. A special fee will be charged for this course.  
Prerequisite: EET 2155C

EET 2939  
**Electronics Engineering Capstone**  
3 Credits  
The capstone course is designed for the student to demonstrate his/her knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project based experience. The student's project requirements will be designed in concert with his/her area of curriculum emphasis. Credit for this course does not apply to the associate in arts degree.

EGS 2122C  
**Geometric Dimension/Tolerance**  
3 Credits  
This course provides the fundamentals of geometric dimensioning and tolerancing (gd and t) as based on the American Society of Mechanical Engineers standard ASME Y14.5m 1994. The coverage of topics includes geometric tolerancing symbols and terms, the rules of geometric dimensioning and
tolerancing, datums, material condition symbols, tolerances of form, profile, orientation and runout, and location tolerances. Prerequisite: ETI 1403

**EME 2040**
**Introduction to Technology for Educators**
3 Credits
Application of instructional design principles for the use of technology to enhance the quality of teaching and learning in the classroom. The course includes hands-on experience with educational media, emerging technologies, and hardware, software, and peripherals for the personal computer as well as data-driven decision-making processes. Identification of appropriate software for classroom applications, classroom procedures for integrating technologies with emphasis on legal and ethical use, and effective instructional strategies for teachers and students in regard to research, analysis, and demonstration of technology. Students will be provided an overview of the Florida Educator Accomplished Practices, Sunshine State Standards, the Professional Educator Competencies and the national Education Technology Standards. College level reading and writing skills are required. Prerequisite: EDF 1005

**EMS 1119**
**Emergency Medical Technician**
7.00 Credits
Provides the lecture, theory and discussion in compliance with the U.S. Department of Transportation (D.O.T) curriculum for the EMT Basic (1994). Also includes additional content related to esophageal intubation, intravenous fluid maintenance, automated defibrillation, and pneumatic anti shock garments. Credit for this course does not apply to the associate in arts degree. Prerequisites: ENC 0015, MAT 0018, REA 0007 or equivalent HCC placement test scores. Corequisites: EMS 1119, EMS 1119L, HSC 1220

**EMS 1119L**
**EMT Practicum**
2 Credits
Provides the competency based practice and testing of skills presented in the companion lecture course. Those skills include all the required skills of the EMT basic national curriculum plus the additional skills of esophageal intubation, intravenous maintenance, automated defibrillation and pneumatic anti shock garments. Includes strenuous skills such as lifting and patient carrying. Credit for this course does not apply to the associate in arts degree. A special fee will be charged for this course. Prerequisites: ENC 0015, MAT 0018, REA 0007 or equivalent HCC placement test scores. Corequisites: EMS 1119, EMS 1431, HSC 1220

**EMS 1431**
**EMT Clinical**
1 Credit
Provides the field experience and hospital clinical portions of the U.S. Dept. of Transportation curriculum (1994) for the EMT Basic. Includes strenuous skills such as lifting and carrying techniques in actual patient care situations. Exposure to blood and blood borne pathogens is possible in patient care situations. Credit for this course does not apply to the associate in arts degree. A special fee will be charged for this course. Drug testing is required. Prerequisites: ENC 0015, MAT 0018, REA 0007 or equivalent HCC placement test scores. Corequisites: EMS 1119, EMS 1119L, HSC 1220

**EMS 2381C**
**EMT Refresher**
2 Credits
Reviews the basic life support training and skills needed by the EMT B personnel who have successfully completed the basic training program. These skills and knowledge are used in the immediate pre-hospital care of the acutely ill or injured patient. A special fee will be charged for this course. This course may be taken unlimited times for credit. Credit for this course does not apply to the associate in arts degree. Prerequisite: Florida EMT B certification

**EMS 2551C**
**Advanced Cardiac Life Support**
2 Credits
The American Heart Association's Advanced Cardiac Life Support Provider course is designed to provide instruction and skill testing of specific therapies for various cardiac emergencies. The target population for this course is the practicing physician, paramedic or critical care nurse. Includes strenuous skills such as lifting and carrying techniques in actual patient care situations. Credit for this course does not apply to the associate in arts degree. Prerequisite: Current CPR certification required on the first class day

**EMS 2617C**
**Assessment Based Management and Proficiency**
2 Credits
Provides a review of the didactic and practical skills of the paramedic certificate program followed by written and practical examinations. Credit for this course does not apply to the associate in arts degree.

**EMS 2621**
**Paramedic Phase I**
7.00 Credits
Provides knowledge and skills contained in Division 1, of the 1998 DOT curriculum, Module 1 Preparatory, Module 2 Airways, Module 3 - Patient Assessment, Module 8 Ambulance Operations, in compliance with the most current DOT curriculum Credit for this course does not apply to the associate in arts degree. Corequisite: EMS 2621L

**EMS 2621L**
**Paramedic Phase I Practicum**
4 Credits
Provides knowledge and skills contained in division 1, of the 1998 DOT curriculum, module 1 preparatory, module 2 air-
way, module 3 – patient assessment, module 8 – ambulance operations, in compliance with the most current DOT curriculum. Credit for this course does not apply to the associate in arts degree.

Corequisite: EMS 2621

EMS 2622
Paramedic Phase II
8.00 Credits
Provides knowledge and skills contained in the most current department of transportation curriculum. Specific modules include Module 4 – Trauma, Module 5 – Medical Emergencies. Credit for this course does not apply to the associate in arts degree.

Prerequisites: EMS 2621, EMS 2621L

Corequisite: EMS 2622L

EMS 2622L
Paramedic Phase II Practicum
4 Credits
Provides knowledge and skills contained in the most current department of transportation curriculum. Specific modules include Module 4 – Trauma, Module 5 – Medical Emergencies. Credit for this course does not apply to the associate in arts degree.

Prerequisites: EMS 2621, EMS 2621L

Corequisite: EMS 2622

EMS 2623
Paramedic Phase III
6.00 Credits
Provides knowledge and skills contained in the most current department of transportation curriculum for paramedic. Specific modules include Module 6 – Special Considerations, Module 5 – Medical Emergencies (Cardiac Emergencies Management and Advanced Life Support). Credit for this course does not apply to the associate in arts degree.

Prerequisites: EMS 2622, EMS 2622L

Corequisite: EMS 2623L

EMS 2623L
Paramedic Phase III Practicum
2 Credits
Provides knowledge and skills contained in the most current department of transportation curriculum for paramedic. Specific modules include module 6 – special considerations, module 5 – medical emergencies (cardiac emergencies management and advanced life support) Credit for this course does not apply to the associate in arts degree.

Prerequisites: EMS 2622 and EMS 2622L

Corequisites: EMS 2623

EMS 2666
Paramedic Clinical I
3 Credits
Focuses on the demonstration of EMT and basic paramedic skills in actual patient care situations, with an emphasis on initial assessment and management of airway management, intravenous and medication administration, and patient and stretcher handling in field and hospital settings. Includes physically strenuous activity. Laboratory fee assessment is made for professional liability insurance. A special fee will be charged for this course. Prerequisite: Admission to Paramedic program. Credit for this course does not apply to the associate in arts degree.

EMS 2667
Paramedic Clinic II
3 Credits
Focuses on the demonstration of skills of the primary provider of patient care in actual situations. Topics include advanced assessment and evaluation, EKG monitoring and rhythm interpretation, defibrillation and cardioversion, chest decompression, and advanced airway management. Involves physically strenuous activity. A special fee will be charged for this course. Credit for this course does not apply to the associate in arts degree.

Prerequisite: EMS 2666

EMS 2668
Paramedic Clinic III
3 Credits
An advanced clinical experience focusing on decision making and direct patient care that stresses the completion of competencies introduced in previous courses and includes a field preceptor transition program. Credit for this course does not apply to the associate in arts degree.

Prerequisite: EMS 2667

EMS 2761
Introduction EMS Instruction
3 Credits
An introductory course for EMS instructors or training officers focusing on program design, teaching methods, student objectives and basic testing/measurement techniques as they apply to EMS training. Simulated patient care and use of Modern EMS equipment are emphasized. Experiences as an EMT, paramedic, registered nurse or physician is mandatory. Credit for this course does not apply to the associate in arts degree.

EMS 2930
EMS Seminar
1 Credit
Focuses on the discussion of current topics in the EMS field. Content may vary by section. This course may be taken five (5) times for credit. Credit for this course does not apply to the associate in arts degree.

ENC 0015 (formerly ENC 0010)
College Prep Writing I
4 Credits
Designed to provide instruction in written communication skills. Basic grammar and rhetorical skills including parts of speech, sentence structure, mechanics, and word choice will be introduced. Emphasis is placed on learning to express ideas in clear, logical standard English and on paragraph development. This class does not satisfy general education requirements and generates compensatory credit only.
ENC 0025 (formerly ENC 0020)  
**College Prep Writing II**  
4 Credits  
Designed to provide additional instruction in written communication skills. Advanced grammar and rhetorical skills including sentence variety, coordination and subordination, misplaced and dangling modifiers and parallelism will be studied. Basic paragraph organization, essay structure and rhetorical modes including cause and effect and comparison/contrast are practiced. Eligible students are required to pass the Florida State Exit Exam at the end of the semester to demonstrate readiness for ENC 1101 (English Composition I). This class does not satisfy general education requirements and generates compensatory credit only.  
Prerequisites: ENC 0015 or appropriate placement score.

ENC 1101  
**English Composition I**  
3 Credits  
Focuses on the writing process of various expository methods with consideration of the writer's purpose, limitations of time, and audience. Students must write unified, coherent essays that include theses and introduction, body, and conclusion paragraphs. Students must demonstrate effective sentence structure, and observe conventions of standard English grammar and usage. Prerequisite requirements: Satisfactory scores on the HCC placement test or ENC 0025 and REA 0017 with a minimum grade of C.

ENC 1101H  
**Honors English Composition I**  
3 Credits  
Same as ENC 1101 with honors content. Honors Institute permission required.  
Prerequisites: College level reading and writing skills are required.

ENC 1102  
**English Composition II**  
3 Credits  
A continuation of ENC 1101. Instruction is persuasive and literary based critical and evaluative skills in English composition. Documented research paper required. Prerequisites: ENC 1101 with a minimum grade of C or S.

ENC 1102H  
**Honors English Composition II**  
3 Credits  
Same as ENC 1102 with honors content. Honors Institute permission required. College level reading and writing skills are required.  
Prerequisites: ENC 1101H with a minimum grade of C or S.

ENC 1151  
**Technical English I**  
3 Credits  
This course prepares students to communicate effectively within the workplace by planning, writing and analyzing a variety of fundamental business documents and electronic messages. It also includes a brief review of common writing errors and mechanics and it explores communication etiquette in terms of giving, receiving and processing information for business. Enc 1151 may serve as general education credit for students in the AAS Industrial Management program. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: College level reading and writing skills are required.

ENC 2210  
**Technical Writing**  
3 Credits  
Focuses on writing and designing documents in technical and professional discourse communities. Students produce a number of technical genres including correspondence, reports, a proposal, and instructions for various technical and lay audiences. Assignments are intended to create a real world situation and present a set of rhetorical considerations and restraints.  
Prerequisite: ENC 1101

ENC 2341  
**Magazine Writing and Design**  
3 Credits  
This course is designed for writing of expository, descriptive and narrative articles on subjects of contemporary interest. Topics will include non-fiction, essay writing, fiction and poetry. Class lectures will cover the publication process from start to finish, and include hands-on work with software design programs. All work produced for the class may be submitted to the student publications. Design software will be utilized as the design and layout program for the course, and participants will receive extensive training in magazine layout, design, editing and production. Completion of ENC 1101 is preferred.  
Prerequisites: College level reading and writing skills are required.

ENG 2100  
**Introduction to Film**  
3 Credits  
Presents film as an art form, with an emphasis on analysis and evaluation. Topics include vocabulary, techniques, story, script, cinematography, sound, directing, acting, historical perspective, cultural settings and comparative status among other films.  
Prerequisite: ENC 1101

ENG 2930  
**English Special Topics**  
3 Credits  
This course will meet the requirements of its objectives and will provide breadth and depth of exploration of a focused topic defined by a literary agenda. It is an advanced study that focuses on developing reading, writing, research, and analytical skills. This course is designed by each individual instructor who selects to teach it. It may be taken twice for up to six credits.  
Prerequisite: ENC 1101
ENL 2012
British Literature to 1800
3 Credits
Focuses on selected British writers, with an emphasis on major periods and trends, such as Anglo Saxon, Middle Ages, neoclassicism and pre-romanticism.
Prerequisites: College level reading and writing skills are required.

ENL 2012H
Honors British Literature to 1800
3 Credits
Same as ENL 2012 with honors content. Honors Institute permission required.
Prerequisites: College level reading and writing skills are required.

ENL 2022
British Literature: 1800 to Present
3 Credits
Focuses on 19th and 20th century writers from the romantics to the present.
Prerequisites: College level reading and writing skills are required.

ENL 2022H
Honors British Literature: 1800 to Present
3 Credits
Same as ENL 2022 with honors content. Honors Institute permission required.
Prerequisites: College level reading and writing skills are required.

ENT 1000
Introduction to Entrepreneurship
3 Credits
This course is designed to provide a broad overview of the process of turning an idea into a successful enterprise. This course will be useful for anyone, whether or not they have had prior business or entrepreneurial experience. The course explores the characteristics of the entrepreneurial mind and the environment in which these ventures succeed. The course provide self-assessment of the skills and commitment necessary to successfully start and operate an entrepreneurial venture.

EPI 0001
Classroom Management
3.00 Credit Hours
This course prepares the student to set up a classroom; employ classroom management techniques; express an understanding of school safety; integrate sunshine state standards into lesson development; create lesson plans; establish and maintain cooperative relations with parents; develop and administer various forms of assessment describe the implications of FCAT and other standardized tests; and demonstrate an understanding of the ethical and legal obligations of the teaching profession.

EPI 0002
Instructional Strategies
3.00 Credit Hours
This course prepares the student to identify different learning styles, recognize Bloom’s Taxonomy prepare lesson plans, use various styles on presentations, employ varied teaching strategies, explain cooperative, group, contextual, and project based learning, apply behavioral management strategies, and discuss accommodations for exceptional students.

EPI 0003
Classroom Technology
3.00 Credit Hours
This course prepares the student to develop computer based record keeping, to identify additional application software productivity tools prepare multimedia presentations, describe content area instructional strategies, identify Internet resources, describe WebQuests, demonstrate knowledge of webpage development and computer aided instruction integrate technology into the learning process, and describe copyright and fair use guidelines.

EPI 0004
Teaching and Learning Process
3.00 Credit Hours
This course prepares the student to research professional literature to seek best practices in teaching and to hone the craft of effective instruction.

EPI 0010
Foundations of Language and Cognition
3.00 Credit Hours
This course prepares the student to describe language structure and function, cognition of phonemic awareness, phonics, fluency, vocabulary and comprehension. The student will learn the integration of the reading components. Instruction is grounded in scientifically based research as a mechanism to inform instructional practice.

EPI 0020
Professional Foundations
2.00 Credit Hours
This course provides the foundation for the student to become a productive member of the teaching profession. Students will gain an understanding of the organization and administration of the public school, the laws governing teachers, the code of ethics, and the purpose of schools. Students will attain a professional perspective as well as a sense of grounding in the profession of teaching.

EPI 0030
Diversity
2.00 Credit Hours
This course provides the student with an understanding of the variety of backgrounds and cultures that may be found in a typical classroom.
EPI 0940
Field Experience
1 Credit Hour
Participants will complete a field experience in a public, charter, or private school. These field experiences will provide the opportunity to gain insight into the instructional process. Those participants who are teaching will be required to complete the field experiences in the schools where they are assigned.

EPI 0945
Field Experience
1 Credit Hour
This course provides the student with a field experience in the classroom to give a broader view of the social aspects of diversity and cause the participant to reevaluate personal beliefs and prejudices that may adversely affect the learning process.

ESC 1000
Earth Science
3 Credits
Focuses on geology, meteorology, and astronomy. Topics include the earth's atmosphere and weather systems, earthquakes, volcanoes, plate tectonics, the solar system and the universe; intended for non science majors.
Prerequisites: College level reading, writing and math skills are required.
Corequisite: ESC 1000L

ESC 1000H
Honors Earth Science
3 Credits
Same as ESC 1000 with honors content. Honors Institute permission required.
Prerequisites: College level reading, writing and math skills are required.
Corequisite: ESC 1000L

ESC 1000L
Earth Science Lab
1 Credit
The focus of this course is to familiarize the student with science laboratory techniques and procedures including collecting and recording data, performing calculations, analyzing data, and interpreting results. This is accomplished through experiments and exercises related to topics in earth science. A special fee will be charged for this course.
Prerequisites: College level reading, writing and math skills are required.
Corequisite: ESC 1000

EST 1436C
Biomedical Electronic Systems I
3 Credits
Designed to cover selected topics as outlined by the Florida Curriculum Frameworks for Biomedical Equipment Engineering Technology. Topics covered include: pneumatic systems, optical systems and treatment devices. Lab work will be as signed for all major topics Credit for this course does not apply to the associate in arts degree.
Prerequisites: EET 1141C, CET 2113C

EST 1535
Automated Process Control
3 Credits
Introduces modern control theory and the use of sensors, actuators and controllers. The student will be introduced to state-of-the-art control systems used in industry and the elements that comprise a closed loop network.

EST 1540
Using Programmable Logic Controllers and Robotics
3 Credits
Provides basic operational concepts common for the control of multi station industrial robotic systems. Topics include the role of programmable controllers, interface of analog and digital components in robotic systems and writing ladder diagram programs.

EST 1542
Introduction to Programmable Logic Controllers
3 Credits
Provides basic operational concepts common to programmable controllers, focusing on PLC principles, programming and the fundamentals needed for simple process control.

EST 2438C
Biomedical Electronics Systems II
3 Credits
Covers topics from the Florida Curriculum Frameworks for Biomedical Equipment Engineering Technology that are not covered in EST 1436C. Topics include: electrosurgical generators and equipment, and electrical device hazards Credit for this course does not apply to the associate in arts degree.
Prerequisite: EST 1436C

EST 2439C
Biomedical Electronics Systems III
3 Credits
Covers topics from the Florida Curriculum Frameworks for Biomedical Equipment Engineering Technology that are not covered in EST 2438C. Topics include diagnostic devices and equipment, testers and analyzers, electrosurgical generators and equipment, and electrical device hazards. Credit for this course does not apply to the associate in arts degree.
Prerequisite: EST 2438C

EST 2440C
Biomedical Electronics Systems IV
3 Credits
Covers topics from the Florida Curriculum Frameworks for Biomedical Equipment Engineering Technology that are not covered in EST 2439C. Continuation of Biomedical Electronics Systems III. Topics include electrosurgical generators and
equipment and electrical device hazards. Credit for this course does not apply to the associate in arts degree.
Prerequisite: EST 2439C

EST 2939
Biomedical Equipment Engineering Capstone
3 Credits
The capstone course is designed for the student to demonstrate his/her knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project-based experience. The student's project requirements will be designed in concert with his/her area of curriculum emphasis. Credit for this course does not apply to the associate in arts degree.

ETD 1110C
Drafting Technology
3 Credits
Focuses on drafting technology, with an emphasis on instruments, processes and technical skills. Topics include orthographic, pictorial, auxiliary, sectional and computer aided design drawings.
Prerequisites: College reading skills are required.

ETD 1320C
Computer-Aided Drafting for Engineering
3 Credits
This course uses the major features of computer-aided design software (AutoCAD) to make graphic displays, including basic geometric figures, orthographic views of three dimensional objects, production of mechanical drawings, and pictorial drawings of various three-dimensional applications. Major topics include drawing, file handling, text and text editing, dimensioning and plotting.

ETI 1110
Introduction to Quality
3 Credits
A survey course addressing quality management, quality systems, quality assurance, quality control and total quality management topics. The student will become familiar with ISO 9000, Pareto charts, and other quality techniques and tools.

ETI 1181
Quality Systems and Workplace Dynamics
2 Credits
Provides the basic concepts and protocols of modern quality systems found in advanced manufacturing facilities. Topics include relevant Total Quality Management (TQM) and the International Standards Organization (ISO) standards for system quality and environmental quality management such as control, statistical process control, manufacturing methodologies.

ETI 1403
Introduction to Advanced Manufacturing Technology
1 Credit
Presents an overview of various advanced manufacturing industries and typical career opportunities of these industries to include circuit board manufacturing, semiconductor manufac-
### ETI 1949  
**Manufacturing Internship**  
2 Credits  
This course is a structured and supervised internship for students in the Manufacturing Technology program of study. On the job experience will be integrated with regular biweekly class meetings to review and compare experiences with respect to workplace skills and technical expectations.

### ETI 2151C  
**Process Metrology**  
3 Credits  
This course covers the principles, techniques, and devices of metrology as applied to the procedures and concepts of the quality process. The uses and applications of measurement with various types of instruments and measuring machines are also covered in the laboratory.  
Prerequisite: ETI 1403

### ETI 2950  
**Engineering Technology Capstone**  
3 Credits  
The capstone course is designed for the student to demonstrate knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project based experience. The student’s project requirements will be designed in concert with the area of curriculum emphasis.

### ETM 1010C  
**Mechanical Measurement and Instrumentation**  
3 Credits  
This course provides a basic foundation for mechanical measurement techniques used in manufacturing environments. The course will integrate the concepts, principles and techniques of mechanical measurement with the use of various types of instruments, including micrometers, calipers, height gauges and other types of measuring equipment.

### ETM 2315  
**Hydraulic and Pneumatic Systems**  
3 Credits  
Introduces the students to the basic hydraulic and pneumatic systems and devices commonly found in advanced manufacturing facilities. The underlying scientific principles will be covered and their practical applications. Completion of PHY 1025 is strongly recommended. Taking ETM 2315L concurrently is strongly recommended.

### EVR 1041  
**Natural Resource Management w/Applications in GIS**  
4 Credits  
An introduction to the appropriate use and potential applications of geographic information systems (GIS) in natural resource management with emphasis on forest management and operations planning. Students will be presented with lectures and exercises that cover a wide range of GIS and GIS related topics and issues.

### EUH 1000  
**Western World: Early Modern Europe**  
3 Credits  
Presents a study of cultural, economic and political developments of Western civilization from prehistoric times through the Reformation and the European Renaissance, with an emphasis on geographic references.  
Prerequisites: College level reading and writing skills required.

### EUH 1000H  
**Honors Western World: Early Modern Europe**  
3 Credits  
Same as EUH 1000 with honors content. Honors Institute permission required.  
Prerequisites: College level reading and writing skills required.

### EUH 1001  
**Western World: Modern Europe**  
3 Credits  
Presents a study of the economic, social and political development of the world from 1648 to the present, with an emphasis on geographic references.  
Prerequisites: College level reading and writing skills required.

### EUH 1001H  
**Honors Western World: Modern Europe**  
3 Credits  
Same as EUH 1001 with honors content. Honors Institute permission required.  
Prerequisites: College level reading and writing skills required.

### EVR 1328  
**Natural Resource Conservation and Ecology**  
3 Credits  
An introduction to the ecology and conservation of natural resources of native lands, concentrating on Florida ecosystems. Emphasis will be given toward interactive networks and ecosystems on which species depend, techniques for insuring biological diversity and human conservation interactions. Topics include: ecosystems, diversity, threats to habitat, the value of natural resources, conservation practices and conservation and human society.  
Prerequisite: College level reading and math skills required, and BSC 1005, BSC 1005L, EVS 1001

### EVR 2040  
**Advanced GIS with Environmental Applications**  
4 Credits  
This course provides advanced instruction using GIS software. Special emphasis will be given to environmental applications.
Designed for students who have taken GEO 2150 or who have had previous experience with GIS software.
Prerequisite: GIS 2040

**EVR 2858**  
**Environmental Law**  
4 Credits  
This course will introduce the basic legal concepts and statutory principles of environmental law with a focus on pollution control. It will also provide an opportunity for applying these concepts and principles through a service project.

**EVS 1001**  
**Introduction to Environmental Science**  
3 Credits  
Provides the student with an overview of current environmental concerns and their management. Emphasis is on the application of biological, physical and chemical methods to the understanding of and solutions to environmental problems. The student will gain insight into the natural interactions among living things and physical aspects of the environment.  
Prerequisites: College level reading and math skills required.

**EVS 1026**  
**Chemistry and Biology of Natural Waters**  
4 Credits  
Provides an introduction to the chemistry of water treatment systems of natural water. Emphasizes the unit operations and analysis of water treatment. Attention is also given on assessing local bodies of water with regard to water quality and appropriate assessment techniques.  
Prerequisite: CHM 1025

**EVS 1042**  
**Water Resources with Applications in GIS**  
4 Credits  
This course is an introduction to water resources with applications in geographic information systems software. Prior GIS experience is not required, but familiarity with Windows is. In this course students will learn the basics of water resource science and management as well as the basics of GIS software. Topics to be studied include the basics of: GIS software; hydrologic science; and global, regional, and local water resource management issues. Special emphasis will be placed on the water resources of Florida.

**EVS 1181**  
**Conventional and Pretreatment Water Technologies**  
3 Credits  
This course covers the technologies required to produce safe drinking water as well as the pretreated water required for advanced technologies. Technologies covered include clarification, media filtration, cartridge filtration, bag filtration, membrane filtration, silt dispersants, biocides, acids, scale inhibitors, sulfite compounds, ultraviolet irradiation, and softening. Credit for this course does not apply to the associate in arts degree.  
Corequisites: EVS 1183, EVS 1190

**EVS 1183**  
**Introduction to Water Treatment Systems**  
3 Credits  
This course serves to introduce the student to a career field in advanced water treatment and prepares students to work safely in an advanced water treatment laboratory and water plant. Credit for this course does not apply to the associate in arts degree.  
Corequisites: EVS 1190, EVS 1181

**EVS 1185**  
**Membrane Technologies I**  
3 Credits  
This course covers the theory, process and equipment of common membrane water treatment technologies. This course covers the microfiltration, ultrafiltration, electrodialysis, and electrodeionization membrane technologies. Some system design consideration and integration into water treatment systems are provided. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: EVS 1183, EVS 1190, EVS 1181  
Corequisites: EVS 1186, EVS 2187

**EVS 1186**  
**Membrane Technologies II: Filters and Reverse Osmosis**  
3 Credits  
This course covers the theory, process and equipment of common membrane water treatment technologies. This course covers the non-filtration and reverse osmosis membrane water treatment. Some system design consideration and integration into water treatment systems are provided. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: EVS 1181, EVS 1183, EVS 1190  
Corequisites: EVS 1185, EVS 2187

**EVS 1190**  
**Water Treatment Plant Equipment**  
3 Credits  
This course covers basic hand tools, equipment, chemical injections, safety and troubleshooting of water treatment systems. Students will also gain an understanding of piping and instrumentation diagrams. Hands-on experience with pumps, valves, gauges and meters is provided. Credit for this course does not apply to the associate in arts degree.  
Corequisites: EVS 1183, EVS 1181

**EVS 1893**  
**Comparative and Sampling Analysis Methods**  
3 Credits  
Provides an overview of sampling and analysis techniques which are commonly used in the environmental and materials testing fields. The course deals with the skills and knowledge necessary to understand sampling and analysis concepts and to conduct basic sampling procedures.
EVS 2005C  
Treatment of Water and Wastewater  
4 Credits  
Examines the chemical, physical and biological treatment of water and wastewater. Emphasizes unit operations analysis of water treatment systems, and field evaluation of their operation.  
Prerequisites: CHM 1025, CHM 1025L

EVS 2179  
Water Analysis and Monitoring  
3 Credits  
This course covers the standard laboratory procedures and on stream analysis for the measurement of silica, organic compounds, ions, particles, and microorganisms. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: EVS 1183, EVS 1186, EVS 2187

EVS 2180  
Advanced Membrane Monitoring  
3 Credits  
This course covers the advanced troubleshooting procedures and techniques required for identifying and correcting common membrane unit problems, including probing, profiling, element replacements, element autopsies, chemical cleaning, and using mathematical calculations and/or computer software programs for trend analysis. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: EVS 1183, EVS 1190, EVS 1181

EVS 2182  
High Purity Water Technologies  
3 Credits  
This course covers the principles and operation of post ion exchange equipment including ultraviolet irradiation units, distillation units, final filters, and storage and distribution, as well as the minimization of dead legs and periodic disinfection of high purity water piping. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: EVS 2179, EVS 2188, EVS 2180

EVS 2184  
Ion Exchange Technology  
3 Credits  
This course covers the characteristics of feed water contaminants and the fundamental principles of water purification using ion exchange technology. Strong acid cation, strong base anion, weak acid cation, and weak base anion resins are covered as well as single bed units, dual bed units, mixed bed exchange units, full train units and electrodeionization. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: EVS 2188, EVS 2179, EVS 2180

EVS 2187  
Membrane Unit Monitor/Troubleshooting  
3 Credits  
This course covers the initial monitoring and troubleshooting skills required to effectively operate and maintain a membrane water treatment system and to identify when scaling, fouling, chemical attack or other problem is occurring. Monitoring and troubleshooting of microfiltration, ultrafiltration, nonfiltration, reverse osmosis, and electrodeionization units are covered. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: EVS 1185, EVS 1186, EVS 2187

EVS 2188  
Pre-treatment Troubleshooting  
3 Credits  
This course covers the operation, monitoring and troubleshooting of membrane pretreatment equipment including multimedia filters and activated carbon beds, as well as how to prevent the common scaling, fouling, and chemical attack problems which membrane units may experience. This advanced pre-treatment course builds on information previously learned. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: EVS 1185, EVS 1186, EVS 2187

EVS 2793  
Sources and Effects of Air Pollution  
4 Credits  
Examines the common sources of air pollution and the effect of this pollution on human and ecosystem health, with an emphasis on how pollutants are produced and transported. The engineering aspects of combustion and transportation related emissions and the basic principles of air pollution meteorology will also be examined.  
Prerequisite: EVS 1001

EVS 2891  
Hydrology Quality Water Resources  
4 Credits  
A comprehensive survey of water resources considering both quantity and quality. Emphasis is on the standard techniques of sampling and monitoring especially for ground water. The hydraulic characteristics of water are also discussed. Analytical procedures used in field investigations and modeling studies are covered. A separate laboratory time is provided for on campus and field activities.

EVS 2893C  
Environmental Sampling and Analysis I  
5 Credits  
Introduces the theory and methods of analysis of certain inorganic chemical substance and physical properties of soil. Techniques of sampling preparation for testing, and testing and analysis will be covered. Approved standards for analysis will be examined and utilized for laboratory testing. Laboratory exercises will include sample collection, testing and analysis.
EVS 2894C
Environmental Sampling and Analysis II
5 Credits
Introduces the theory and methods of analysis of inorganic chemical substances of water. Techniques of sampling, preparation for testing, testing and analysis will be covered. Federal and state approved standards for analysis will be examined and utilized for laboratory testing. Laboratory exercises will include sample collection, testing and analysis.

EVS 2895C
Environmental Sampling and Analysis III
5 Credits
Introduces the theory and methods of analysis of metals, organic load and biological test methods associated with water and wastewater. Techniques of sampling, preparation for testing and analysis will be covered. Quality control methods are also covered. Laboratory exercises will include sample collection, testing and analysis.
Prerequisite: EVS 2894

EVS 2939
Water Treatment Capstone Course
3 Credits
This course is the final preparation for students to pass state certification exams if the student chooses to work at a municipal drinking water facility. Drinking water laws are covered as well as all of the reviews necessary to prepare the student for obtaining a job in the industrial or municipal sectors. Many case studies, process flows and problem solving workshops are provided. Credit for this course does not apply to the associate in arts degree.
Corequisites: EVS 2184, EVS 2182

EVS 2942L
Environmental Technology Practicum
3 Credits
Focuses on hands-on experience in environmental sampling and analysis methods by assigning students to agencies or businesses for 150 hours per semester. Emphasis will be to gain practical experience in protocols, methods and use of equipment in an applied setting; includes the possibility of outdoor work and mildly strenuous skills such as carrying and lifting.
Prerequisite: EVS 2893C

FAS 1401L
Aquacultural Lab Techniques
3 Credits
The field of aquaculture uses a number of laboratory techniques to assist the technician in the treatment of fish, identification of fish, breeding techniques, raising of fish, feeding, and a whole host of controls on the artificial environment of the aquarium. This laboratory teaches the techniques used in the field. A special fee will be charged for this course.
Prerequisites: College level reading and writing skills are required.

FAS 1404C
Aquacultural Field Techniques
3 Credits
Focuses on the practical aspects of establishing a fish farm, setting up the ponds, maintaining environmental conditions, and harvesting the fish. College level reading and writing skills are required. A special fee will be charged for this course.
Prerequisites: College level reading and writing skills are required.

FAS 2240C
Aquacultural Nutritional Tech
3 Credits
Focuses on the nutritional aspects of fish. Fish digestive anatomy, nutrition requirements, metabolic rates, diets, and available food sources will be covered.
Prerequisites: College level reading and writing skills are required.

FAS 2253L
Aquacultural Disease Process Lab
1 Credit
Designed to teach laboratory techniques to identify disease causing organisms and to use some of the treatment methodologies. A special fee will be charged for this course.
Prerequisites: College level reading and writing skills are required.
Corequisite: FAS 2253

FAS 2253
Aquacultural Disease Processes
3 Credits
Studies the disease processes that affect fish that includes bacterial diseases, infections, viruses, fungi, parasites, immune diseases, nutritional diseases and environmental diseases.
Prerequisites: College level reading and writing skills are required.
Corequisite: FAS 2253L

FAS 2263C
Aquacultural Reproductive Technology
3 Credits
Focuses on the principles of reproductive biology for the aquaculture industry. The primary emphasis will be on freshwater fish reproduction, however, other aquaculture organisms will be discussed.
Prerequisites: College level reading, writing and math skills are required.
FAS 2353C
Aquacultural Management Practices
3 Credits
Aquaculture operations are businesses. This course teaches the basic operations of the business side, showing profit and loss statements, marketing, how to manage people, and the general principles of how to manage an aquaculture establishment. In addition, decision making tools for the manager will be presented that include the use of computers and records management. Prerequisites: College level reading and writing skills required.

FAS 2941L
Aquaculture Field Experience I
3 Credits
Focuses on the hands-on experience that can be gained from being in the field at aquaculture facilities in Hillsborough County. Students rotate through a variety of aquaculture operations to gain a broad spectrum of experiences that can only be gained from actual field work. This is the first of the four field experience courses. Prerequisites: College level reading and writing skills required.

FAS 2942L
Aquaculture Field Experience II
3 Credits
Focuses on the hands-on experience that can be gained from being in the field at aquaculture facilities in Hillsborough County. Students rotate through a variety of aquaculture operations to gain a broad spectrum of experiences that can only be gained from actual field work. This is the second of the four field experience courses. Prerequisite: FAS 2941L.

FAS 2943L
Aquaculture Field Experience III
3 Credits
Focuses on the hands-on experience that can be gained from being in the field at aquaculture facilities in Hillsborough County. Students rotate through a variety of aquaculture operations to gain a broad spectrum of experiences that can only be gained from actual field work. This is the third of the four field experience courses. Prerequisite: FAS 2942L.

FAS 2944L
Aquaculture Field Experience IV
3 Credits
Focuses on the hands-on experience that can be gained from being in the field at aquaculture facilities in Hillsborough County. Students rotate through a variety of aquaculture operations to gain a broad spectrum of experiences that can only be gained from actual field work. This is the last of the four field experience courses. Prerequisite: FAS 2943L.

FFP 1000
Introduction to Fire Science
3 Credits
Provides an overview of the fire protection field, with an emphasis on fire protection agencies, equipment, building design and construction and fire fighting tactics. Topics include fire suppression and equipment, characteristics and behavior of fire, fire hazard properties of ordinary materials, extinguishing agents and public relations.

FFP 1304
Aerial Operators Course
3 Credits
Covers driving laws and techniques, construction and operation of ladder trucks, aerial platforms and apparatus maintenance.

FFP 1506
Fire Prevention and Investigation
3 Credits
Deals with the principles of prevention and investigation, a study of the fire hazards of various occupancies, a review of fire prevention codes, OSHA requirements, surveying and mapping procedures. Topics include recognition of hazards, engineering and enforcement of solutions, public relations and presentation of arson evidence.

FFP 1710
Company Officer
3 Credits
Designed to assist officers in solving problems and situations encountered in today's changing fire service. The curriculum includes a review of fire department organization and administration, management theory, leadership, communication, motivation and group dynamics.

FFP 1810
Fire Fighting Tactics and Strategy I
3 Credits
Involves a review of fire chemistry, equipment, manpower, strategies, methods of attack and pre planning fire problems.

FFP 2120
Fire Service Building Construction
3 Credits
Building construction topics include identifying hazards from assault by fire and gravity, how building construction can influence fire spread, fire confinement or structural collapse, and many other life safety issues.

FFP 2151
Fire Service Information Management
3 Credits
Emphasis on the development and implementation of effective information services systems, strategic planning documentation and technology.
FFP 2280
Management of EMS for Fire Science
3 Credits
Provides a framework for the design and development of an emergency medical program. Focuses on current issues facing emergency medical services today.

FFP 2303
Fire Service Hydraulics
3 Credits
This course will cover the principles of fire service hydraulic formulas and calculations to determine pump pressures.

FFP 2305
Apparatus Operations
3 Credits
This course covers emergency vehicle driving fire ground pump operations including the use of master stream devices, pump construction and pump operational applications. Prerequisite: FFP 2303

FFP 2401
Hazardous Materials I
3 Credits
On site operational practices for hazardous materials in compliance with CFR 1910.120 standards.

FFP 2402
Hazardous Materials II
3 Credits
On site operational practices for hazardous materials in compliance with CFR 1910.120 standards.

FFP 2484C
Hazardous Materials Scene Management
3 Credits
This course will focus on the strategies and safe procedures for mitigating the danger at a hazardous materials incident. The course will meet the requirements set forth by OSHA 1910.120 and CFR 1910.120. Credit for this course does not apply to the associate in arts degree.

FFP 2490C
Chemistry of Hazardous Materials
3 Credits
This course focuses on the chemistry knowledge required to evaluate the potential hazards and behaviors of materials considered hazardous. It examines the reasons for the chemical behavior of hazardous materials and is designed to improve decision making, safety operations, and handling. The course will meet the requirements set forth by OSHA 1910.120 and CFR 1910.120. Credit for this course does not apply to the associate in arts degree.

FFP 2510
Codes and Standards
3 Credits
This course is designed to familiarize inspectors with the basic units of NFPA 101. This course includes statewide fire prevention code NFPA 1.

FFP 2521
Construction Documents and Plan Review
3 Credits
This curriculum is designed to have the student assimilate information contained in working drawings and specifications as they relate to the fire inspector. Topics include the interpretation of conventional graphic communication, symbols, abbreviations, principles of technical projection as well as a review of construction arithmetic and geometry.

FFP 2540
Private Fire Protection Systems
3 Credits
The study of private fire protection and detection systems, such as sprinkler and standpipe systems, chemical extinguishing systems, detection systems and devices. Each system is discussed as to its construction, preventive maintenance and individual uses.

FFP 2590
Management Fire Prevention Programs
3 Credits
Focuses on the ability of chief officers to effectively plan and execute fire prevention investigation functions.

FFP 2604
Cause and Origin
3 Credits
This course is designed to enhance the fire investigators ability to detect and determine the origin and cause of a fire. Specific topics include fire behavior review, investigation ethics, construction, ignition sources, reading fire patterns and scene reconstruction. Special topics on electrical fire investigation, woodland fires, vehicle fires, mobile home fires, RV and boat fires and scene documentation.

FFP 2630
Latent Investigation
3 Credits
A survey of the principles of latent fire and arson investigation.

FFP 2701
Organization and Command of Volunteer Fire Service Operations
3 Credits
Focuses on identifying the organizational structure, training, and the application of the incident command system to volunteer programs.
FFP 2720
Executive Fire Officer Leadership and Personnel Management
3 Credits
Provides a framework to identify the required skill and abilities necessary for administrative effectiveness and personnel management.

FFP 2730
Fire Service Organizational Theory
3 Credits
Provides a medium to relate current organizational theory to practical application in the fire service.

FFP 2740
Fire Service Course Delivery
3 Credits
Draws from many recognized authorities in exploring the methods and mechanics of imparting information, with an emphasis on techniques and multi-media materials for communication of ideas and strengthening the retention of skills obtained in the learning process.

FFP 2741
Fire Service Course Development
3 Credits
Emphasis on instructional design, course development and training manuals. Students develop their own course by establishing goals, objectives and evaluation criteria. Students may repeat this course up to 20 times for renewal of their Fire Certification.

FFP 2750
Financial Management in Fire Service
3 Credits
Designed to assist fire executives in the planning and managing of a fiscal program.

FFP 2790
Analysis of Fire Department Operations
3 Credits
Designed for upper level management and officers who will direct operations of maximum involvement at fire or emergency incidents within their community.

FFP 2791
Interpersonal Management in Fire Science
3 Credits
Provides a critical self assessment of individual managerial techniques and the implementation of a successful human resource development plan.

FFP 2801
Incident Command and Disaster Management
3 Credits
Focuses on the command and control of large scale disasters. Emphasis on inter agency relationships, planning and implementation of a disaster plan, practice drills, and mutual aid agreements.

FFP 2811
Fire Fighting Tactics and Strategy II
3 Credits
Covers advanced fire fighting techniques, with an emphasis on incident command systems.

FFP 2830
Incident Command of Major Fire Department Operations
3 Credits
Focuses on the command and control for fire officers charged with a greater alarm fire or incident, by emphasizing preplanning, size up, ICS and safety.

FIL 1000
Introduction Film, Cinema and the Environment
3 Credits
This course will provide an introduction to the basic terminology, techniques, and contributions of filmmaking and will explore major issues in the history of the moving image, from its invention at the end of the 19th century to the present day. Prerequisites: College level reading and writing skills required.

FIL 1420C
Motion Media I – Recording and Interpreting Reality
3 Credits
Provides a basic understanding of motion media production technology, equipment operation, terminology, and techniques. This will include an introduction to the camera, and to "mise en scene" for documentaries. Students apply the essentials of creative filmmaking in both studio and location settings. Prerequisites: CGS 1000, FIL 1000

FIL 1432C
Motion Media II: Space and the Environment
3 Credits
A continuation of FIL 1420C with emphasis on developing camera techniques in space and the environment. Students will undertake more advanced projects in motion media to further works both technically and conceptually. Prerequisite: FIL 1420C

FIL 2010
Films of Fantasy and Imagination
3 Credits
This course focuses on the art of the created motion picture image, which springs from the imagination with the help of tools such as animation, optical printing and digital construction and manipulation. This approach contrasts with the more traditional production of moving images, which focuses on and photographs aspects of real and existing objects, whether these are actors and sets or the world of nature. This course concerns films which spring from the imagination, literally from the mental pastures of human dreams, from the subconscious rather than the conscious mind. Prerequisites: College level reading and writing skills required.
FIL 2030
History and Future of Motion Pictures
3 Credits
This course explores the history of the motion media, including important films, techniques, and styles from 1900 to the present. It also surveys the industrial and social developments of cinema from the point of view of the artist.

FIL 2905
Directed Independent Study: Film
3 Credits
This course is designed to establish a framework for further self-learning in various areas of motion media for the advanced student. The student will shape the course to fit their needs by planning activities and preparing a contract coordinated with a member of the motion media faculty. The contract will outline a specific project, or a particular set of goals and requirements that the student wishes to achieve. The contract must be satisfactorily completed and reviewed by the assigned faculty member.
Prerequisite: FIL 1000

FIL 2931
Careers in Film and Video
1 Credit
Students are exposed to the full range of careers in film, video and broadcasting in addition to learning about resumes, internships, interviews, and portfolios.

FIN 1100
Personal Finance
3 Credits
Focuses on charting financial objectives, with an emphasis on budgeting, savings, credit, loans, insurance, estate planning, taxes, investments and real estate.

FIN 2001
Principles of Finance
3 Credits
This course is an introduction to the fundamentals of corporate finance. It will cover corporate financial structures, monetary systems, financial instruments, financial statement analysis, interest, and the time-value of money.
Prerequisites: ACG 2021. College level reading, writing and math skills required.

FIN 2051
International Financial Management
3 Credits
This course explores the management of international banking, financial services, financial risk, foreign exchange, corporate financing from a global perspective, direct foreign investment decisions, and the management of ongoing operations.
Prerequisite: FIN 2001. College level reading and writing skills required.

FNR 1001
Natural Resource Management
3 Credits
An introduction to the ecology and conservation of natural resources of native lands, concentrating on Florida ecosystems. Emphasis will be given toward management techniques for the conservation of interactive networks and ecosystems on which species depend. Topics include: land use, ecosystems management, conservation and restoration practices, wildlife and forest management, and prescribed fire management.
Prerequisite: EVR 1328. College level reading and math skills required.

FOS 1201
Sanitation and Safety Management.
2 Credits
This course explores the scientific rationales of sanitation and safety practices which are enforced for group protection in institutions and food service facilities. Students will recognize the importance of preparing, serving, storing, and holding foods so that they are free of contamination. This course also includes a study of the micro-world, food allergies, food borne illness, safe food handling, cleaning, sanitizing, pest management, and state, local, and national regulation governing sanitary food handling practices.
Prerequisites: College level reading, writing, and math skills are required.

FOS 2521
Introduction Seafood Processing
3 Credits
Provides a comprehensive overview of food science and technology, and an understanding of how raw aquacultural commodities and seafood are converted into consumer products. Topics include: food constituents, food deterioration and spoilage, food laws and regulations, methods used to preserve and process foods, and examples of processing and preservation of seafood. Class will include field trips to local seafood processing plants. This class is part of the curriculum for the C.A.S.S. International Aquaculture students. Others can take course with the instructor’s approval. Credit for this course does not apply to the associate in arts degree.

FRE 1120
Elementary French I
4 Credits
Covers the fundamentals of listening, reading and writing the language while developing an understanding of the French culture. Native speakers of French are encouraged to seek credit by exam test.
Prerequisites: College level reading and writing skills are required.

FRE 1121
Elementary French II
4 Credits
Enhances the skills learned in FRE 1120. Native speakers of French are encouraged to seek credit by exam test. College
level reading and writing skills required. Prerequisite: FRE 1120 with a minimum grade of "C" or instructor's permission.

FSS 1063C
Food Specialties I (Baking)
3 Credits
This course covers the fundamentals of baking as it applies to the industry. The student gains hands-on experience in practical applications, weights, measures and formula procedures. Emphasis is placed on the proper use of care of equipment, food safety and sanitation. Prerequisites: FOS 1201, FSS 1223C. College level reading, writing and math skills required.

FSS 1223C
Food Preparation for Managers
4 Credits
Students are introduced to various food preparation and kitchen management techniques. It specifically examines the chemical and physical changes that take place as food is processed and prepared for consumption. The knowledge in this course is acquired through theoretical lectures and hands-on service in the HCC kitchen laboratory ensuring the students’ understanding of back-of-the-house procedures and the application of food safety and sanitation principles. Prerequisites: College level reading, writing and math skills required.

FSS 1248C
Food Specialties II (Garde Manger I)
3 Credits
The purpose of this course is to introduce basic information, procedures, and techniques identifiable to contemporary chefs, in understanding and applying garde manger terminology, and the principles of cold food preparation. The proper care and use of tools and the correct preparation, handling, and use of mousses, cold dressings, and charcuterie are explained. Traditional plate presentations and techniques will also be discussed, as well as changes and interpretations of classical preparations to contemporary cooking standards. Prerequisites: FSS 1063C. College level reading, writing and math skills required.

FSS 1249C
Food Specialties III (Garde Manger II)
3 Credits
The cold station in any restaurant is one that encompasses a wide range of culinary techniques. From sausage making to garnishing and into charcuterie; this course will cover all the responsibilities associated with the garde manger department. The proper use of tools and the correct preparation, handling, and use of mousses, terrines, galantines, forcemeats and garnishes are explained. Traditional platter presentations and techniques will also be discussed, as well as changes and interpretations of classical preparation to contemporary cooking standards. Prerequisites: FSS 1248C. College level reading, writing and math skills required.

FSS 1500
Food and Beverage Control
3 Credits
This course is designed to provide students with a solid introduction to the planning and controlling elements of a food and beverage operation. It focuses on proven control principles and practical applications essential to operating an effective control system. Prerequisites: College level reading, writing and math skills required.

FSS 1941
Food Practicum I
2 Credits
A coordinated work-study course involving class work and field experience. Objectives determined by the student and teacher-coordinator will be used to evaluate the student. Prerequisites: FOS 1201, FSS 1223C. College level reading, writing and math skills required.

FSS 1942
Food Practicum II
2 Credits
A coordinated work-study course involving class work and field experience. Objectives determined by the student and teacher coordinator will be used to evaluate the student. Prerequisites: FOS 1201, FSS 1223C. College level reading, writing and math skills required.

FSS 1943
Food Practicum III
2 Credits
A coordinated work-study course involving class work and field experience. Objectives determined by the student and teacher coordinator will be used to evaluate the student. Prerequisites: FOS 1201, FSS 1223C. College level reading, writing and math skills required.

FSS 1944
Food Practicum IV
2 Credits
A coordinated work-study course involving class work and field experience. Objectives determined by the student and teacher coordinator will be used to evaluate the student. Prerequisites: FOS 1201, FSS 1223C. College level reading, writing and math skills required.

FSS 1945
Food Practicum V
2 Credits
A coordinated work-study course involving class work and field experience. Objectives determined by the student and teacher coordinator will be used to evaluate the student. Prerequisites: FOS 1201, FSS 1223C. College level reading, writing and math skills required.
FSS 1946
Food Practicum VI
2 Credits
A coordinated work-study course involving class work and field experience. Objectives determined by the student and teacher coordinator will be used to evaluate the student. Prerequisites: FOS 1201, FSS 1223C. College level reading, writing and math skills required.

FSS 2100
Food Plans and Menu Preparation
3 Credits
Emphasizes the preparation of a nutritionally balanced cycle menu, portion control, use of leftovers and waste control. Prerequisites: College level reading, writing and math skills required.

FSS 2120
Food Purchase and Storage
3 Credits
Focuses on volume food purchasing, with an emphasis on the legal obligations of vendors and vendees, receiving controls, and storing and dispersal. Prerequisites: College level reading, writing and math skills required.

FSS 2271
Beverage Management Service
3 Credits
This course is designed to familiarize students with the many varieties of alcoholic and non-alcoholic beverages. This class also examines wines from different countries while developing an appreciation for wine and food affinity. Emphasis is also placed on responsible serving techniques, purchasing, storing, and product control. Prerequisites: College level reading, writing and math skills required.

GCO 2230
Pumping and Irrigation Systems
3 Credits
This course is designed to allow students to focus on applying water to horticulture crops. Topics will include pumps, water resources, irrigation installation, pipe types and sizing, wire sizing, surge pressure, backflow, back siphon protection, valve locations, selection, sprinkler head location, geographical regions, pumps and pumping, water pressure calculation, cost estimation, troubleshooting and maintenance.

GEB 1214
Business Communications and Technology
3 Credits
This course is designed to equip students with a comprehensive understanding of communication, its scope and importance in business. Students will learn to apply fundamental communication theory. The various types of business communication genre are developed and used including written and oral forms. Emphasis is placed on planning, preparing, drafting, analyzing, performing the different communications required in the normal course of business activities. The course provides opportunities to recognize complex issues, organize ideas and thoughts in a consistently logical format, and then to communicate these ideas in a succinct and concise manner. College level reading, writing, and math skills are required.

GEB 1949
Business Internship
3 Credits
A coordinated work-study course involving class work and field experience. Objectives determined by the student and teacher coordinator will be used to evaluate the student. This course may be repeated six times for credit. Credit for this course does not apply to the associate in arts degree.

GEB 2350
Introduction to International Business Essentials
3 Credits
Focuses on the fundamentals of international business through an analysis of the cultural, economic, legal, and political factors that influence international operations in the global economy. Prerequisite: College level reading and writing skills required.

GEB 2351
International Business Practice Firm
3 Credits
Using an international business model, the students work as team members in a simulated business firm in a state-of-the-art facility. Students have the opportunity to perform various business functions (i.e., purchasing, accounting, marketing, human resources) as the firm transacts business with students in other simulated companies both in the U.S. and in other countries. Students are involved in decision-making, critical thinking, and team activities, and will partner with local businesses to further enhance their business skills. Prerequisites: College level reading, writing and math skills required.

GEB 2370
Introduction to International Business Policy Issues
3 Credits
Examines the challenges associated with planning and implementing international policy within business enterprises whose operations span across national boundaries. Students will be able to obtain a fundamental understanding of the strategic, operational and behavioral aspects of managing across cultures. Prerequisites: GEB 1011, GEB 2350, and FIN 2051. College level reading and writing skills are required.
GER 1120
Elementary German I
4 Credits
Covers the fundamental of reading, writing, listening and speaking the language while developing an understanding of the German culture. Native speakers of German will be asked to seek credit by exam test.
Prerequisites: College level reading and writing skills are required.

GER 1121
Elementary German II
4 Credits
Enhances the skills taught in GER 1120. Native speakers of German will be asked to seek credit by exam test.
Prerequisites: GER 1120 with a minimum grade of "C" or instructor's permission. College reading and writing skills are required.

GEY 1000
Issues of Aging
3 Credits
Explores the issues related to the aging process and the later stages of life including: retirement, psychosocial concerns and community services for the elderly.
Prerequisites: College level reading and writing skills are required.

GIS 1041
1 Credit
Designed to acquaint students with the uses and applications of Geographic Information Systems (GIS) and Global Positioning Systems (GPS). Methods and techniques used in GIS and GPS will also be reviewed. Credit for this course does not apply to the associate in arts degree.

GIS 2040
Fundamentals of Geographic Information Systems
3 Credits
Designed to acquaint students with the history, operation and applications of geographic information systems (GIS). This course will cover all aspects of geographic information systems including data collection, preprocessing, data management and data analysis as well as the application of these systems. Credit for this course does not apply to the associate in arts degree.

GLY 1010
Physical Geology
3 Credits
Covers basic geology concepts and principles. Topics include origin and structure of the earth, processes involved in shaping the earth's crust, the nature and classification of earth materials, and the dynamic interactions of the lithosphere with the hydrosphere and atmosphere that produce characteristic landforms.
Prerequisites: College level reading, writing and math skills are required.
Corequisite: GLY 1010L

GLY 1010L
Physical Geology Lab
1 Credit
This course accompanies GLY 1010. A special fee will be charged for this course.
Prerequisites: College level reading, writing and math skills are required.
Corequisites: GLY 1010

GRA 2111C
Graphic Design
3 Credits
This course is an introductory class which will introduce students to the design applications relevant to graphic design. Students with little or no experience on a MAC or PC will become familiar with the operating systems and will be able to use the computer to bring their images into the computer and be able to function with proficiency in file management, input and output, design applications, and creating backups of their work.
Prerequisite: ART 1202C
Corequisite: PGY 2401C

GRA 2156C
Digital Illustration
3 Credits
This course will build upon the student's understanding of digital design within the larger context of visual literacy and communication by expanding upon basic digital design processes and practices, particularly the differences between working in raster and vector-based media. The course will explore visual and technical understanding of digital illustration in a vector based environment using software applications that are considered to be the industry standard.
Prerequisites: GRA 2111C or ART 2600C

HFT 1000
Introduction to Hospitality Industry Management
3 Credits
The purpose of this course is to provide students with a basic understanding of facilities management within the hospitality industry. Emphasis is placed on the organization, structure, and functional areas in food service and lodging operations.
Prerequisites: College level reading and writing skills are required.

HFT 1410
Front Desk Procedure
3 Credits
This course presents a systematic approach to front office procedures by detailing the flow of business through a hotel from the reservation process to check-out and settlement. It also
examines the various elements of effective front office procedures within the context of the overall operation of a hotel. Prerequisites: College level reading, writing and math skills are required.

HFT 1790
The Event Industry
3 Credits
This course examines the full event planning process; beginning with the anatomy of an event to establish the different layers of an event experience and the step-by-step process needed to plan, design and execute events that will meet the needs of both customers and their audiences. Prerequisites: College level reading and writing skills are required.

HFT 2210
Supervisory Development
3 Credits
This course introduces students to the process of managing personnel in the hospitality industry. Lectures will highlight the supervisory skills, techniques, and procedures needed to become successful business leaders in today's dynamic and diverse workplace. Prerequisites: College level reading, writing and math skills are required.

HFT 2530
Hospitality Merchandising Techniques
3 Credits
This course is designed to provide students with a solid background in hospitality sales and advertising. It focuses on practical sales technologies, proven approaches for selling to targeted markets, and advertising's role in sales. Prerequisites: College level reading, writing and math skills are required.

HFT 2600
Hospitality Industry Law
3 Credits
Presents a study of the laws, codes and regulations applicable to the hospitality industry. Prerequisites: College level reading and writing skills are required.

HFT 2750
Meeting, Convention and Exposition Industry
3 Credits
The purpose of this course is to provide students with a basic understanding of convention sales and service. It identifies the various segments of the convention market and explores the methods and techniques utilized in exceeding guest expectations. Prerequisites: College level reading and writing skills are required.

HFT 2840
Maitre D' and Dining Room Service
3 Credits
Students are introduced to various service techniques and customer interaction skills. The knowledge in this course is acquired through theoretical lectures and practical hands-on service in the HCC Gourmet Dining Room. In this way, students become knowledgeable about front-of-the-house procedures and apply the principles of food safety and team leadership skills. Prerequisites: College level reading, writing and math skills are required.

HFT 2941
Hospitality Management Internship
3 Credits
A work-based learning experience that focuses on an area of interest in a restaurant or hotel. The intern will experience the opportunity to apply the theory learned in the program within a hospitality business setting. Grading is based on academic projects related to the position. The student must also provide authorized documentation confirming 125 hours of internship experience. Prerequisite: College level reading, writing, and math skills are required.

HIM 1000
Medical Record Content
1 Credit
Covers the basics of medical record content and usage. Provides an understanding of patient record requirements, access, and confidentiality. Includes analysis of the medical record, emphasizing legal ramifications, ethics, proper use, and confidentiality issues. Credit for this course does not apply to the associate in arts degree.

HIM 1433
Principles of Disease
4 Credits
This course addresses the etiology, pathophysiology, treatment, and complications of human diseases. A systems approach to the disease process is used, which will incorporate basic medical terminology, anatomy and physiology. Common laboratory and diagnostic tests are included. Credit for this course does not apply to the associate in arts degree.

HIM 1442
Pharmacology
2 Credits
Course is designed for students who will not be administering medications but require a general knowledge of classifications, common usage, and therapeutic indications of commonly prescribed medications. Credit for this course does not apply to the associate in arts degree.

HIM 1453
Anatomy and Physiology for Medical Coding
4 Credits
This course is designed for students with limited background in sciences pursuing careers in the allied health fields. The stu-
Students will gain an understanding of how the human body operates on a daily basis from birth to death and the fascinating working systems in our bodies, intended for medical coding students. Focuses on the structure and function of the various body systems. Includes the medical terminology and abbreviations related to each body system. Credit for this course does not apply to the associate in arts degree.

**HIM 2222**  
**Basic ICD-9-CM Coding**  
1 Credit  
An introduction to basic coding principles, characteristics and conventions using the ICD-9-CM coding system. Students will learn to use the Alphabetic Index to select correct codes from the Tabular listing to numerically identify diseases and procedures. Credit for this course does not apply to the associate in arts degree.  
Prerequisite: HSC 1531

**HIM 2232**  
**Intermediate ICD-9-CM Coding**  
3 Credits  
Coding principles, characteristics, and conventions of coding using the ICD-9-CM coding system. Includes coding principles and guidelines using the Alphabetic Index and Tabular list for diseases and procedures. Credit for this course does not apply to the associate in arts degree.  
Prerequisite: HIM 2222

**HIM 2253**  
**Basic CPT Coding**  
1 Credit  
Introduces basic coding principles, characteristics, and conventions of coding using the Physicians' Current Procedural Terminology (CPT). Focuses on evaluation and management coding, unbundling, starred procedures, separate procedures, the global period, and modifiers. Credit for this course does not apply to the associate in arts degree.  
Prerequisite: HSC 1531

**HIM 2254**  
**Intermediate CPT Coding**  
3 Credits  
A continuation of basic coding principles, characteristics, and conventions of coding, using the Physicians' Current Procedural Terminology (CPT) coding nomenclature. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: HSC 1531, HIM 2253, HIM 1453, HIM 1433

**HIM 2272C**  
**Medical Billing and Insurance II**  
3 Credits  
Emphasis on billing regulations for the State of Florida. Course content includes LMRPs, Workers' Compensation Laws, Florida Medicare and claims for automobile accident injuries. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: HIM 2275C, HSC 1531, HIM 2253

**HIM 2273**  
**Billing Software**  
2 Credits  
Students will receive training with a software program that is used to complete billing forms and process claims to insurance companies. Includes paper claims and electronic billing. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: HIM 2275C, HIM 2272C, HSC 1531, HIM 2253

**HIM 2275C**  
**Medical Billing and Insurance I**  
3 Credits  
Introduction to health insurance claims processing, carrier requirements, and state and federal regulations. Billing for physician's offices, hospital and ambulatory surgery services. Topics that are covered include, electronic billing, confidentiality, managed care systems, Workers' Compensation, Medicare and Medicaid. Will include hands-on laboratory component. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: HSC 1531, HIM 2222, HIM 2253

**HIM 2283**  
**Advanced Coding**  
3 Credits  
Includes the study of complex medical and surgical diagnoses and procedures in the inpatient and outpatient settings using CPT and ICD-9-CM codes to ensure accurate coding and reporting. Addresses current concepts and changes related to coding practice. Reimbursement by prospective payment systems will be reviewed. The 3M encoder will be used to provide hands-on practice. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: HSC 1531, HIM 1442, HIM 1433, HIM 1453, HIM 2232, HIM 2253, HIM 2254, HIM 2222

**HIM 2940**  
**Clinical Billing Practicum**  
2 Credits  
Course is a planned work-based experience that provides students with an opportunity to enhance their skills through a supervised practical experience related to their career objectives in medical billing. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: HSC 1531, OST 1100, OST 2145, CIS 1931, HSC 1641, HIM 1000, HIM 2275C, APA 1111, SLS 1261, HIM 2253, HIM 2222

**HIM 2941**  
**Clinical Coding Practicum**  
2 Credits  
Course is planned work based experience that provides students with an opportunity to enhance their skills through a supervised practical experience related to their career objectives. Coding guidelines will be used and the student will address billing and reimbursement issues. Medical records will be used by the student to perform coding procedures. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: HSC 1531, CIS 1931, HIM 2253, HIM 1000, HIM 1433, HIM 1453, HSC 1641, HIM 2254, HIM 2232, HIM 1442
HIS 2206
Selected Topics in History
3 Credits
An in depth study of the economic, intellectual, cultural, social and political developments in Western Civilization and their impact on today’s world. May be taken two times for credit.

HIS 2206H
Honors Selected Topics in History
3 Credits
Same as HIS 2206 with honors content. Honors Institute permission required. May be taken two times for credit.

HLP 1081
Health Analysis and Improvement
3 Credits
Examines the role, wellness and fitness, disease, nutrition, stress and physical activity, and their implications for total well being. Includes a self evaluation of the student’s current health status through their body composition and target heart rate. The development of a personal fitness program through complimentary and integrative modalities and a wide variety of choices is designed to improve total body fitness.

HOS 1010
Horticultural Science
3 Credits
Focuses on the fundamentals of plant growth, physiology, reproduction and related sciences. Plant identification structures, classification, soils, nutrition, irrigation, fertilizers, IPM post harvest handling and sustainable agriculture systems will be addressed. The impact of horticulture economy will also be addressed.

HOS 1016
Introduction Horticultural Math and Chemistry
3 Credits
Focuses on the fundamentals of chemistry and mathematics as they impact horticulture. Emphasis will be placed on measurements and units, chemicals and chemical reactions as they apply to horticulture. Topics include: numbers, metric system conversion, figures (charts and graphs), chemical reactions, liquids and solids, biochemistry and organic chemistry.

HSC 1220
Introduction to the Health Sciences
1 Credit
Introduces students to health care and patient care delivery systems. Includes discussion of infectious diseases and their transmission, including HIV/AIDS and hepatitis, bloodborne pathogens, legal/ethical issues regarding violence/abuse cognition and reporting. Also includes CPR certification for health care providers. Credit for this course does not apply to the associate in arts degree.

Prerequisites: MAT 0018, REA 0007 and ENC 0015 or equivalent HCC placement test scores.

HSC 1531
Medical Terminology
3 Credits
Focuses on medical terminology, with an emphasis on anatomical names of bones and organs of the body, anatomic descriptive terms, radiographic laboratory terms and their common abbreviations and commonly used medical terms and their proper usage. Credit for this course does not apply to the associate in arts degree.

HSC 1538
Terminology in Healthcare Professionals
1 Credit
Provides the student with the basic knowledge of the language of healthcare and the formation of complex medical terms. This independent study course is presented in modular design. It utilizes written and reading assignments as well as audio visual presentations to maximize retention. Credit for this course does not apply to the associate in arts degree.

HSC 1641
Legal and Ethical Aspects in Health Care
1 Credit
An introduction to health care delivery systems, their roles and responsibilities, and the patient's legal rights within the system. The student will also evaluate ethical issues as they relate to the health care field. Credit for this course does not apply to the associate in arts degree.

HSC 2100
Health Education
3 Credits
Provides a survey of the principles of health with an emphasis on physical fitness, mental health, nutrition, the use of tobacco, alcohol, drugs and family living.

HSC 2400
First Aid
3 Credits
To provide the citizen responder with the knowledge and skills necessary in an emergency to help sustain life, reduce pain, and minimize the consequences of injury or sudden illness until professional medical help arrives. Meets American Red Cross requirements for First Aid Responding to Emergencies Certification. A special fee will be charged for this course.

HUM 1520
Music in Culture
3 Credits
Links music to the visual arts and the composer’s cultures, focusing on western music from the Medieval Period to the present.

HUM 2210
World Humanities: Prehistoric to Early Modern Era
3 Credits
Provides an overview of the arts and ideas of major world civilizations of Europe, Asia, the Middle East, Africa and the Americas from the Prehistoric Era to the Renaissance. History is discovered through a study of art, music, literature, religion
and philosophy as students learn what others valued and believed.
Prerequisites: College level reading and writing skills are required.

**HUM 2210H**
**Honors World Humanities: Prehistoric to Early Modern Era**
3 Credits
Same as HUM 2210 with honors content. Honors Institute permission required.
Prerequisites: College level reading and writing skills are required.

**HUM 2230**
**World Humanities: Early Modern to the Contemporary**
3 Credits
Provides an overview of the arts and ideas of major world civilizations of Europe, Asia, the Middle East, Africa and the Americas from the Renaissance to the present day. History is discovered through a study of art, music, literature, religion and philosophy as students learn what others valued and believed.
Prerequisites: College level reading and writing skills are required.

**HUM 2230H**
**Honors World Humanities: Early Modern to the Contemporary**
3 Credits
Same as HUM 2230 with honors content. Honors Institute permission required.
Prerequisites: College level reading and writing skills are required.

**HUM 2410**
**Asian Humanities**
3 Credits
A historical survey of the humanities in India, China, Japan: the visual arts, music, dance, theater, religion, and philosophy from the Prehistoric Era to modern times. Emphasis will be on the cultural values revealed in works of art and literature.
Prerequisites: College level reading and writing skills are required.

**HUM 2410H**
**Honors Asian Humanities**
3 Credits
Same as HUM 2410 with honors content. Honors Institute permission required.
Prerequisites: College level reading and writing skills are required.

**HUM 2420**
**African Humanities**
3 Credits
A historical survey of African humanities: the visual arts, music, dance, literature, theater, religion, and philosophy from the prehistoric era to the present day. Emphasis will be on the cultural values revealed in works of art and artifact.
Prerequisites: College level reading and writing skills are required.

**HUM 2461**
**Latin American Humanities**
3 Credits
A historical survey of the humanities of Latin America: the visual arts, music, dance, theater, religion and philosophy from the pre-Columbian era to modern times. Emphasis will be on the cultural values revealed in works of art, artifact, and literature.
Prerequisites: College level reading and writing skills are required.

**HUS 1001**
**Introduction Human Services**
3 Credits
Focuses on the history of the field of Human Services. In addition, models of service delivery, ethics, and professionalism in the practice of human service skills are investigated. College level reading and writing skills are required.

**HUS 1024**
**Abnormal Behavior: Etiology and Treatment**
3 Credits
Focuses on the basic concepts of mental health and therapeutic intervention with an emphasis on normal and abnormal behaviors. Topics include concepts of normalcy, models of abnormal designations (medical v. non medical) and identification and classification of abnormal behavior. Credit for this course does not apply to the associate in arts degree.

**HUS 1111**
**Interpersonal Skills in Human Services**
3 Credits
Focuses on the learning and proactive basic communication and interpersonal skills that are necessary in providing competent mental health and social services. Credit for this course does not apply to the associate in arts degree.

**HUS 1200**
**Introduction Group Process**
3 Credits
Provides an introduction to the principles of group interaction, with an emphasis on observation and participation in the group environment. Credit for this course does not apply to the associate in arts degree.
HUS 1320
Crisis Intervention
3 Credits
Focuses on the theoretical and practical aspects of human crises, with an emphasis on handling simulated crisis situations. Prerequisites: College level reading and writing skills are required.

HUS 1406
Etiology and Treatment of Substance Use Disorder
3 Credits
This course is a comprehensive analysis of the causes, diagnosis, treatment, and prevention of substance abuse and dependence. Symptoms and the progression of substance use disorders are discussed. Types of abusers and different conceptualizations of the nature of substance disorders are reviewed. Strategies and skills are required for working with substance abusing clients are explored.

HUS 1540
Principles of Understanding Working Families
3 Credits
This course presents family theories most often used by human service workers as the framework for working with families. Three of these theories, the ecological model of human development, family systems theory and empowerment theory will be used to help students understand the complexity of family development and adaptation and the impact of stress on the family system. The student will learn how these theories can be used in the development of family professional collaboration and application of family centered practice. Students will learn and practice skills for empowering families to assess their strengths, concerns and priorities and to plan for how to meet their needs. Credit for this course does not apply to the associate in arts degree. Prerequisite: HUS 1001

HUS 1550
Multicultural Perspective in Human Services
3 Credits
Addresses cultural diversity and its implications for counseling and human services practice. It considers the psychological impact of factors such as sex, race, ethnicity and culture, religious preference, socioeconomic status, sexual orientation, and physical disability. Common stereotypes and prejudices toward various groups and cultures are investigated. Strategies for overcoming prejudice are studied. Interventions and strategies for working effectively in a helping capacity with diverse clients are discussed. Credit for this course does not apply to the associate in arts degree.

HUS 1820
Human Services Practicum I
3 Credits
Provides an opportunity to apply theory in community health agencies for 16 hours per week. The emphasis is on direct client contact and on using correct interviewing techniques. A special fee will be charged for this course. Credit for this course does not apply to the associate in arts degree.

HUS 2008
Psychotherapy: Theory and Practice
4 Credits
This course surveys the field of counseling theory and practice. The major theories that guide the practice of mental health counseling are investigated, including the personality theories which are the underpinnings of many theoretical approaches. Further, this course reviews issues related to the counselor as a person and a professional and considers ethical issues in counseling practice. Credit for this course does not apply to the associate in arts degree.

HUS 2311
Strategy of Behavior Modification
3 Credits
Focuses on the tenet of learning and motivation, with an introduction to behavior theory. Credit for this course does not apply to the associate in arts degree. Prerequisites: HUS 1820 and HUS 1331. College level reading and writing skills are required.

HUS 2541
Working with Family in the Early Childhood Period: Impact on Child Health, Development and Parenting
3 Credits
This course addresses three important issues of early childhood: health, development and parenting. Common health problems of infancy and early childhood are discussed along with important health promotion and disease prevention strategies for creating safe and nurturing environments. Content will address general social, environmental and biologic influences and factors that collectively impede or facilitate individual and family development, the major periods and domains of child development and the importance of early learning experiences that enhance brain development. Students will learn about characteristics and importance of parent child interactions as well as other cultural and social influences on parenting skills. The depth of developmental knowledge provided is intended to enhance the skills of the family health and support worker, to increase their ability to provide anticipatory guidance and teaching, and to empower the parent child relationship. Credit for this course does not apply to the associate in arts degree. Prerequisite: HUS 1001

HUS 2542
Working with Family in Perinatal Period: Impact on Mother, Child and Family
3 Credits
Pregnancy is an exciting and important time in the life of a woman, her unborn child and family members. This course reviews central issues that affect the family, particularly mother and child, before conception through the end of the first month after birth. The student will learn information to enhance their ability to support a woman as she gets ready for pregnancy, undergoes many changes in her body and the way she feels while pregnant, while in labor and following delivery. The student will learn what a woman should not do when pregnant, how to enable the pregnant woman to care of herself to have a healthy baby, warning signs of problems, and care and feeding
of the new baby. Students will practice skills for assessing a mother's emotional adjustment to the birth of her infant, the interactions and bonding behaviors with her child, and the infant's physical adaptations and social responsiveness. Credit for this course does not apply to the associate in arts degree.

**Prerequisites:** HUS 1001

**HUS 2821**  
**Counseling and Human Services Practicum II**  
3 Credits  
HUS 2821 builds on the training achieved in HUS 1820. Emphasis is on developing increased skill in working therapeutically with clients and in treatment planning. The elements of ethical practice are emphasized. The course requires 200 hours over the duration of the semester and attendance at a biweekly, two hour practicum seminar. The seminar hours are not included in the required 200 practicum hours. A special fee is charged for this course. Credit for this course does not apply to the associate in arts degree.

**Prerequisite:** HUS 1820

**HUS 2822**  
**Counseling and Human Services Practicum III**  
3 Credits  
HUS 2822 builds on the training achieved in HUS 1821. Emphasis is on providing effective and professional clinical services to clients and on achieving a sense of professional identity. The course requires 200 hours over the duration of the semester and attendance at a biweekly, 2 hour practicum seminar. The seminar hours are not included in the required 200 practicum hours. A special fee will be charged for this course. Credit for this course does not apply to the associate in arts degree.

**Prerequisite:** HUS 2821

**HUS 2840**  
**Field Placement in Maternal and Child Services**  
3 Credits  
This course involves students being assigned by HCC to an affiliate field placement site and having supervised contact with clients under the auspices of that agency for a total of ten hours per week. This field placement allows the student to experience and practice screening and assessment procedures, adult learning principles, and health education teaching functions in maternal and child service settings. The field placement or practicum experience will be augmented by biweekly seminars during which students will review their experiences and receive additional content not covered during the previous six ATD courses. The field placement is designed to enable students to apply specialized content to a specialized population. Credit for this course does not apply to the associate in arts degree.

**Prerequisite:** HUS 2821

**IDH 2931**  
**Honors Leadership**  
3 Credits  
An honors course in leadership and career theory that emphasizes understanding of oneself as an unique individual and that will serve as the basis for developing effective leadership abilities. The major topics include personal assessment, values and expectations, motivation, decision making, and leadership and career theory. Honors Institute permission required.

**Prerequisites:** College level writing and reading skills are required.
occur in the water. Therefore all students must be proficient swimmers and be able to swim unassisted for at least 100 yards and tread water for 10 minutes.

IDS 2200
Energy Issues
3 Credits
This course provides an interdisciplinary study of renewable energy sources. A comparison of how the United States and other nations (primarily Denmark) have dealt with the political and economic vulnerability of the dependence on fossil fuel sources since the 1980's will be made. Societal aspects of energy use, waste, production, economics and environmental impacts will be compared between other nations and current United States trends. Course participants will be expected to observe aspects of Danish culture while staying with a Danish host family for approximately two weeks. This course will include both pre-trip and post-trip components. Note: Course participants must successfully complete an application process. Prerequisites: College level reading, writing and math skills are required.

INT 1941
Interpreting Practicum
2 Credits
Provides the intermediate level interpreting student with an opportunity to observe the process of interpreting in various professional work situations and to gain knowledge of community agencies and resources which serve the deaf and hard of hearing population. Students will schedule regular observation hours, and according to their level of interpreting skill, assist agency staff in normal duties. College level reading and writing skills are required. A special fee will be charged for this course. Credit for this course does not apply to the associate in arts degree. Prerequisites: INT 2130, INT 2200, INT 2200L Corequisite: INT 2201L

INT 2130
Introduction to Interpreting Ethics
3 Credits
Provides a basic understanding of the Registry of Interpreters for the Deaf (RID) Code of Professional Conduct which governs the standards of the interpreting profession and how to apply these principles to a variety of interpreting situations as well as other central issues related to the interpreting profession. Prerequisites: INT 2200, INT 2200L. College level reading and writing skills are required.

INT 2200
Interactive Interpreting I
3 Credits
Provides an introduction to the basic theories, guidelines, principles, and practices of interpreting, including the role of the interpreter, professional behavior and the ethics of interpreting, and environmental considerations of interpreting situation. Credit for this course does not apply to the associate in arts degree. Prerequisites: ASL 2160C or ASL 2130 and ASL 2130L. College level reading and writing skills are required. Corequisite: INT 2200L

INT 2200L
Interactive Interpreting Lab I
2 Credits
Focuses on introductory cognitive, linguistic and motor skill development. Utilization of audio tape, video tape and CD ROM materials will reinforce skill development. Live role play and modeling techniques permit students to experience a variety of interactive interpreting settings. Credit for this course does not apply to the associate in arts degree. Prerequisites: ASL 2160C or ASL 2130 and ASL 2130L. College level reading and writing skills are required. Corequisite: INT 2200

INT 2201L
Interactive Interpreting Lab II
3 Credits
A continuation of Interactive Interpreting I, this course focuses on advanced cognitive, linguistic, and motor skill development. Utilization of audio tape, video tape and CD ROM materials will reinforce skill development. Live role play and modeling techniques permit students to experience a variety of interactive interpreting settings. Credit for this course does not apply to the associate in arts degree. Prerequisites: INT 2200L. College level reading and writing skills are required.

INT 2210L
Interactive Transliterating Lab
2 Credits
Focuses on understanding the differences between interpreting and transliterating, and reinforcing skill development in transliterating by conveying spoken English messages into signed messages using conceptually accurate signed English and other known manually coded sign systems. Credit for this course does not apply to the associate in arts degree. Prerequisites: INT 2200, INT 2200L. College level reading and writing skills are required.

INT 2231L
American Sign Language to Spoken English Interpreting
3 Credits
Focuses on advanced skills in interpreting from a signed message to a spoken English message using a variety of stimulus materials with an emphasis on more complex constructions in signed messages and dialogues. Prerequisites: INT 2200, INT 2200L, INT 2130. College level reading and writing skills are required.
INT 2400
Educational Interpreting
2 Credits
Focuses on sign systems and processes used in secondary and post secondary settings, with an emphasis on the role and ethics of the institutional interpreter, related vocabulary, use of transliteration and interpreting in various situations.
Prerequisites: INT 2200, INT 2200L, INT 2210L. College level reading and writing skills are required.
Corequisites: INT 2400L

INT 2400L
Educational Interpreting Lab
1 Credit
A variety of stimulus will be used to improve expressive and receptive interpreting skills in specific settings.
Prerequisites: INT 2200, INT 2200L, INT 2210L. College level reading and writing skills are required.
Corequisite: INT 2400

INT 2930
Interpreting Topics
2 Credits
Designed to be taken as an advanced level interpreting course during the second year of training. Special topics including business practices, marketing/entrepreneurship and interpreting in specialized situations (education, legal, medical, and mental health) will be taught. This course may be repeated for a total of six credits. Credit for this course does not apply to the associate in arts degree.
Prerequisites: ASL 2160C or ASL 2130 and ASL 2130L

INT 2942
Interpreting Internship
3 Credits
Provides an opportunity to participate in the interpreting process in work situations and to assist with agency duties. Requires a minimum of 24 hours per week. A special fee will be charged for this course.
Prerequisites: INT 1941. College level reading and writing skills are required.

IPM 1301
Application of Pesticides and Fertilizers
3 Credits
The course focuses on the fundamentals of pesticide and fertilizer application as they impact the horticulture industry. Emphasis will be placed on the safe and effective use of pesticides and fertilizers on horticultural crops and the environment. It will cover theory and provide practical hands on activities in application strategies, to include application time, method rate and environment, types of chemicals, formulation, management strategies, the use of labels, habits, habitats, signs and symptoms, mode of action of pesticides and fertilizers. Special emphasis will be placed on environmental safety, food, feed and water systems. The course will also cover equipment, calibration, application techniques, point and nonpoint contamination and emergency response. Strategies to prevent offsite contamination by wind, water or equipment will also be addressed.

IPM 2253
Management of Insects and Nematodes
3 Credits
The course will focus on the significance of insects and nematodes to horticulture. Emphasis will be placed on identification, classification, signs, symptoms and damage associated with insects and nematodes. It will also cover beneficial and harmful organisms, and provide hands on activities including collecting, inspecting and identifying these organisms. Characteristics essential to management such as life cycle and development, body characteristics, feeding habits, habitats, hosts and control strategies will be included. Management will cover host specificity, harmful growth stage, control strategies to include legal, chemical, cultural, mechanical and biological. Emphasis will be placed on scouting and IPM strategies used in the horticultural industry.
Prerequisite: IPM 1011

IPM 2302
Applied Materials Chemistry and Calculus
3 Credits
The course focuses on the fundamentals of materials used in agriculture. Emphasis will be placed on the safe and effective use of the chemicals used on crops. It will cover theory and provide practical hands on activities in calculating chemicals for application. Chemical composition, formulation, mode of action of materials, families, application rate and factors affecting the effectiveness of the applied materials will also be covered. Safety concerns for human and domestic animals, food, feed, wildlife and aquatic systems will also be addressed.

IPM 2551
Regulatory Environment of Pest Management
3 Credits
The course will focus on federal, state and local regulations in pest management. It will address the various agencies with roles in pest management. The regulatory roles of the USDA, EPA, DOT, DOI, FED, DOL will be addressed. Federal, state and local regulatory roles on certification, registration, special local needs, transport, spill, storage, disposal, restricted pesticide usage will all be covered. Safe use of pesticides with im-
plication for handlers, groundwater, endangered species, agriculture and maintaining biological diversity will be addressed. Laws and acts with regulatory roles in pest management will be discussed.

Prerequisite: IPM 1011

**IPM 2634**

Management of Diseases and Weeds
3 Credits

The course will focus on the diseases and weeds that impact Florida's agriculture. Emphasis will be placed on identification, classification and signs and symptoms of disease organisms.

Management strategies to reduce impact of weeds and diseases of the landscape will be addressed. Characteristics essential to management such as disease occurrence, causative organisms, pathogenicity, development and transmission will be discussed. Weed characteristics, identification, classification, control strategies will be discussed. Principles and methods crucial to the management of weed and diseases will be covered, including legal, chemical, cultural, mechanical and biological. Emphasis will be placed on scouting and IPM strategies used in the horticultural industry.

**ISC 1004C**

Integrated Natural Science I
3 Credits

Students will examine integrative concepts in earth system science and environmental science. Topics include: the scientific method, the origin of the earth and life, geologic time processes/phenomena, evolution, ecology, and biological/geochemical cycles. This course is inquiry based and fully integrated with both laboratory and field experiences which emphasize active learning strategies.

**ISC 1005C**

Integrated Natural Science II
3 Credits

Students will examine integrative concepts in earth system science and environmental science. Topics include: fossils and earth history, natural catastrophic events, classification of organisms, ecosystems and how they work, the atmosphere and environment. This course is inquiry based and fully integrated with both laboratory and field experiences which emphasize active learning strategies.

Prerequisite: ISC 1004C

**ISS 2930**

Special Topics Interdisciplinary Social Science
3 Credits

This course focuses on in-depth coverage of one or more topics that are not covered in great detail in other social science courses. The course stresses an interdisciplinary approach. Course content varies according to the interests of students and faculty. This course may be repeated one time for credit under a different topic.

Prerequisites: College level reading and writing skills are required.

**ITA 1120**

Elementary Italian I
4 Credits

Covers the fundamentals of reading, writing, listening and speaking the Italian language while developing an understanding of the Italian culture. Native speakers of Italian are encouraged to seek credit by exam test.

Prerequisites: College level reading and writing skills are required.

**ITA 1121**

Elementary Italian II
4 Credits

This course enhances skills learned in ITA 1120. Native speakers of Italian are encouraged to seek credit by exam test.

Prerequisite: ITA 1120 with a minimum grade of "C" or instructor's permission. College level reading and writing skills are required.

**JOU 1400L**

Journalism Lab
1 Credit

Provides practical experience through work on college publications under faculty supervision. This course may be repeated six times for credit.

Prerequisites: ENC 1101

**JOU 1949**

Journalism Internship
3 Credits

A coordinated work study course involving class work and field experience. Objectives determined by the student and the teacher coordinator will be used to evaluate the student. This course may be repeated six times for credit.

Prerequisite: ENC 1101

**JOU 2100C**

Journalistic Writing and Reporting
3 Credits

Introductory course providing instruction and practice in journalistic writing and news reporting. Course includes writing leads, defining news and writing news with specific emphasis on features, editorials, and specific content. Additional course emphasis is placed on the principles of identification, selection, and evaluation of news stories for print and online publication. Course also includes instruction in professional ethics.

Prerequisite: ENC 1101 with a grade of C or better.

**LAH 1020**

Survey Latin American History
3 Credits

To examine the major events in the history of Latin American countries from the colonial period to the present with special emphasis on social, cultural, political, and economic development.
LDE 1310  
Irrigation and Water Management  
3 Credits  
Focuses on the major aspects of irrigation. Topics include water quality and treatment, irrigation design, installation tools and techniques, drainage and retention ponds, watering techniques for turf and plant quality, and conservation.

LIN 1670  
English Grammar and Usage  
3 Credits  
Provides an intensive study of traditional grammar usage and mechanics for those students who desire to improve both their understanding and use of English. Provides an in-depth review of grammar to returning students. Complements English composition courses.  
Prerequisites: College level reading and writing skills are required.

LIN 1670H  
Honors English Grammar and Usage  
3 Credits  
Same as LIN 1670 with honors content. Honors Institute permission required.  
Prerequisites: College level reading and writing skills are required.

LIS 1004  
Introduction Internet Research  
1 Credit  
This course is delivered via the World Wide Web and Internet email. The course focuses on the methods of accessing information resources available through the Internet. Students will learn to design search strategies, retrieve resources, electronic journals, and electronic text, evaluate and cite Internet sources valuable for research purposes.

LIT 2110  
World Literature to 1650  
3 Credits  
Focuses on the major periods and forms in literature from Greek and Roman Classicism through the Renaissance, excluding British and American literature. Topics will include the cultural background of each period and the distinctive characteristics of each style and genre.  
Prerequisites: College level reading and writing skills required.

LIT 2110H  
Honors World Literature to 1650  
3 Credits  
Same as LIT 2110 with honors content. Honors Institute permission required.  
Prerequisites: College level reading and writing skills required.

LIT 2120  
World Literature: 1650 to Present  
3 Credits  
Focuses on literature from the Renaissance to now.  
Prerequisites: College level reading and writing skills are required.

LIT 2120H  
Honors World Literature: 1650 to Present  
3 Credits  
Same as LIT 2120 with honors content. Honors Institute permission required.  
Prerequisites: College level reading and writing skills are required.

LIN 1670  
English Grammar and Usage  
3 Credits  
Provides an intensive study of traditional grammar usage and mechanics for those students who desire to improve both their understanding and use of English. Provides an in-depth review of grammar to returning students. Complements English composition courses.  
Prerequisites: College level reading and writing skills are required.

LIN 1670H  
Honors English Grammar and Usage  
3 Credits  
Same as LIN 1670 with honors content. Honors Institute permission required.  
Prerequisites: College level reading and writing skills are required.

MAC 1105  
College Algebra  
3 Credits  
Provides students with the opportunity to gain algebraic knowledge needed for many fields such as engineering, business, science, computer technology, and mathematics. Graphical and numerical methods support the study of functions and their corresponding equations and inequalities. Students will study linear, quadratic, polynomial, rational, exponential, logarithmic, inverse, composite, radical, and absolute value functions; systems of equations and inequalities; modeling applied problems; and curve fitting techniques.  
Prerequisite: MAT 1033 with a minimum grade of C or appropriate score on placement test.

MAC 1105H  
Honors College Algebra  
3 Credits  
Same as MAC 1105 with honors content. Honors Institute permission required.  
Prerequisite: MAT 1033 with a minimum grade of C or appropriate score on placement test.

MAC 1114  
Trigonometry  
3 Credits  
Major topics include trigonometric functions, their properties and graphs; inverse trigonometric functions, their properties and graphs; conditional trigonometric functions; solutions of triangles; vector algebra; parametric equations; polar coordinates; applications. For students taking MAC 1140 and MAC 1114 in preparation for MAC 2311, it is recommended that MAC 1140 be taken before MAC 1114. Previous credit for MAC 1147 precludes credit for MAC 1114.  
Prerequisite: MAC 1105 with a minimum grade of C or appropriate score on placement test.
MAC 1140
Pre-Calculus Algebra
3 Credits
Major topics include polynomial, rational, and other algebraic functions, their properties and graphs; polynomial and rational inequalities; exponential and logarithmic functions, their properties and graphs; piecewise defined functions; conic sections; matrices and determinants; sequences and series; mathematical induction; binomial theorem; applications. For students taking MAC 1140 and MAC 1114 in preparation for MAC 2311, it is recommended that MAC 1140 be taken before MAC 1114. Previous credit for MAC 1147 precludes credit for MAC 1140. Prerequisites: MAC 1105 with a minimum grade of C or appropriate score on placement test.

MAC 1147
Pre-Calculus Algebra and Trigonometry
5 Credits
This is an accelerated course covering the topics of both MAC 1140 and MAC 1114. Students should already have some prior knowledge of trigonometry. Major topics include polynomial, rational, and other algebraic functions, their properties and graphs; polynomial and rational inequalities; exponential and logarithmic functions, their properties and graphs; piece-wise defined functions; trigonometric functions, their properties and graphs; inverse trigonometric functions, their properties and graphs; trigonometric identities; conditional trigonometric equations; solutions of triangles; vector algebra; parametric equations; polar coordinates; conic sections; matrices and determinants; sequences and series; mathematical induction; binomial theorem; applications. Previous credit for MAC 1114 or MAC 1140, precludes credit for MAC 1147. Prerequisite: MAC 1105 with a minimum grade of B or appropriate score on placement test.

MAC 2233
Calculus for Business and Social Science
3 Credits
Provides a review of functions and an introduction to limits, with an emphasis on differentiation and integration of algebraic, exponential and logarithmic functions. Topics are directed toward applications in business, economic, social and behavioral sciences. Previous credit for MAC 2311 precludes credit for MAC 2233. Prerequisite: MAC 1105 or MAC 1140 with a minimum grade of C or appropriate score on placement test.

MAC 2241
Calculus for the Life Sciences
5 Credits
This is a Calculus I course with a heavy emphasis on applications to biological systems. The basic concepts of Calculus, such as limits, continuity, derivatives, extreme value theorem, differentials, integration and the fundamental theorem, will be developed together with solutions techniques of both analytic and numerical nature. Differentiation and integration of algebraic, trigonometric, exponential, and logarithmic functions with applications to life sciences and other topics of interest to biology, psychology, pre-medical, pre-pharmacy, pre-dental, and pre-veterinary students will be covered. Students cannot receive credit for this course and also for MAC 2311 (Calculus 1) or MAC 2233 (Calculus for Business). Prerequisites: MAC 1140 and MAC 1114 or MAC 1147 with a minimum grade of C or appropriate score on placement test.

MAC 2311
Calculus and Analytic Geometry I
5 Credits
This is the first of a three-course sequence in calculus. Major topics include limits, continuity, and differentiation and integration of algebraic, trigonometric, exponential and logarithmic functions. Applications include rates of change, related rates, mean value theorem, extreme values, curve sketching, differentials, area, volume and work. Prerequisites: MAC 1114 and MAC 1140 or MAC 1147 with a minimum grade of C or appropriate score on placement test.

MAC 2312
Calculus and Analytical Geometry II
5 Credits
This is the second in a three-course sequence in calculus. Major topics include differentiation and integration of hyperbolic functions, algebraic, trigonometric, and numerical integration techniques, applications of integrals, improper integrals, parametric equations, polar coordinates, conics, and sequences and series. Prerequisite: MAC 2311 with a minimum grade of C.

MAC 2313
Calculus and Analytical Geometry III
5 Credits
A continuation of MAC 2312. Focuses on arc length and surface area, vectors in two and three dimensional space, planes, lines and surfaces in three-dimensional space, functions of more than one variable, partial derivatives, double and triple integrals and their applications, cylindrical and spherical coordinates, vector fields, line integrals, Green's theorem and Stoke's theorem. Prerequisites: MAC 2312 with a minimum grade of C.

MAN 1021
Principles of Management
3 Credits
This course presents an overview of the management functions including planning, organizing, controlling, leading, and problem-solving in organizations; reviews foundations of management thought and managerial processes that lead to organizational effectiveness in today’s global business environment. Prerequisites: College level reading and writing skills are required.

MAN 1949
Management Internship
3 Credits
A coordinated work-study course involving class work and field experience. Objectives determined by the student and teacher-coordinator will be used to evaluate the student. This course may be repeated six times for credit. Credit for this course does not apply to the associate in arts degree.
MAN 2604
Intercultural Relations in Business
3 Credits
Examines the influence of individual differences and ethnic and national culture on behaviors within organizations and across national borders. Addresses the questions of how and when to be sensitive to these issues, and develops skills required to effectively manage in diverse environment. Prerequisites: College level reading and writing skills are required.

MAN 2761
Strategic Business Management and Leadership
3 Credits
This course examines techniques to creatively vision and analyze the future to prepare individuals and organizations for future opportunities and threats. Designed to familiarize students with techniques for analyzing the future, critical issues, how the future will impact them as individuals. This course will expand the concepts in MAN 1021 by focusing on strategies for effective planning management and leadership.

MAP 2302
Differential Equations
3 Credits
Covers first order differential equations including those with separable variables, homogeneous and exact equations and equations made by an integrating factor. Topics include linear differential equations of higher order and their solutions including both homogeneous and non-homogeneous equations, differential operators, Laplace transforms, and series solutions and applications. Designed for engineering and mathematics majors. Prerequisite: MAC 2312 with a minimum grade of C.

MAT 0018
Pre-Algebra
4 Credits
Focuses on manipulative skills of whole numbers, integers, fractions, and decimals. Topics include prime factorization, square roots, and absolute values, order of operations, use of percents, formulas, measurement, geometry, and introduction to algebra. This course does not satisfy general education requirements in mathematics and is awarded compensatory credit only. Credit for MAT 0012 precludes credit for MAT 0018. Prerequisites: REA 0007 or appropriate score on placement test.

MAT 0022
Integrated Arithmetic and Algebra
6 Credits
This course combines the arithmetic and algebra skills of MAT 0018 and MAT 0024. This course includes all mathematics skills necessary for entry into college level mathematics. Arithmetic topics include operations with real numbers, fractions, decimals, exponents, geometry measurement systems, percents and ratios. Algebra topics include polynomial operation, factoring, solving and graphing linear equations and inequalities, operations with quadratic equations, and applications of all concepts. This course does not satisfy general education requirements and generates compensatory credit only. Permission from instructor required.

MAT 0028
Beginning Algebra
4 Credits
Provides an introduction to algebra. Topics include basic linear equations and inequalities, properties of real numbers, operations, involving exponents and polynomials, factoring, quadratic equations, applications, graphing of linear equations, and an introduction to radical simplification. This course does not satisfy general education requirements in mathematics and is awarded compensatory credit only. Credit for MAT 0024 precludes credit for MAT 0028. Prerequisite: MAT 0018 and REA 0007 or appropriate score on placement test.

MAT 1033
Intermediate Algebra
3 Credits
Topics include sets, relations, functions, polynomial operations, factoring, absolute value, rational expressions, and equa-
tions (linear, quadratic, radical, rational) systems of equations, inequalities, exponents, radicals, graphs of linear equations, and inequalities in two variables, complex numbers, and applications. Elective credit only.

Prerequisites: MAT 0028 with a grade of C or better or appropriate score on placement test.

**MCB 1000**
**Microbiology and Human Disease**
3 Credits
Intended for Biology and Allied Health majors. Focuses on disease states, bacteria, viruses, fungi, rickettsiae and other pathogenic organisms. Topics will include problems of sterilization, infections, resistance, diagnostic testing and immunization.

Prerequisites: College level reading and writing skills are required.
Corequisite: MCB 1000L

**MCB 1000L**
**Microbiology Lab**
1 Credit
A special fee will be charged for this course.
Prerequisites: College level reading and writing skills are required.
Corequisite: MCB 1000

**MCB 1060**
**Food Microbiology**
3 Credits
This course offers detailed examination of the principles of food microbiology and their application to current food technology. Additional topics covered will be food and enzymes produced by micro-organisms, food in relation to disease, food sanitation control and inspection and the Food Additives Amendment of the Federal Food, Drug and Cosmetic Act.

Corequisite: MCB 1060L

**MCB 1060L**
**Food Microbiology Lab**
1 Credit
This course is designed to accompany MCB 1060. Aseptic techniques and the culturing of microorganisms are presented. Various techniques for culturing foods, preparing food counts, preparing food using micro-organisms, and sampling the environment for microorganisms are presented.
Corequisite: MCB 1060

**MCB 1910L**
**Guided Undergraduate Research**
1 Credit
This course is intended for biological science majors who desire to gain experience with research techniques, methods and procedures. It is intended to create supervised study through field and laboratory projects, guided readings, and achievement in specific research skills. Students will develop independence in the laboratory regarding their research project and will learn how to write a scientific abstract.

**MCB 2010**
**General Microbiology**
3 Credits
Focuses on a survey of general topics in microbiology needed by students majoring in biology, microbiology and allied health. Emphasis is given to the structures, functions, classification, metabolism and genetics of microorganisms. The course explores the interaction between infectious microorganisms and the human body including a survey of typical infectious diseases.
Prerequisite: BSC 1010
Corequisite: MCB 2010L

**MCB 2010L**
**Gen Microbiology Lab**
1 Credit
Prerequisites: BSC 1010L
Corequisite: MCB 2010

**MET 2010C**
**Meteorology**
3 Credits
A one semester course for non-science majors that focuses on the physical properties and dynamics of the atmosphere. Topics include the origin and evolution of the atmosphere, storms and severe weather, weather forecasting and analysis, and the impact of weather and climate on humankind.
Prerequisites: College level reading, writing and math skills are required.

**MGF 1106**
**Topics in Mathematics**
3 Credits
Topics will include finite and infinite sets, logic, deductive and inductive reasoning, geometry, counting methods, probability and statistics. Studying these topics will develop a broader base of mathematical knowledge. This course may be used to satisfy part of the mathematics general education requirement for the associate in arts degree.
Prerequisite: MAT 1033 with a C or better, or appropriate score on placement score.

**MGF 1106H**
**Honors Topics in Mathematics**
3 Credits
Same as MGF 1106 with honors content.
Prerequisite: MAT 1033 with a C or better, or appropriate score on placement score.

**MGF 1107**
**Explorations in Mathematics**
3 Credits
This course may be used to satisfy part of the mathematics general education requirement for the associate in arts degree. Topics will be chosen from the following; financial mathematics; sequences and series; elementary number theory; history of mathematics; linear and exponential growth; voting theory; chaos and fractals; reflections and translations in geometry; graph theory; game theory; and mathematical use of calculators and computers. These topics will be helpful in developing
a broader base of mathematical knowledge. Prerequisite: MAT 1033 with a minimum grade of C or appropriate score on placement test.

MGF 1107H Honors Explorations in Mathematics 3 Credits  
Same as for MGF 1107 with honors content. Honors Institute permission required.

MGF 1119 Introduction Math with Applications 3 Credits  
This course is designed to provide a survey of mathematics topics to serve the associate in science and the associate in applied science degree programs. Focuses on sets, probability, statistics, metric measurement, geometry, syllogisms and consumer mathematics with an emphasis on problem solving, reasoning, and the use of a calculator. This course does not satisfy the general education mathematics requirement of associate in arts students. Prerequisites: MAT 0028 with a minimum grade of C.

MKA 1949 Marketing Internship 3 Credits  
A coordinated work-study course involving class work and field experience. Objectives determined by the student and teacher-coordinator will be used to evaluate the student. This course may be repeated six times for credit. Credit for this course does not apply to the associate in arts degree.

MMC 2000 Introduction Mass Communications 3 Credits  
Provides an overview of the background, role, and responsibilities of the mass media; focuses on analyzing and evaluating techniques. Topics include print and electronic media and film.

MMC 2100C Writing for Mass Communication 3 Credits  
Covers the basic techniques used in preparing copy for mass media including the fundamental journalistic skills used in writing for newspapers, magazines, radio, television, public relations and advertising. Prerequisites: MMC 2000. College writing skills are required. Corequisite: JOU 1400L

MNA 1325 HR Statistical Analysis, Compensation and Benefits 3 Credits  
An examination of the compensation systems in large and small organizations, the methods and implications of making wage and salary decisions, and the use of statistical analysis in decision making. Topics include: job analysis, job evaluation, wage surveys, incentives, pay equity, benefits and compensation strategy, and legal perspectives. Credit for this course does not apply to the associate in arts degree.

MSL 1001C Leadership and Personal Development 2 Credits  
Introduces personal challenges and competencies critical to effective leadership; teaches personal development life skills relative to leadership, officership, and the Army profession; focuses on gaining understanding of the ROTC program and its purpose in the Army. Enrollment is limited to students who are also enrolled in the USF ROTC program.

MSL 1002C Introduction to Tactical Leadership 2 Credits  
Presents leadership basics (e.g.: setting direction, problem-solving, listening, briefs, giving feedback and use of effective writing skills); explores dimensions of leadership values, attributes, skills and actions in context of practical hands-on exercises. Enrollment is limited to students who are also enrolled in the USF ROTC program.

MSL 2101C Innovative Team Leadership 2 Credits  
Examines challenges of leading tactical teams in complex current operating environment; highlights dimensions of terrain analysis, patrolling and operation orders; develops greater self-awareness, communication and team building skills. Enrollment is limited to students who are also enrolled in the USF ROTC program.

MSL 2102C Foundations of Tactical Leadership 2 Credits  
Examines challenges of leading tactical teams in complex current operating environment; highlights dimensions of terrain analysis, patrolling and operation orders; develops greater self-awareness, communication and team building skills. Enrollment is limited to students who are also enrolled in the USF ROTC program.

MSL 2900 Army Physical Readiness 1 Credit  
This course will train students in the unique role of Army physical readiness in sustaining military operations. It will also prepare students to plan, prepare, and conduct military fitness training. Student can receive one credit per semester for up to four semesters. Enrollment is limited to students who are also enrolled in the USF ROTC program.
MTB 1103
Math for Business
3 Credits
Focuses on depreciation, overhead allocation, sales and property taxes, insurance, wages and payrolls, trade and cash discounts, markup and markdown, simple and compound interest, present value, bank discount, installment purchasing and annuities. Credit for this course does not apply to the associate in arts degree.
Prerequisites: College level math skills are required.

MTB 1327
Electronics Math
4 Credits
Focuses on the basic algebraic and trigonometric skills required in the study of electronics. Topics include algebraic operations, equations, and fractions. Also included are solving simultaneous linear equations, trigonometric functions, right triangle applications, vectors, phasor algebra, and logarithms. Credit for this course does not apply to the associate in arts degree.
Prerequisites: College level math skills are required.

MUL 1010
Introduction to Music
3 Credits
Covers the basic principles of music and techniques for listening to music, with an emphasis on Western music from the 17th century to the present.
Prerequisites: College level reading and writing skills are required.

MUM 1623
Electronic Music: Introduction MIDI
3 Credits
An introduction to electronic music composition through lecture and studio instruction, with an emphasis on the MIDI system, in conjunction with computers and the digital synthesizer.
Prerequisite: MUT 1111

MUN 1120
Concert Band I
1 Credit
Provides for participation in a concert band which performs traditional and contemporary music. This course may be repeated four times for credit.

MUN 1310
Chorus
1 Credit
Provides for participation in a chorus which performs a variety of music at college and public functions. This course may be repeated four times for credit.

MUN 1340
Vocal Ensemble
1 Credit
Provides for participation in small performing groups and includes the study of traditional and contemporary music. This course may be repeated four times for credit.

MUN 1410
String Ensemble
1 Credit
Provides for participation in small instrumental groups and includes the study of traditional and contemporary music. This course may be repeated four times for credit.

MUN 1420
Woodwind Ensemble
1 Credit
Provides for participation in small instrumental groups and includes the study of traditional and contemporary music. This course may be repeated four times for credit.

MUN 1430
Brass Ensemble
1 Credit
Provides for participation in small instrumental groups and includes the study of traditional and contemporary music. This course may be repeated four times for credit.

MUN 1440
Percussion Ensemble, Small Ensemble
1 Credit
Provides for participation in small instrumental groups and includes the study of traditional and contemporary music. This course may be repeated four times for credit.

MUN 1450
Piano Ensemble
1 Credit
Designed to assist the pianist in learning how to perform in ensemble with other musicians. Repertoire will include piano duet and duo piano works from the standard repertoire. May be repeated for credit each semester.
Prerequisite: Approval of instructor.

MUN 1480
Classical Guitar Ensemble
1 Credit
Open to all students, faculty and members of the community who play guitar. Enrollment is determined by the director through audition. Participants will study and perform music from all periods in preparation for public performance. May be taken six times for credit.

MUN 1710
Stage Band I, Major Ensemble
1 Credit
Provides for participation with a select group of musicians who perform contemporary jazz and stage band music. This course may be repeated four times for credit.
MUN 1810  
**Steel Drum Ensemble**  
2 Credits  
This course involves the study and performance of literature for the Steel Drum. Students will develop instrumental technique specific to the steel drum and additionally develop an awareness of Caribbean music and culture. This course may be repeated six times for credit. Instructor approval required.

MUO 1001  
**Musical Theatre Workshop I**  
2 Credits  
Open to those interested in musical theatre with approval of the instructor. Includes development of musical theatre repertoire, acting and movement performance skills. May include mock auditions or a public performance. This class is a performance class and participation is required. May be repeated for credit.

MUS 1010  
**Recital Attendance**  
Students in this course are required to attend recitals and concerts approved by the Hillsborough Community College, Ybor City Campus School of Visual and Performing Arts Music Department. This course is required of all students enrolled in Applied Music, principal instrument (or voice) courses. It is a non-credit S/U (Satisfactory/Unsatisfactory) course.

MUT 1001  
**Fundamentals of Music**  
3 Credits  
Focuses on music fundamentals for non-music majors, with an emphasis on reading music, keys, scales, simple chords and their practical application.

MUT 1111  
**Music Theory I**  
3 Credit  
Covers the rudiments of music, with an emphasis on major and minor scales, rhythmic and melodic notation, triads, intervals, cadences, chords and inversions and four part music writing. Topics include the development of aural and visual skills in music reading, rhythmic, melodic and harmonic dictation and the practical application of basic harmonic principles. Corequisite: MUT 1241L

MUT 1112  
**Music Theory II**  
3 Credit  
A continuation of MUT 1111  
Corequisite: MUT 1242L

MUT 1241L  
**Sight Singing and Ear Training I**  
1 Credit  
Trains students to visually and aurally recognize the melodic, rhythmic and harmonic patterns studied in Theory I, translate patterns from aural stimulus to notation and visual/cognitive stimulus to performance in real time. Corequisite: MUT 1111

MUT 1242L  
**Sight Singing and Ear Training II**  
1 Credit  
Trains students to visually and aurally recognize the melodic, rhythmic and harmonic patterns studied in Theory II, translate patterns from aural stimulus to notation and visual/cognitive stimulus to performance in real time. Corequisite: MUT 1112

MUT 2116  
**Music Theory III**  
3 Credits  
Focuses on the development of music from Beethoven through the 20th century, with an emphasis on the techniques of four-part harmonization, including triads and chords, with an introduction to counterpoint. Corequisite: MUT 2246L

MUT 2117  
**Music Theory IV**  
3 Credits  
A continuation of MUT 2116  
Corequisite: MUT 2247L

MUT 2246L  
**Sight Singing/Ear Training III**  
1 Credit  
Trains students to visually and aurally recognize the melodic, rhythmic and harmonic patterns studied in Theory III, translate patterns from aural stimulus to notation and visual/cognitive stimulus to performance in real time. Corequisite: MUT 2116

MUT 2247L  
**Sight Singing/Ear Training IV**  
1 Credit  
Trains students to visually and aurally recognize the melodic, rhythmic and harmonic patterns studied in Theory IV, translate patterns from aural stimulus to notation and visual/cognitive stimulus to performance in real time. Corequisite: MUT 2117

MVB 1011  
**Pre-Principal Freshman Trumpet (A)**  
2 Credits  
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.' Corequisite: MUS 1010, MUT 1001
MVB 1011
Pre-Principal Freshman Trumpet (B)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010

MVB 1012
Pre-Principal Freshman Horn (A)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010, MUT 1001

MVB 1012
Pre-Principal Freshman Horn (B)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010

MVB 1013
Pre-Principal Freshman Trombone (A)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010, MUT 1001

MVB 1013
Pre-Principal Freshman Trombone (B)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010, MUT 1001

MVB 1014
Pre-Principal Freshman Baritone (A)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010, MUT 1001

MVB 1014
Pre-Principal Freshman Baritone (B)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010

MVB 1015
Pre-Principal Freshman Tuba (A)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010, MUT 1001

MVB 1015
Pre-Principal Freshman Tuba (B)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who
are not music majors, but who wish to study an instrument on
the college level. In such cases, enrollment is subject to space
availability and instructor approval. Students may take two
semesters, designated 'A' and 'B.'
Corequisite: MUS 1010

MVB 1211
Secondary Freshman Trumpet
1 Credit
This course is designed for the music major who wishes to
study a secondary instrument, or for a student who has com-
pleted the MV_ 10XX level but still does not meet the require-
ments for entry to the MV_ 13XX level course. This course may
be repeated 1 time for credit.
Corequisite: MUS 1010

MVB 1212
Secondary Freshman Horn
1 Credit
This course is designed for the music major who wishes to
study a secondary instrument, or for a student who has com-
pleted the MV_ 10XX level but still does not meet the require-
ments for entry to the MV_ 13XX level course. This course may
be repeated 1 time for credit.
Corequisite: MUS 1010

MVB 1213
Secondary Freshman Trombone
1 Credit
This course is designed for the music major who wishes to
study a secondary instrument, or for a student who has com-
pleted the MV_ 10XX level but still does not meet the require-
ments for entry to the MV_ 13XX level course. This course may
be repeated 1 time for credit.
Corequisite: MUS 1010

MVB 1214
Secondary Freshman Baritone
1 Credit
This course is designed for the music major who wishes to
study a secondary instrument, or for a student who has com-
pleted the MV_ 10XX level but still does not meet the require-
ments for entry to the MV_ 13XX level course. This course may
be repeated 1 time for credit.
Corequisite: MUS 1010

MVB 1215
Secondary Freshman Tuba
1 Credit
This course is designed for the music major who wishes to
study a secondary instrument, or for a student who has com-
pleted the MV_ 10XX level but still does not meet the require-
ments for entry to the MV_ 13XX level course. This course may
be repeated 1 time for credit.
Corequisite: MUS 1010

MVB 1311
Principal Freshman Trumpet
2 Credits
Students must audition for placement in this course and will
receive private instruction of one contact hour weekly. This
course may be repeated once for credit.
Corequisite: MUS 1010

MVB 1312
Principal Freshman Horn
2 Credits
Students must audition for placement in this course and will
receive private instruction of one contact hour weekly. This
course may be repeated once for credit.
Corequisite: MUS 1010

MVB 1313
Principal Freshman Trombone
2 Credits
Students must audition for placement in this course and will
receive private instruction of one contact hour weekly. This
course may be repeated once for credit.
Corequisite: MUS 1010

MVB 1314
Principal Freshman Baritone Horn
2 Credits
Students must audition for placement in this course and will
receive private instruction of one contact hour weekly. This
course may be repeated once for credit.
Corequisite: MUS 1010

MVB 1315
Principal Freshman Tuba
2 Credits
Students must audition for placement in this course and will
receive private instruction of one contact hour weekly. This
course may be repeated once for credit.
Corequisite: MUS 1010

MVB 2221
Secondary Sophomore Trumpet
1 Credit
This course is a continuation of MV_ 222X and is designed for
the music major who wishes to study a secondary instrument,
or for a student who has completed the MV_ 10XX level but
still does not meet the requirements for entry to the MV_ 13XX
level course. This course may be repeated once for credit.
Corequisite: MUS 1010

MVB 2222
Secondary Sophomore Horn
1 Credit
This course is a continuation of MV_ 222X and is designed for
the music major who wishes to study a secondary instrument,
or for a student who has completed the MV_ 10XX level but
still does not meet the requirements for entry to the MV_ 13XX
level course. This course may be repeated 1 time for credit.
Corequisite: MUS 1010
MVB 2223
Secondary Sophomore Trombone
1 Credit
This course is a continuation of MV_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_ 10XX level but still does not meet the requirements for entry to the MV_ 13XX level course. This course may be repeated 1 time for credit.
Corequisite: MUS 1010

MVB 2224
Secondary Sophomore Baritone
1 Credit
This course is a continuation of MV_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_ 10XX level but still does not meet the requirements for entry to the MV_ 13XX level course. This course may be repeated once for credit.
Corequisite: MUS 1010

MVB 2225
Secondary Sophomore Tuba
1 Credit
This course is a continuation of MV_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_ 10XX level but still does not meet the requirements for entry to the MV_ 13XX level course. This course may be repeated 1 time for credit.
Corequisite: MUS 1010

MVB 2321
Principal Sophomore Trumpet
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.
Prerequisite: MVB 1311
Corequisite: MUS 1010

MVB 2322
Principal Sophomore Horn
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.
Prerequisites: MVB 1312
Corequisite: MUS 1010

MVB 2323
Principal Sophomore Trombone
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.
Prerequisite: MVB 1313
Corequisite: MUS 1010

MVB 2324
Principal Sophomore Baritone Horn
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.
Prerequisite: MVB 1314
Corequisite: MUS 1010

MVB 2325
Principal Sophomore Tuba
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.
Prerequisite: MVB 1315
Corequisite: MUS 1010

MVK 1011
Pre-Principal Freshman Piano (A)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010, MUT 1001

MVK 1011
Pre-Principal Freshman Piano (B)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010

MVK 1111
Freshman Class Piano
1 Credit
Covers beginning piano skills for non keyboard music majors by combining lecture and outside practice. This course may be repeated once for credit.

MVK 1211
Secondary Freshman Piano
1 Credit
This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_ 10XX level but still does not meet the require-
ments for entry to the MV_ 13XX level course. This course may be repeated once for credit.
Corequisite: MUS 1010

**MVK 1311**
**Principal Freshman Piano**
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.
Corequisite: MUS 1010

**MVK 1811**
**Class Piano/Non Music Majors**
1 Credit
Beginning piano for the non music major. This course may be repeated four times for credit.

**MVK 2121**
**Sophomore Class Piano**
1 Credit
Prepares the non keyboard music major in basic piano proficiency. This course may be repeated once for credit.
Prerequisite: MVK 1111

**MVK 2221**
**Secondary Sophomore Piano**
1 Credit
This course is a continuation of MV_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_ 10XX level but still does not meet the requirements for entry to the MV_ 13XX level course. This course may be repeated 1 time for credit.
Corequisite: MUS 1010

**MVP 1011**
**Pre-Principal Freshman Percussion (A)**
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010, MUT 1001

**MVP 1011**
**Pre-Principal Freshman Percussion (B)**
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010

**MVP 1211**
**Secondary Freshman Percussion**
1 Credit
This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_ 10XX level but still does not meet the requirements for entry to the MV_ 13XX level course. This course may be repeated 1 time for credit.
Corequisite: MUS 1010.

**MVP 1221**
**Secondary Sophomore Percussion**
1 Credit
This course is a continuation of MV_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_ 10XX level but still does not meet the requirements for entry to the MV_ 13XX level course. This course may be repeated 1 time for credit.
Corequisite: MUS 1010

**MVP 1311**
**Principal Freshman Percussion**
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated 1 time(s) for credit.
Corequisite: MUS 1010

**MVP 2221**
**Secondary Sophomore Percussion**
1 Credit
This course is a continuation of MV_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_ 10XX level but still does not meet the requirements for entry to the MV_ 13XX level course. This course may be repeated 1 time for credit.
Corequisite: MUS 1010

**MVP 2321**
**Principal Sophomore Percussion**
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.
Prerequisite: MVP 1311
Corequisite: MUS 1010

**MVS 1011**
**Pre-Principal Freshman Violin (A)**
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010, MUT 1001
the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010, MUT 1001

MVS 1011
Pre-Principal Freshman Violin (B)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010

MVS 1012
Pre-Principal Freshman Viola (A)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010

MVS 1012
Pre-Principal Freshman Viola (B)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010

MVS 1013
Pre-Principal Freshman Cello (A)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010, MUT 1001

MVS 1013
Pre-Principal Freshman Cello (B)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010

MVS 1014
Pre-Principal Freshman String Bass (A)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisites: MUS 1010, MUT 1001

MVS 1014
Pre-Principal Freshman String Bass (B)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010

MVS 1015
Pre-Principal Freshman Harp
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUT 1001 ("A" semester only), MUS 1010
MVS 1016
**Pre-Principal Freshman Guitar (A)**
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisites: MUS 1010, MUT 1001

MVS 1016
**Pre-Principal Freshman Guitar (B)**
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010

MVS 1116
**Class Guitar**
1 Credit
Guitar class: group instruction in beginning classical guitar techniques. May be repeated four times for credit.

MVS 1211
**Secondary Freshman Violin**
1 Credit
This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_10XX level but still does not meet the requirements for entry to the MV_13XX level course. This course may be repeated once for credit.
Corequisite: MUS 1010

MVS 1212
**Secondary Freshman Viola**
1 Credit
This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_10XX level but still does not meet the requirements for entry to the MV_13XX level course. This course may be repeated once for credit.
Corequisite: MUS 1010

MVS 1213
**Secondary Freshman Cello**
1 Credit
This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_10XX level but still does not meet the requirements for entry to the MV_13XX level course. This course may be repeated once for credit.
Corequisite: MUS 1010

MVS 1214
**Secondary Freshman String Bass**
1 Credit
This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_10XX level but still does not meet the requirements for entry to the MV_13XX level course. This course may be repeated once for credit.
Corequisite: MUS 1010

MVS 1215
**Secondary Freshman Harp**
1 Credit
This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_10XX level but still does not meet the requirements for entry to the MV_13XX level course. This course may be repeated once for credit.
Corequisite: MUS 1010

MVS 1216
**Secondary Freshman Guitar**
1 Credit
This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_10XX level but still does not meet the requirements for entry to the MV_13XX level course. This course may be repeated once for credit.
Corequisite: MUS 1010

MVS 1311
**Principal Freshman Violin**
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.
Corequisite: MUS 1010

MVS 1312
**Principal Freshman Viola**
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.
Corequisite: MUS 1010

MVS 1313
**Principal Freshman Cello**
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.
Corequisite: MUS 1010
MVS 1314
Principal Freshman String Bass
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.
Corequisite: MUS 1010

MVS 1315
Principal Freshman Harp
2 Credits
This course is designed for the music major to improve technical skills, musicianship and to study appropriate repertoire with emphasis on stylistically accurate performance practices. Students must either audition successfully for placement in this course or have successfully completed the MV_101_ courses. May be repeated once for credit.
Corequisite: MUS 1010

MVS 1316
Principal Freshman Guitar
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.
Corequisite: MUS 1010

MVS 2221
Secondary Sophomore Violin
1 Credit
This course is a continuation of MV_222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_10XX level but still does not meet the requirements for entry to the MV_13XX level course. This course may be repeated once for credit.
Corequisite: MUS 1010

MVS 2222
Secondary Sophomore Viola
1 Credit
This course is a continuation of MV_222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_10XX level but still does not meet the requirements for entry to the MV_13XX level course. This course may be repeated once for credit.
Corequisite: MUS 1010

MVS 2223
Secondary Sophomore Cello
1 Credit
This course is a continuation of MV_222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_10XX level but still does not meet the requirements for entry to the MV_13XX level course. This course may be repeated once for credit.
Corequisite: MUS 1010

MVS 2224
Secondary Sophomore String Bass
1 Credit
This course is a continuation of MV_222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_10XX level but still does not meet the requirements for entry to the MV_13XX level course. This course may be repeated once for credit.
Corequisite: MUS 1010

MVS 2225
Secondary Sophomore Harp
1 Credit
This course is a continuation of MV_121_ and is designed for the music major who wishes to study a secondary instrument or for a student who has completed the MV_101_ level but still does not meet the requirements for entry to the MV_131_ level course. May be repeated once for credit.
Corequisite: MUS 1010

MVS 2226
Secondary Sophomore Guitar
1 Credit
This course is a continuation of MV_222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_10XX level but still does not meet the requirements for entry to the MV_13XX level course. This course may be repeated once for credit.
Corequisite: MUS 1010

MVS 2321
Principal Sophomore Violin
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.
Prerequisite: MVS 1311
Corequisite: MUS 1010

MVS 2322
Principal Sophomore Viola
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.
Prerequisite: MVS 1312
Corequisite: MUS 1010

MVS 2323
Principal Sophomore Cello
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.
Prerequisite: MVS 1313
Corequisite: MUS 1010
MVS 2324
Principal Sophomore String Bass
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.
Prerequisite: MVS 1314
Corequisite: MUS 1010

MVS 2325
Principal Sophomore Harp
2 Credits
This course is designed for the music major to improve technical skills, musicianship and to study appropriate repertoire with emphasis on stylistically accurate performance practices. Students must either audition successfully for placement in this course or have successfully completed the MV_101_ courses. May be repeated once for credit.
Corequisite: MUS 1010

MVS 2326
Principal Sophomore Guitar
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.
Prerequisite: MVS 1316
Corequisite: MUS 1010

MVV 1111
Elementary Voice
1 Credit
Covers the fundamentals of voice production; designed as a secondary study for the applied piano music major, or as an elective for the non music major. This course may be repeated four times for credit.

MVV 1211
Secondary Freshman Voice
1 Credit
This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_ 10XX level but still does not meet the requirements for entry to the MV_ 13XX level course. This course may be repeated 1 time for credit.
Corequisite: MUS 1010

MVV 1311
Principal Freshman Voice
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once.
Corequisite: MUS 1010

MVV 2221
Secondary Sophomore Voice
1 Credit
This course is a continuation of MV_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_ 10XX level but still does not meet the requirements for entry to the MV_ 13XX level course. This course may be repeated 1 time for credit.
Corequisite: MUS 1010

MVV 2321
Principal Sophomore Voice
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.
Prerequisite: MVV 1311
Corequisite: MUS 1010

MVW 1011
Pre-Principal Freshman Flute (A)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010, MUT 1001

MVW 1011
Pre-Principal Freshman Flute (B)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisites: MUS 1010, MUT 1001
MVW 1011
Pre-Principal Freshman Flute (B)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010

MVW 1012
Pre-Principal Freshman Oboe (A)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisites: MUS 1010, MUT 1001

MVW 1012
Pre-Principal Freshman Oboe (B)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010

MVW 1013
Pre-Principal Freshman Clarinet (A)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisites: MUS 1010, MUT 1001

MVW 1013
Pre-Principal Freshman Clarinet (B)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisites: MUS 1010, MUT 1001

MVW 1014
Pre-Principal Freshman Bassoon (A)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisites: MUS 1010, MUT 1001

MVW 1014
Pre-Principal Freshman Bassoon (B)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisite: MUS 1010

MVW 1015
Pre-Principal Freshman Saxophone (A)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'
Corequisites: MUS 1010, MUT 1001

MVW 1015
Pre-Principal Freshman Saxophone (B)
2 Credits
This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who
are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Corequisite: MUS 1010

MVW 1211
Secondary Freshman Flute
1 Credit
This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_10XX level but still does not meet the requirements for entry to the MV_13XX level course. This course may be repeated once for credit. Corequisite: MUS 1010

MVW 1212
Secondary Freshman Oboe
1 Credit
This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_10XX level but still does not meet the requirements for entry to the MV_13XX level course. This course may be repeated once for credit. Corequisite: MUS 1010

MVW 1213
Secondary Freshman Clarinet
1 Credit
This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_10XX level but still does not meet the requirements for entry to the MV_13XX level course. This course may be repeated once for credit. Corequisite: MUS 1010

MVW 1214
Secondary Freshman Bassoon
1 Credit
This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_10XX level but still does not meet the requirements for entry to the MV_13XX level course. This course may be repeated 1 time for credit. Corequisite: MUS 1010

MVW 1215
Secondary Freshman Saxophone
1 Credit
This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_10XX level but still does not meet the requirements for entry to the MV_13XX level course. This course may be repeated 1 time for credit. Corequisite: MUS 1010

MVW 1311
Principal Freshman Flute
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit. Corequisite: MUS 1010

MVW 1312
Principal Freshman Oboe
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit. Corequisite: MUS 1010

MVW 1313
Principal Freshman Clarinet
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit. Corequisite: MUS 1010

MVW 1314
Principal Freshman Bassoon
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit. Corequisite: MUS 1010

MVW 1315
Principal Freshman Saxophone
2 Credits
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit. Corequisite: MUS 1010

MVW 2221
Secondary Sophomore Flute
1 Credit
This course is a continuation of MV_222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_10XX level but still does not meet the requirements for entry to the MV_13XX level course. This course may be repeated 1 time for credit. Corequisite: MUS 1010

MVW 2222
Secondary Sophomore Oboe
1 Credit
This course is a continuation of MV_222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_10XX level but still does not meet the requirements for entry to the MV_13XX level course. This course may be repeated 1 time for credit. Corequisite: MUS 1010
MVW 2223  
Secondary Sophomore Clarinet  
1 Credit  
This course is a continuation of MV_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_ 10XX level but still does not meet the requirements for entry to the MV_ 13XX level course. This course may be repeated 1 time for credit. Corequisite: MUS 1010

MVW 2224  
Secondary Sophomore Bassoon  
1 Credit  
This course is a continuation of MV_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_ 10XX level but still does not meet the requirements for entry to the MV_ 13XX level course. This course may be repeated 1 time for credit. Corequisite: MUS 1010

MVW 2225  
Secondary Sophomore Saxophone  
1 Credit  
This course is a continuation of MV_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV_ 10XX level but still does not meet the requirements for entry to the MV_ 13XX level course. This course may be repeated 1 time for credit. Corequisite: MUS 1010

MVW 2321  
Principal Sophomore Flute  
2 Credits  
Students must audition for placement in this course and will receive private instruction on one contact hour weekly. This course may be repeated once for credit. Prerequisite: MVW 1311 Corequisite: MUS 1010

MVW 2322  
Principal Sophomore Oboe  
2 Credits  
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit. Prerequisite: MVW 1312 Corequisite: MUS 1010

MVW 2323  
Principal Sophomore Clarinet  
2 Credits  
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit. Prerequisite: MVW 1313 Corequisite: MUS 1010

MVW 2324  
Principal Sophomore Bassoon  
2 Credits  
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit. Prerequisite: MVW 1314 Corequisite: MUS 1010

MVW 2325  
Principal Sophomore Saxophone  
2 Credits  
Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once. Prerequisite: MVW 1315 Corequisite: MUS 1010

NMT 1002  
Introduction Nuclear Medicine  
3 Credits  
Focuses on the history of nuclear medicine, nuclear medicine procedures, and basic concepts of radioactivity, radiation detection, instrumentation, radiation safety and production of radio pharmaceuticals. Field trips to nuclear medicine training facilities are included. Credit for this course does not apply to the associate in arts degree.

NMT 1051  
Nuclear Medicine Data Analysis  
3 Credits  
Presents concepts dealing with data acquisition and reduction relative to the practice of nuclear medicine technology. Credit for this course does not apply to the associate in arts degree.

NMT 1103  
Introduction Patient Care  
2 Credits  
Covers the basic concepts of patient care with an overview of proper patient management. Credit for this course does not apply to the associate in arts degree.

NMT 1312  
Radiation Safety and Health Physics  
3 Credits  
Covers proper techniques in the safe handling of radioactive materials, with an emphasis on proper receipt, usage, storage and disposal of radioactive materials. Topics include rules, standards, regulations and biological effects of radiation. Credit for this course does not apply to the associate in arts degree. Prerequisite: NMT 1613

NMT 1534  
Nuclear Instrumentation  
3 Credits  
Covers the basic operation of various radiation detection instruments including the Geiger Muller detector, analyzers, ionization chambers, scanners and cameras. Credit for this course does not apply to the associate in arts degree. Corequisite: NMT 1534L
NMT 1534L
Nuclear Instrumentation Lab
1 Credit
Accompanies NMT 1534. Laboratory exercises include plotting gamma spectra, instrument calibration, detector resolution, simultaneous and radio nuclide quantification. Credit for this course does not apply to the associate in arts degree. Corequisite: NMT 1543

NMT 1613
Nuclear Physics
3 Credits
Covers the basic concepts of atomic, nuclear and radiation physics with an emphasis on the interaction of radiation with matter. Alpha, beta and gamma sources are used with various detection devices to demonstrate these concepts. Credit for this course does not apply to the associate in arts degree. Prerequisite: NMT 1051 or NMT 1002 Corequisite: NMT 1534

NMT 1713
Nuclear Medicine Methodology I
4 Credits
Teaches the foundations of nuclear medicine procedures. Emphasis is given to radiotracer methodology, preparation and properties of radiopharmaceuticals, routine imaging techniques, and radioimmunoassay. Prepares NMT students for the nuclear medicine practicum courses. Credit for this course does not apply to the associate in arts degree. Prerequisite: NMT 1723

NMT 1723
Nuclear Medicine Methodology II
4 Credits
Teaches non imaging nuclear medicine procedures as well as some basic imaging methodologies. Special emphasis is given to hematology, ferrokinetics, endocrine functions, and the radioimmunoassay of hormones and drugs. The students are guided in the preparation of their term papers. Credit for this course does not apply to the associate in arts degree. Prerequisite: NMT 1804

NMT 1804
Nuclear Medicine Practicum I
4 Credits
Consists of up to 32 hours per week of clinical training at local hospitals affiliated with the NMT Program. Students follow a rotational schedule. Under the guidance of clinical supervisors and/or hospital staff, students learn routine nuclear medicine procedures while practicing radiation safety at all times. Credit for this course does not apply to the associate in arts degree.

NMT 1814
Nuclear Medicine Practicum II
4 Credits
Consists of up to 32 hours per week of clinical training at local hospitals affiliated with the NMT Program. Students follow a rotational schedule. Under the guidance of clinical supervisors and/or hospital staff, students learn techniques in nuclear cardiology and basic tomography of various organ systems. Credit for this course does not apply to the associate in arts degree. Prerequisite: NMT 1804

NMT 2061
Nuclear Medicine Seminar
3 Credits
A comprehensive review of all aspects of the Nuclear Medicine Technology program. Credit for this course does not apply to the associate in arts degree.

NMT 2733
Nuclear Medicine Methodology III
4 Credits
Continues the teaching of routine and special nuclear medicine imaging procedures. The properties of radio pharmaceuticals and the special instrumentation used in those procedures are also taught. In addition, students present their papers in oral and written form. Credit for this course does not apply to the associate in arts degree. Prerequisite: NMT 2824

NMT 2824
Nuclear Medicine Practicum III
4 Credits
Consists of up to 32 hours per week of clinical training at local hospitals affiliated with the NMT Program. Students follow a rotational schedule. Under the guidance of clinical supervisors and/or hospital staff, students learn SPECT, PET and NMR procedures in cardiology, neurology and oncology. Credit for this course does not apply to the associate in arts degree. Prerequisite: NMT 1814

NUR 1000
Basic Healthcare Concepts
1 Credit
This course will introduce transition students (LPN/RN) to the nursing process and the role of the associate in arts degree nurse, utilizing previous knowledge and skills. Nursing history and theorists will be introduced. Emphasis will be placed on the role changes. The program threads of legal/ethical issues, communication, patient education, and cultural diversity will be introduced. Corequisite: NUR 1260C

NUR 1060
Health Assessment
3 Credits
Provides the student with the basic skills needed for health assessment. In simulated laboratory setting clients will be assessed physically, psychologically, and socially across the life span. Topics include the health history, objective physical examination and subjective client information coordinated within the framework of the nursing process. The student will be able to differentiate common deviations from the norm. Credit for this course does not apply to the associate in arts degree.
NUR 1141  
**Pharmacology in Nursing**  
3 Credits  
This course will introduce basic concepts of pharmacology related to the actions of drugs, therapeutic and adverse effects, and food and interactions of these drugs used in the treatment of acute and chronic diseases. Drug classification will be presented based on body system and disease process format. Emphasis is placed on nursing implications and patient education in collaboration with other treatment modalities needed in patient care. Legal aspects of drug administration including safety and precautionary measures will be included. Calculation of medication doses and various routes of administration will be discussed. Students will be able to apply this knowledge in subsequent nursing courses as they care for clients across the lifespan.  
Prerequisite: NUR 1213C

NUR 1213C  
**Nursing Process I**  
10 Credits  
Focuses on nursing theory and application of the nursing process, including the understanding and setting of priorities in health care. Students will participate in simulated laboratory learning and will perform guided patient care in various health care settings. Class work will emphasize basic nursing care for clients with common health problems affecting oxygenation, circulation, elimination, neurosensory and musculoskeletal systems. Also included are concepts related to pharmacology, communication, teaching, legal/ethical and computer literacy. Credit for this course does not apply to the associate in arts degree.  
Prerequisite: Acceptance into the Nursing program, BSC 1086.

NUR 1260C  
**Nursing Process II**  
10 Credits  
Focuses on the nursing theory and application of the nursing process for clients experiencing chronic health problems. Students will build on prior knowledge as they plan and implement care in the laboratory and clinical settings for clients dealing with chronic renal, cardiac/respiratory, psychiatric and neuromuscular disorders. Class work will emphasize the unique bio psycho social needs of this population. Content will continue to enhance the students understanding of pharmacology, communication, teaching, legal/ethical and computer literacy concepts. Credit for this course does not apply to the associate in arts degree.  
Prerequisite: NUR 1213C

NUR 2243C  
**Nursing Process IV**  
10 Credits  
Focuses on advanced nursing theory, the nursing process and techniques involved in caring for the adult client with complex health problems. Decision making and management theory will be emphasized. Selected clinical experiences will complement the class work. A portion of the clinical time will allow students to work with an RN preceptor to implement nursing care for groups of individuals in the acute care area. Credit for this course does not apply to the associate in arts degree.

NUR 2412C  
**Nursing Process III**  
10 Credits  
Focuses on the nursing theory and application of the nursing process of the childbearing family and children from conception through the adolescence period of development. Students will be building on prior knowledge as they plan and implement care in the laboratory and clinical settings for clients dealing with related common, chronic and complex problems. Class work will emphasize the unique bio psycho social needs of this population. Content will continue to enhance the students understanding of pharmacology, communication, teaching, legal/ethical, and computer literacy concepts. Credit for this course does not apply to the associate in arts degree.  
Prerequisite: NUR 1213C

NUR 2413C  
**Nursing Process III Transition Option**  
9 Credits  
This course focuses on the physical, emotional and psychosocial needs of the family. The nursing process is applied to the special needs of the childbearing family. This course includes nursing care of the childbearing mother and family and care of the infant through adolescence. The learner will build on specific cognitive and psychomotor skills acquired from their practical nurse education and demonstrate competent performance in the clinical setting. Credit for this course applies to the associate of science degree in nursing program. Credit for this course does not apply to the associate in arts degree.  
Prerequisite: NUR 1000, NUR 1260C  
Corequisite: NUR 2521C

NUR 2521C  
**Mental Health Nursing**  
2 Credits  
This course emphasizes the role of the professional nurse in assessing, planning and implementing care of clients with psychiatric disorders that require hospitalization. An overview of psychopathology and treatment modalities is included. The clinical experience will focus on the nursing process in the planning and care of these clients. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: NUR 1213C, NUR 1260C  
Corequisite: NUR 2412C or NUR 2413C

NUR 2650C  
**Transcultural Nursing**  
2 Credits  
Provides the student the opportunity to experience a direct relationship with healthcare providers and recipients from various cultural backgrounds in an international setting. The students will travel to a supervised site for theoretical concepts as well as clinical experiences. The students will gain valuable components of learning process relating to culturally diverse
communities with emphasis on holistic care. Credit for this course does not apply to the associate in arts degree.

Prerequisites: Nursing Student or Licensed Nurse. College level reading, writing and math skills required.

**NUR 2931C**
**Selected Studies/Clinical Makeup**
1 Credit
This course is designed to complete clinical hours in order to meet the course requirements for Nursing Process I (NUR 1213C), Nursing Process II (NUR 1260C), Nursing Process III (NUR 2412C and NUR 2521C) and Nursing Process IV (NUR 2243C). The course assigns the student to select adult and pediatric medical surgical clients, maternity and mental health clients experiencing health and/or mental health care problems correlating with current didactic course content. This course may be repeated 24 times.

**OCB 2000**
**Marine Biology**
3 Credits
An introductory course covering the complexities of the marine environment. Topics include an introduction to marine habitats, marine organisms, ecological interactions and methods used by oceanographers and marine biologists. Prerequisites: College level reading, writing and math skills required.
Corequisite: OCB 2000L

**OCB 2000H**
**Honors Marine Biology**
3 Credits
Same as OCB 2000 with honors content. Honors Institute permission required.
Corequisite: OCB 2000L

**OCB 2000L**
**Honors Marine Biology Lab**
1 Credit
Accompanies OCB 2000H; same as OCB 2000L with honors content. Honors Institute permission required.
Corequisite: OCB 2000H

**OCB 2000L**
**Marine Biology Lab**
1 Credit
Accompanies OCB 2000; the emphasis is on experiments and field trips.
Corequisite: OCB 2000

**OPT 1155**
**Ophthalmic Lens I**
3 Credits
Provides a brief history of the development of glass and plastic lenses, the various sphere, cylinder and prism powers, the use of optical cross, flat and toric transposition, and the aberrations of lenses. Credit for this course does not apply to the associate in arts degree.

**OPT 1156**
**Ophthalmic Lens II**
3 Credits
This course continues the study of optical theory. Topics include: prism notation; vertical imbalance and methods of correcting for it; vertex power; luminance; reflection and absorption; diffraction; third order lens aberrations, and lens tilt; anisometropia, and spectacle magnification. Credit for this course does not apply to the associate in arts degree.

**OPT 1225**
**Low Vision**
3 Credits
Provides a definition of visual impairment and methods used to measure its severity. A description of the most common causes of visual impairment will be presented. Treatment plans including optical and non optical aids will be reviewed. Credit for this course does not apply to the associate in arts degree.

**OPT 1400L**
**Ophthalmic Lab I**
3 Credits
Introduces the student to terms, instruments, lenses, frames, and materials to be used in the surfacing and finishing of ophthalmic prescription eyewear. Credit for this course does not apply to the associate in arts degree.

**OPT 1430L**
**Ophthalmic Lab II**
3 Credits
Introduces the student to terms, instruments, lenses, frames and materials to be used in the finishing process and handwork of ophthalmic prescription eyewear. This course is a continuation of Ophthalmic Laboratory I. Credit for this course does not apply to the associate in arts degree.

**OPT 1460**
**Ophthalmic Dispensing I**
3 Credits
This course introduces the student to the skills necessary for becoming a dispensing optician. Included are the history of the profession, patient/client measurements, frame and lens materials, frame and lens selection, prescription, prescription analysis, and adjustment techniques. Credit for this course does not apply to the associate in arts degree.
OPT 1460L
Ophthalmic Dispensing Lab I
3 Credits
Designed to introduce the students to the practical dispensing of optical products. The students will perform competencies related to the neutralization of single vision lenses and multifocal lenses for duplication, measurement of frames and mountings, and the measurement of PD’s. Credit for this course does not apply to the associate in arts degree.

OPT 1666
Safety and Sports Vision
3 Credits
Opticians are constantly requested to provide eyewear that will better protect, improve and enhance vision for occupational and recreational activities. This course will present the visual requirements for common occupations and sports. It will also discuss spectacle, contact lens, and non optical solutions to safety and sports vision problems. Credit for this course does not apply to the associate in arts degree.

OPT 2030
Ophthalmic Board Review
1 Credit
Provides a comprehensive review and update of opticianry dispensing in preparation for the Florida State Board of Opticianry examination. Credit for this course does not apply to the associate in arts degree.

OPT 2204
Anatomy and Physiology of the Eye
3 Credits
Investigates the anatomical structure of the eye and the function of its parts as they pertain to the process of vision. Credit for this course does not apply to the associate in arts degree.

OPT 2375
Refractometry
2 Credits
Designed to instruct the students in the theory of refractometry and testing for visual acuity. It will include identifying ametropias, the etiology and distribution of refractive errors and anomalies of binocular vision. The steps in performing retinoscopy, objective and subjective refraction procedures will be covered. Credit for this course does not apply to the associate in arts degree.

OPT 2375L
Refractometry Lab
2 Credits
Continuation of OPT 2375 designed to introduce the students to the procedures of an objective and subjective refraction. Students will perform competencies related to retinoscopy, patient history, binocular balance and subjective testing for visual acuity. Primarily a hands-on course designed to help the students gain speed and accuracy in performing objective and subjective refractions. Credit for this course does not apply to the associate in arts degree.

OPT 2376L
Refractometry Lab II
1 Credit
Continuation of OPT 2375L. Designed to refine the procedures of objective and subjective refractions. Students will perform competencies related to measuring visual acuity and taking a patient history, retinoscopy (review), confrontations and EOM’s, pupillary functions, balance and binocular/ phoria/tropia testing. Primarily a hands-on course to help the students gain speed and accuracy in performing objective and subjective refractions. Credit for this course does not apply to the associate in arts degree.

OPT 2461
Ophthalmic Dispensing II
3 Credits
This course presents ophthalmic instruments and devices; analysis of absorptive lenses; computing and compensation of vertical imbalance; discussion of ethics and legal issues; record keeping and communications; optical salesmanship, and visual impairment. Credit for this course does not apply to the associate in arts degree.

OPT 2461L
Ophthalmic Dispensing Lab II
3 Credits
Designed to introduce students to the practical aspects of frame alignments and adjustments, and the insertion and removal of lenses from various frames. Includes further instruction and practice on neutralization of lenses for verification and duplication of an Rx order, measure and callipering of lenses and frames, the facial measurements of orders (PD and seg heights), frame repair and the identification of various types of lenses. Credit for this course does not apply to the associate in arts degree.

OPT 2463L
Ophthalmic Skills Lab I
2 Credits
This course is designed to educate students in the technical skills of performing various procedures within the ophthalmic visual assessment area of a dispensary. The course will present technical equipment procedures, maintenance and use, as well as the skills needed in assisting Optometrists and patients with various procedures such as administering medicines and pharmacology identification and uses. Credit for this course does not apply to the associate in arts degree.

OPT 2500
Contact Lens Theory I
3 Credits
This course includes a historical review as well as theory; design and optical principle of contact lenses; indications and contraindications for contact lens wear; patient evaluation; discussion of lens types and availability; fundamental techniques and fitting philosophies including the role of the biomicroscope, keratometer and radiuscope; patient education on care, cleaning, insertion and removal of contact lenses. Credit for this course does not apply to the associate in arts degree.
OPT 2500L  
Contact Lens I Lab  
2 Credits  
Students will perform competencies related to the handling of instruments and charts used in the fitting and designing of contact lenses, and the handling and evaluation of contact lenses by the fitter and the patient. Credit for this course does not apply to the associate in arts degree.

OPT 2501  
Contact Lens Theory II  
2 Credits  
Emphasizes contact lens verification, dispensing, and follow up care. The fitting of astigmatic, presbyopic, and special needs patients will also be covered. Credit for this course does not apply to the associate in arts degree.

OPT 2501L  
Contact Lens II Lab  
2 Credits  
Students will perform competencies related to the design, inspection, modification, evaluation and dispensing of spherical contact lenses. The fitting of astigmatic, presbyopic, and other special contact lens patients will also be covered. Credit for this course does not apply to the associate in arts degree.

OPT 2502L  
Contact Lens Lab III  
1 Credit  
Advanced hands-on experience in fitting contact lenses. Credit for this course does not apply to the associate in arts degree. Prerequisite: OPT 2501L.

OPT 2800L  
Vision Care Clinical I  
2 Credits  
This course is designed to allow students to apply knowledge gained in lectures and laboratories to clinical situations. Depending on the placement, the student may utilize skills related to management, fabrication, dispensing, contact lenses or visual assessment. Credit for this course does not apply to the associate in arts degree.

OPT 2801L  
Vision Care Clinical II  
2 Credits  
This course is designed to allow students to apply knowledge gained in lectures and laboratories to clinical situations. Depending on the placement, the student may utilize skills related to management, fabrication, dispensing, contact lenses or visual assessment. Credit for this course does not apply to the associate in arts degree.

OPT 2802L  
Vision Care Clinical III  
2 Credits  
This course is designed to allow students to apply knowledge gained in lectures and laboratories to clinical situations. Depending on the placement, the student may utilize skills related to management, fabrication, dispensing, contact lenses or visual assessment. Credit for this course does not apply to the associate in arts degree.

OPT 2803L  
Vision Care Clinical IV  
2 Credits  
This course is designed to allow students to apply knowledge gained in lectures and laboratories to clinical situations. Depending on the placement, the student may utilize skills related to management, fabrication, dispensing, contact lenses or visual assessment. Credit for this course does not apply to the associate in arts degree.

OPT 2910  
Directed Research  
3 Credits  
Covers the research, planning and development of an optical dispensary. Topics include the type, size, location and design, as well as financing, business structure, taxes, licenses and equipment. Credit for this course does not apply to the associate in arts degree.

ORH 1002  
Water Resources and Land Use  
3 Credits  
This course focuses on the interrelationship of water resources and land use. Emphasis will be placed on water source and land use policies, classification, identification, water quality and quantity. The relationship between land use and water pollution, pollution prevention, the hydrologic cycle and water shed, land and water conservation practices and principles will be addressed.

ORH 1005C  
Horticulture Field Skills  
3 Credits  
This course is designed to provide hands on teaching experiences on outdoor and horticultural vocational skills. The skills will be those required for certification by the Florida Nursery and Growers Association, and employers in the areas of landscape technicians, contracting, landscape design and installation.

ORH 1006  
Environmental Issues in Horticulture  
3 Credits  
This course will explore the hazards of and contribution of the horticultural industry on the environment. It will focus on providing sound practices for a safe environment. Topics will include but not limited to, water contamination sources, soil contamination, industry and farm roles in contamination, ecology of pesticides, invasive exotic species and their control, soil subsidence, wetland mitigation, habitat restoration, urban wildlife, plants and air quality, remediation, plant use in environmentally sensitive design and xeriscaping.
ORH 1220  
**Turf and Landscape Maintenance**  
3 Credits  
Focuses on the care of turf grass and landscape plants on residential and commercial properties. Topics will include the maintenance of trees, shrubs, the diagnosis of landscape problems and landscape structure repair.

ORH 1252  
**Retail Nursery Operation**  
3 Credits  
Focuses on operating a retail garden center. Topics include licenses, purchasing, merchandising, sales, personnel management, business analysis and regulation.

ORH 1262  
**Floriculture Lecture**  
3 Credits  
Focuses on the production, handling and marketing of major and potential floriculture, foliage, fern and bedding crops in Florida and the Southeast. Corequisite: ORH 1262L

ORH 1262L  
**Floriculture Lab**  
1 Credit  
Field experiences related to the production, handling, and marketing of flowering foliage fern and bedding crops. Corequisite: ORH 1262

ORH 1302  
**Irrigation System Installation**  
3 Credits  
This course will provide students with the basics and techniques used in installing irrigation systems. Students will understand the role of designs, materials and supplies, water supply, layout, trenching, backfilling, routing, looping, systems and components, landform, grading and pipe drainage, equipment and buildings, plants and soils. Students will understand the role of individuals, specifications, electricity, quality control, instructions, and pipe connection and testing. Installing irrigation in athletic fields, greenhouses, residents and commercial, parks and other public places will be addressed. Students will be introduced to sources of equipment, materials and supplies used in installation and cost estimation. Prerequisite: LDE 1310

ORH 1306  
**Computer Software for Irrigation**  
3 Credits  
Focuses on the use of computers and software for irrigation systems. Topics to be covered include golf course, athletic fields, nursery, parks, residential and commercial properties and irrigation scheduling. Introduction to products such as basics and commercial software as well as the WWW as a tool for marketing and understanding software systems will also be included.

ORH 1309  
**Irrigation Troubleshooting and Repair**  
3 Credits  
Students will learn and develop a knowledge of the components of troubleshooting and repairing systems. Students will be able to use diagnostic tools of sight, equipment to solve problems. Students will be able to understand the reasons for poor or non performance in a system. Manufacturers, materials and supplies, availability, costs and estimating repairs will be addressed. Prerequisite: LDE 1310

ORH 1312  
**Residential Irrigation Design**  
3 Credits  
Topics include cost, water, resources, crops, soil and terrain. Zoning, pipes and fittings, layout, installation, maintenance will also be addressed. Students will get hands-on exercises in residential designs and be able to understand the factors that impact the designing of residential landscapes. The use of technology such as computer and the WWW in irrigation designs will be addressed. Prerequisite: LDE 1310

ORH 1314  
**Commercial Irrigation Design**  
3 Credits  
Provides the foundation for effective systems commercial water management. Emphasis will be placed on athletic fields, golf courses, parks, schools, housing developments, resorts and commercial crop production. Determining water requirements to meet the needs of plants based on soil, plant and atmosphere relation and components of systems will be covered. Students will be able to understand and use computers as a tool in irrigation design and will estimate cost effectiveness of designs. Prerequisite: LDE 1310

ORH 1510  
**Plant Identification**  
3 Credits  
Focuses on the identification of woody ornamental plants, trees, grasses, foliage, flowering and annual bedding plants common to Florida.
ORH 1515
Plant Identification II
3 Credits
Focuses on the identification of foliage, flowering and annual bedding plants common to Florida.

ORH 1523
Native Upland Plants
2 Credits
This course includes the identification of approximately 100 plants and plant groups native or naturalized in the higher ground habitats of South Florida. The application of these plants as in situ, mitigation or landscape materials in the ecological and esthetic situations of this area will be an additional objective. Most instruction will be done in the field utilizing local passive and active-use parks.

ORH 1524
Native Wetland Plants
2 Credits
A continuation of ORH 1523, Native Upland Plants, and includes the identification of approximately 100 plants and plant groups native or naturalized in the fresh and salt water wetlands of South Florida. The application of these plants as in situ and mitigation species in ecological, landscape and esthetic situations will also be discussed. Most instruction will be done in the field.

ORH 1830
Landscape Design
3 Credits
Focuses on the use and planting of appropriate plants for particular area. Emphasizes the development of a sound basic knowledge of proper plant materials, height, spread, flowers, fruit, soil requirements and insects. Also addresses the drawing skills needed for the presentation of design, and sales training techniques.

ORH 1851
Landscape Installation
3 Credits
Focuses on preparing students for certification in landscape installation and maintenance. Emphasizes landscape crew supervision, reading plans, construction, establishing lawns, planting and transplanting, watering, pest and weed control, chemicals and fertilizers.

ORH 1936
Irrigation Seminar
3 Credits
The course is designed to expose students to and provide information on irrigation topics that are common in agriculture. Students will prepare and present seminar, attend field trips to operations utilizing different irrigation systems and attend instructional seminars given by professionals. Prerequisite: LDE 1310, HOS 1010

ORH 2212
Principles Woody Ornamental
2 Credits
Focuses on nursery design, structures, irrigation systems and watering practices, equipment, media components and preparation, fertilization, management theory of wholesale nursery production and operations. Topics include weed control, pest management and physiological disorders. Prerequisites: SWS 1102, HOS 1010, BOT 1000 Corequisite: ORH 2212L

ORH 2212L
Principles Woody Ornamental Lab
2 Credits
Practical, hands on application of techniques learned in Principles of Woody Ornamental Plant Production classroom sessions. Potting activities, weed control, chemical application and fertilization will be performed plus field trips to area nurseries for practical application appraisal. Corequisite: ORH 2212

ORH 2251
Florida Horticulture Professional Preparation
3 Credits
This course will offer a broad perspective of the nursery industry. Topics will include but not limited to, business management, nursery organization and development, marketing, inventory control, cultural practices, pest management, employer/employee relations, and industry requirements.

OST 1100
Beginning PC Typing
3 Credits
Introduces the techniques of touch typing and speed development on the personal computer, with an emphasis on business letter styles, centering, and manuscript formatting. A minimum of one hour per week in the lab is required.

OST 1110
Intermediate PC Typing
3 Credits
Covers advanced letter writing, tabulation and manuscript typing with an emphasis on developing speed and skills. A minimum of one hour per week in the laboratory is required. Prerequisite: OST 1100

OST 1142
Keyboarding I
1 Credit
Provides instruction in the touch system of typing on the personal computer.

OST 1143
Keyboarding II
1 Credit
Provides instruction in the touch system of keyboarding with an emphasis on speed and accuracy. Prerequisite: OST 1142
OST 1330  
Skills for Transcription  
3 Credits  
Provides an in-depth review of grammar, punctuation and spelling with an emphasis on proofreading and editing. Topics include numbers usage, word division, possessives, grammatical context, use of secretarial reference books, formatting, and transcription procedures.

OST 1335  
Business Communications  
3 Credits  
Presents an overview of business communications, including international considerations, and focuses on constructing proper business letters, with an emphasis on various styles, such as sales, claims, credit reference, collection, requests, order and refusal. Preparation for and formatting of proposals and business reports is also included.

OST 1741  
Word Processing I  
1 Credit  
Provides hands-on experience in a specific word processing software. Students may select more than one software by repeating the course three times for credit. However, only one credit hour will apply toward meeting program graduation requirements.  
Prerequisite: OST 1100

OST 1813  
Desktop Publishing  
3 Credits  
Uses a page layout software program to cover the basic skills required for the preparation of flyers, brochures, and newsletters in camera ready form, with an emphasis on composition, type styles, and layout. Students must take noted prerequisite or obtain permission of instructor.  
Prerequisite: CGS 1000

OST 1825  
Desktop Design  
3 Credits  
Using a variety of popular computer software, this course focuses on preparing professional quality, camera-ready designs and layouts for newsletters, brochures and print advertisements. Topics include printing terms and requirements and selecting paper stock. Students must noted prerequisite or obtain permission of instructor.  
Prerequisite: OST 1813

OST 1831  
Introduction to Windows I  
1 Credit  
Covers basic commands of Windows software.

OST 1832  
Introduction to Windows II  
1 Credit  
Intermediate course covering Windows commands.  
Prerequisite: OST 1831 or permission of instructor.

OST 1941  
OST Internship  
3 Credits  
On-the-job training related to the coursework completed at HCC in the Office Systems Technology Department. Involves a "learning by doing" educational approach. Paid or unpaid internships will be provided at HCC and Tampa area businesses.

OST 2135  
Medical Document Production on the PC  
3 Credits  
Uses a medical software program to input patient information, schedule appointments, and process insurance claims and billing. A minimum of one hour per week in the laboratory is required.  
Prerequisite: OST 1741

OST 2145  
Data Entry Applications  
3 Credits  
Covers data entry skills, with an emphasis on dexterity and accuracy. Topics include point of sale, sale invoices, questionnaires, auto insurance applications, auto registration and inventory.

OST 2357  
Electronic Records Management  
3 Credits  
Develops managerial and decision-making techniques for the records manager. Involves the study of systems analysis, forms development, archival administration, personnel development, and the establishment of a records management program.

OST 2501  
Office Administration  
3 Credits  
Focuses on organizing, planning and controlling office operations with an emphasis on motivation and productivity. Topics include human resources, work environment and information systems.

OST 2611  
Medical Transcription I  
3 Credits  
Provides a working knowledge of the transcription of medical reports based on individual case studies.  
Prerequisites: OST 1330, OST 1741, CGS 1500

OST 2612  
Medical Transcription II  
3 Credits  
Presents advanced transcription of medical reports, with an emphasis on speed and accuracy.  
Prerequisite: OST 2611
OST 2722  
**Advanced Word Processing**  
3 Credits  
Focuses on advanced work processing functions such as macros, math calculations, equation editor, tables, column formats, importing and exporting files, text imaging and formatting, integrating graphics, generating tables of contents, indexes, and lists. Topics include design techniques for production of multi page documents such as newsletters, brochures, reports, and flyers.  
Prerequisite: OST 2743

OST 2742  
**Word Processing II**  
1 Credit  
Focuses on more complex technical procedures on the software studied in Word Processing I. Students may select more than one software application by repeating the course three times for credit. However, only one credit hour will apply toward meeting program graduation requirements.  
Prerequisite: OST 1741

OST 2743  
**Word Processing III**  
1 Credit  
Continues with more complex technical procedures on the software studied in Word Processing II. Students may select more than one software application by repeating this course three times for credit. However, only one credit hour will apply toward meeting program graduation requirements.  
Prerequisite: OST 2742

PCB 1730C  
**Human Reproduction and Inheritance**  
3 Credits  
Intended for those not majoring in the biological sciences or in allied health. Focuses on the various aspects of human reproduction. Topics include the male and female reproductive systems, embryology, birth control, sexually transmitted infections and heredity. Combined and integrated with a hands-on laboratory component. A special fee will be charged for this course.  
Prerequisites: College reading, writing and math skills are required.

PEL 1121  
**Golf**  
2 Credits  
Teaches the skills of recreational golf. This course may be repeated twice for credit.

PEL 1321  
**Volleyball**  
2 Credits  
Teaches the skills and strategies of recreational volleyball.

PEL 1341  
**Beginning Tennis**  
2 Credits  
Teaches the skills of recreational tennis on the elementary level. This course may be repeated two times for credit.

PEL 1342  
**Intermediate Tennis**  
2 Credits  
Teaches the skills, techniques and strategies of recreational tennis on an intermediate level. Topics include the development of the overhead, the net game, lobs, spins and drop shots.

PEL 1621  
**Basketball**  
2 Credits  
Teaches the skills and strategies of recreational basketball.

PEM 1101  
**Fitness and Conditioning**  
2 Credits  
Focuses on applying the basic principles of movement, figure and fitness control, exercise and diet.

PEM 1121  
**Beginning Yoga**  
2 Credits  
This course will focus on the forms of yoga training emphasizing flexibility and stress relief. Emphasis will be given to flexibility, breathing and relaxation techniques.

PEM 1122  
**Intermediate Yoga**  
2 Credits  
This course is designed to be an extension of PEM 1121. The focus will be on the appreciation of yoga in everyday life. Emphasis will be on performing postures that are more challenging and remaining in the postures for longer. This course may be repeated twice for credit.  
Prerequisite: PEM 1121

PEM 1131  
**Weight Training**  
2 Credits  
Presents an overview of weight training, with an emphasis on procedures, safety and theory. Men will focus on high resistance strength producing exercise and women will focus on high repetition, endurance and toning. This course may be repeated twice for credit.

PEM 1141  
**Aerobics**  
1 Credit  
A fitness activity that combines principles of dance, calisthenics and aerobics. This program is based on the principles of continuous movement and is designed to improve cardiovascular endurance. This course may be taken four times for credit.
PEM 1405  
Judo and Self Defense  
1 Credit  
An activity course designed to provide knowledge of basic self defense techniques and skills necessary to enjoy and participate in the sport of Judo. A gi (uniform) is required for participation in this course.

PEM 1954  
Intercollegiate Athletics  
1 Credit  
Limited to students on HCC varsity teams. This course may be repeated four times for credit.

PEM 2930  
Ballroom Dance  
2 Credits  
This course is intended to be an introduction to ballroom dance for students with little or no previous ballroom dance training. Students will learn the dance steps to the fox trot, cha cha, waltz, swing, and tango. Participants will experience valuable enrichment as they progress at their own individual pace beginning to intermediate. Each student will receive personal attention and beneficial feedback. Dancers will learn routines to showcase their artistry. This course may be repeated twice for credit.

PEN 1136C  
Open Water Diver  
2 Credits  
This is an extensive course for training persons in open water recreational diving. Satisfactory completion of this course leads to internationally recognized scuba certification. Students must demonstrate satisfactory swimming ability, physical stamina and emotional stability to instructor at the first lab. Medical certificate may be required.

PET 2622C  
Prevention and Care of Athletic Injuries  
3 Credits  
Focuses on the prevention and care of athletic injuries with an emphasis on modern equipment, supplies and therapeutic aids, and athletic training as a career. Topics include professional relationships with physicians and coaches, medical examination, referrals and follow up care.

PGY 2401C  
Photography I  
3 Credits  
Provides a basic understanding of the technical aspects of black and white photography involving camera operation, exposure control, film processing, print enlarging and finishing. The students will become familiar with photographic materials, as well as artistic composition and design.

PGY 2404C  
Photography II  
3 Credits  
Addresses advanced technical problems introducing the students to various manipulative techniques both in the camera and in the darkroom. The students will deal with refinement of the silver print, toning, hand coloring, collaging, and the production of a cohesive exhibition quality body of work. Prerequisite: PGY 2401C

PGY 2405C  
Photography III  
3 Credits  
Provides an opportunity for continued personal development through assigned advanced projects, theory and practice of photography as an art form. Emphasis on production of an advanced photographic portfolio of exhibition quality. Prerequisite: PGY 2404C

PGY 2801C  
Digital Photography I  
3 Credits  
This course is intended to introduce students to the basic concerns in digital photography as a fine art medium, and the computer as a darkroom. Includes digital imaging techniques of scanning, color correction, retouching, composition, content, and more. Hardware, image input and output processes, and software are also discussed. May be repeated once for credit. Prerequisite: PGY 2401C

PGY 2802C  
Digital Photography II  
3 Credits  
This course is intended to enable students to continue the exploration of concerns in digital photography as a fine art medium through the use of the computer as a darkroom. Includes advanced digital imaging techniques of scanning, color correction, retouching, composition, content, and more. Hardware, image input and output processes, materials, and software are also discussed. May be repeated once for credit. Prerequisite: PGY 2801C

PGY 2905  
Directed Independent Study  
3 Credits  
Designed to establish a framework for further self learning in various areas of photography, for the advanced student. The students will shape the course to fit their needs by planning activities and preparing a contract coordinated with an art faculty member. The contract will specifically outline a specific project, or a particular set of goals and requirements that the student wishes to achieve. The contract must be satisfactorily completed and reviewed by the assigned faculty member. May be taken four times for credit.

PGY 2930C  
Selected Topics in Photography  
3 Credits  
Selected Topics in Photography is a studio course centered around topics of special interest to the class and professor. Topics or focus will be based on the needs and areas of interest, which may vary from semester to semester. Exceptions to the prerequisite will be considered by the instructor. Transfer credit is the prerogative of the receiving institution. Prerequisite: PGY 2401C or PGY 2404C
PHI 1010
Introduction to Philosophy
3 Credits
Introduces the study of our human capacity to reflect consciously and critically on our experience and our routines. It introduces several basic concepts in philosophy such as the idea of being, the nature and criteria of knowledge claims, ethical foundations, free will, the existence of God, and methods of philosophical inquiry with selected applications to practice. Prerequisites: College reading and writing skills are required.

PHI 1010H
Honors Introduction to Philosophy
3 Credits
Same as PHI 1010 with honors content. Honors Institute permission required. Prerequisites: College reading and writing skills are required.

PHI 1100
Elementary Logic
3 Credits
A study of the principles of reasoning involving the detection of fallacies, analysis and criticism of arguments and concepts of formal proof. Prerequisites: College reading and writing skills are required.

PHI 1600
Ethics
3 Credits
Covers several major ethical theories in philosophy and their applications, including contemporary issues. Prerequisites: College reading and writing skills are required.

PHI 1600H
Honors Ethics
3 Credits
Prerequisites: College reading and writing skills are required.

PHY 1025
Fundamentals of Physics
3 Credits
Emphasizes the principles of physics; the use of mathematics is kept to a minimum. Topics include mechanics, properties of matter, heat, sound, electricity, magnetism, light, relativity, atomic and nuclear physics. Designed for students without the physics background needed for General Physics or other science courses. Prerequisites: College reading, writing skills and math skills are required. Corequisite: PHY 1025L

PHY 1025L
Fundamentals of Physics Lab
1 Credit
A physics laboratory course designed primarily for students lacking laboratory experience who need the background prior to taking PHY 1053L or other laboratory science courses. Topics include: measurement techniques, graphical analysis of data, study of bodies at rest or in motion, heat, sound, light, and electrical experiments, and introduction to computer applications. Prerequisites: College reading, writing skills and math skills are required. Corequisite: PHY 1025

PHY 1053
General Physics I
3 Credits
Focuses on the fundamental concepts of natural physical laws as they apply to mechanics and thermodynamics. Topics include kinematics and dynamics, energy and momentum, properties of matter, rotational motion of rigid bodies, vibration motion, kinetic theory and thermal physics. Prerequisites: PHY 1025 or passing score on physics exemption test and either MAC 1114 or MAC 1147. Corequisite: PHY 1053L

PHY 1053L
Physics I Lab
1 Credit
Students are provided with physical experiments to enable them to strengthen understanding developed in PHY 1053. Students will perform experiments, record data, perform assigned calculations and interpret results in terms of the principles and concepts developed in PHY 1053. Prerequisites: PHY 1025L. College level math skills are required. Corequisite: PHY 1053

PHY 1054
General Physics II
3 Credits
Focuses on the fundamental concepts of natural physical laws as they apply to electricity, magnetism, electromagnetic radiation, optics, relativity, atomic and nuclear physics. Prerequisites: PHY 1053, PHY 1053L Corequisite: PHY 1054

PHY 1054L
Physics II Lab
1 Credit
Prerequisites: PHY 1053, PHY 1053L Corequisite: PHY 1054

PHY 2048
Physics with Calculus I
4 Credits
First semester of a two semester sequence of general physics (mechanics, wave motion, sound, thermodynamics, geometrical and physical optics, electricity and magnetism, selected topics from modern physics) and laboratory for physics majors and engineering students. Prerequisite: MAC 2311 and either PHY 1025 or passing score on physics exemption test. Corequisite: PHY 2048L
PHY 2048L
Physics with Calculus I Lab
1 Credit
Prerequisites: College level reading, writing and math skills are required.
Corequisite: PHY 2048

PHY 2049
Physics with Calculus II
4 Credits
Second semester of general physics and laboratory for physics majors and engineering students.
Prerequisites: MAC 2312, PHY 2048, PHY 2048L
Corequisite: PHY 2049L

PHY 2049L
Physics with Calculus II Lab
1 Credit
Prerequisites: MAC 2312, PHY 2048, PHY 2048L
Corequisite: PHY 2049

PLA 1003
Introduction to the Paralegal Profession
3 Credits
Provides an overview of the training and purpose of paralegals. Examines the role of the lawyer and legal assistant in modern society and ethical and professional practice standards.
Prerequisite: College level reading and writing skills are required.

PLA 1104
Writing and Research I
3 Credits
Provides an in-depth exploration of the law library, legal research and writing legal memoranda.
Prerequisite: PLA 1003

PLA 1203
Litigation Process I
3 Credits
Covers the Florida Rules of Civil Procedures, Criminal and Appellate Procedures and related matters.
Prerequisite: PLA 1003

PLA 1271
Tort Law
3 Credits
This course provides a general perspective of areas of law relating to persons and property through civil law. Topics that may be included are Intentional Torts, Negligence, Product Liability, Defamation and other relevant civil law areas.

PLA 1433
Business Organization
3 Credits
Covers procedural information and basic law as it applies to corporations, partnerships and other business vehicles.

PLA 1600
Wills, Trusts and Probate
3 Credits
Presents a survey of estate planning and administration including the preparation of wills, trusts, probate forms and guardianship procedures.

PLA 1611
Real Estate Law and Property Transactions I
3 Credits
Covers common real estate transactions and drafting documents such as deeds, leases and contracts.

PLA 1700
Legal Ethics and Professional Responsibility
3 Credits
Introduces the student to the types of ethical situations and dilemmas they may encounter in the legal workforce. Students will learn applicable disciplinary rules for both the lawyer and the paralegal, in order to understand how to function responsibly as a legal professional. The content and course work is geared not only to the paralegal student, but also to the practicing paralegal and other legal professionals.
Prerequisite: PLA 1003

PLA 1949
Paralegal Internship
3 Credits
The internship program augments the paralegal curriculum by placing the student in a legal work environment under the supervision of an attorney. It provides the student with the opportunity to gain practical experience as a paralegal in a private law firm, governmental agency or corporation.
Prerequisite: Program manager permission required.

PLA 2114
Writing and Research II
3 Credits
An advanced course in legal writing and research.
Prerequisite: PLA 1104

PLA 2223
Litigation Procedures II
3 Credits
Covers advanced litigation procedures law to including interviewing techniques, preparing and organizing courtroom materials, compiling documentary evidence, applying investigative procedures and taking effective courtroom notes.
Prerequisite: PLA 1203

PLA 2303
Criminal Litigation
3 Credits
This course provides students with a survey of the criminal justice system. Substantive and procedural aspects of criminal law are studied. Course content includes the nature of different crimes, and the penalties involved. Also covered are the pre-trial procedures, the discovery process, the plea bargaining process, and the problems involved in the conduct of trial proceedings.
PLA 2421
Contract Law
3 Credits
Covers the basic principles of contract law including both
common law contract concepts and uniform commercial code
concepts when applicable.

PLA 2460
Bankruptcy Law
3 Credits
Examines the principles and procedures for filing bankruptcy
and reorganizations, including the preparation of forms.

PLA 2531
Elder Law
3 Credits
Covers the various aspects of law that have particular applica-
tions to the elderly client. The course is designed to familiarize
the student with the practical and theoretical aspects of elder
law.
Prerequisites: College level reading and writing skills are re-
quired.

PLA 2612
Real Estate Law and Property Transactions II
3 Credits
Advanced training in common real estate transactions and the
preparation of documents such as deeds and leases.
Prerequisite: PLA 1611

PLA 2732
Law Office Computer Applications
3 Credits
This course introduces the student to the law office work envi-
ronment and is designed to provide the student with an intro-
duction to the different administrative functions that are most
commonly used in a law office. Using the computer and vari-
ous applications software, the student will learn to perform
various legal related business tasks commonly used on the job.
The student will prepare many of the common legal office
documents. Methods of records management, basic computer
file management, scheduling and other administrative duties
will be explored. Ethical issues associated with computers and
information systems will be explored, as will the importance of
the procedures used in the legal office to protect attor-
ney/client confidentiality. Students should have basic comput-
er application skills before taking this course.
Prerequisite: CGS 1000

PLA 2763
Law Office Management
3 Credits
Covers managerial responsibility, effective planning and use of
financial resources.

PLA 2800
Family Law
3 Credits
Covers such topics as marriage dissolution, separation, custo-
dy, legitimacy, adoption, change of name, guardianship, sup-
port, court procedures and separation agreements.

PLA 2612
Real Estate Law and Property Transactions II
3 Credits
Advanced training in common real estate transactions and the
preparation of documents such as deeds and leases.
Prerequisite: PLA 1611

PLS 1220
Plant Propagation
2 Credits
Focuses on the basic practical skills regarding containers, bud-
ding hormones, preparations of the media, the collection of
seed, seed treatments and all areas of propagation.
Corequisite: PLS 1220L

PLS 1220L
Plant Propagation Lab
2 Credits
Field experience in the use of containers; preparation of media,
collection of seeds, use of hormones, and seed treatments. Stu-
dents will participate in propagation processes relating to cut-
ting, seeds, air layering, grafting and tissue culture.
Corequisite: PLS 1220

POS 1001
Introduction Political Science
3 Credits
Covers the basic concepts and theories of government and pol-
itics.
Prerequisites: College level reading and writing skills are re-
quired.

POS 2041
American Government
3 Credits
Covers the structure and function of the American govern-
ment, the dynamics of political change and contemporary is-
ues.
Prerequisites: College level reading and writing skills are re-
quired.

POS 2041H
Honors American Government
3 Credits
This course covers the structure and function of the American
government, the dynamics of political change and contemporary issues with honors content.
Prerequisites: College level reading and writing skills are re-
quired.

POS 2112
State and Local Government
3 Credits
Covers the mechanics of state and local governments, public
participation and current political issues. Topics include the
role of the governor, cabinet, legislature, courts, interest
groups, voters and political parties.
POS 2930
Select Topics Political Science
3 Credits
Provides an in-depth study of topics in political science not covered in other courses.
Prerequisite: POS 2041.

PSC 1515
Energy and the Environment
3 Credits
Focuses on the basic scientific principles related to energy and their application to society. Topics include fossil fuel resources, environmental impact of energy usage, energy conversions, electricity, resource depletion, alternative forms of energy and energy conservation; intended for non science majors.
Prerequisites: College level reading, writing and math skills are required.
Corequisite: PSC 1515L

PSC 1515L
Energy and the Environment Lab
1 Credit
Accompanies PSC 1515. Topics include an understanding of solar energy, nuclear energy, fossil fuels and electricity, through exercises and experiments. Addresses computer applications to energy problems.
Prerequisites: College level reading, writing and math skills are required.
Corequisite: PSC 1515

PSY 2012
General Psychology
3 Credits
An introduction to modern scientific psychology and its application to human behavior. Topics include perception, motivation, learning, thinking, remembering, emotion, intelligence, personality development and the scientific methods used in psychology.
Prerequisites: College level reading and writing skills are required.

PSY 2012H
Honors General Psychology
3 Credits
Same as PSY 2012 with honors content. Honors Institute permission required.
Prerequisites: College level reading and writing skills are required.

PSY 2933
Selected Topics in Psychology
3 Credits
Focuses on an in-depth coverage of specialized aspects of psychology not covered in introductory courses. The course content varies according to the interests of the students and faculty. This course may be repeated once for credit.
Prerequisite: PSY 2012. College level reading and writing skills are required.

PUR 2003
Introduction to Public Relations
3 Credits
The underlying theory and professional practice of public relations within corporate and institutional structures and its vital role in society; ethical standards of practice; relationships of the practice to the public media; and public relations problem-solving process.
Prerequisite: MMC 2000

RAT 1614
Radiation Therapy and Physics I
2 Credits
Provides the students with the fundamentals of physics and its importance to the field of Radiography in general and Radiation Therapy specifically. A review of mathematics as applied to radiology and radiation therapy is completed. Fundamentals principles, concepts and terminology are discussed. Credit for this course does not apply to the associate in arts degree.

RAT 1618
Radiation Therapy and Physics II
2 Credits
Provides the students with the fundamentals of physics and its importance to the field of radiography in general and radiation therapy specifically. A review of mathematics as applied to radiology and radiation therapy is completed. Fundamentals principles, concepts and terminology are discussed. Credit for this course does not apply to the associate in arts degree.

RAT 1800
Introduction Radiation Therapy Clinic
1 Credit
Clinical experience designed to allow the students to apply knowledge gained in the classroom and lab to the clinical situation. Clinical will enable the students to understand and relate the role of all medical imaging working as a team in the diagnosis and treatment of malignant process. The students will clinically utilize those lab skills learned related to monitoring equipment (IVs, catheters, chest tubes, wheelchairs, stretchers, etc.) and patient contact. Students will also become familiar with the radiation therapy simulator and utilization of such. Credit for this course does not apply to the associate in arts degree.
Prerequisites: HSC 1220 and RAT 2001C
Additional Prerequisite: Admission to the Radiation Therapy or Radiation Therapy Specialist programs.
Corequisite: RTE 1157

RAT 1810
Radiation Therapy Clinic II
2 Credits
The clinical experience is designed to give the student the ability to apply the knowledge gained in the classroom and lab in the practical experience. Students will work directly with radiation therapists and patients applying radiation therapy treatments. Credit for this course does not apply to the associate in arts degree.
RAT 2001C  
Introduction to Radiation Therapy  
2 Credits  
Designed to instruct the students in patient care, medical terminology and an introduction to the radiation therapy department and profession. Includes self-directed medical terminology section. Credit for this course does not apply to the associate in arts degree.  
Prerequisite: Admission to the Radiation Therapy program.

RAT 2021  
Radiation Therapy Treatment Plan  
3 Credits  
Factors involved in the development of a treatment plan are explained and what measurements are reviewed for each anatomical site that is routinely treated with external beam irradiation. Time, dose fractionation schedules are given for all sites with variations (hypofractionation and accelerated fractionation) are discussed. Tissue radiosensitivity as related to side effects are given as well as other modifiers of radiosensitivity. Credit for this course does not apply toward an associate in arts degree.  
Prerequisites: RAT 2001C, RAT 2621  
Corequisite: RAT 2902L

RAT 2023  
Principles and Practices in Radiation Therapy I  
3 Credits  
Content designed to provide an overview of cancer and the specialty of radiation therapy. The medical, biological and pathological aspect as well as the fundamentals of oncology including the terminology, behaviors of malignant disease, and review of the cell and the cell cycle. Credit for this course does not apply to the associate in arts degree.

RAT 2061  
Radiation Therapy Seminar  
2 Credits  
Provides the students with the opportunity to evaluate their cumulative retention of the radiation therapy curriculum content. Some areas are identified as areas that require more reinforcement and study. Credit for this course does not apply to the associate in arts degree.

RAT 2242  
Principles and Practices in Radiation Therapy II  
4 Credits  
Provides the students with content designed to examine and evaluate the management of malignant conditions, etiology, epidemiology, diagnosis, staging/grading, regional spread, lymphatic involvement and the treatment methods utilized in the management and treatment of the disease. The radiation therapist responsibility in patient care, prognosis, treatment results and the effect of using combined modalities will be presented. Various treatment methods and technical components or treatment will be integrated with the histological types of disease and the area of the body in which they occur will be linked to the skills required to analyze complex issues. Credit for this course does not apply to the associate in arts degree.

RAT 2303  
Psychosocial Aspects in Oncology  
2 Credits  
Describes the effects of cancer and its treatments on patients, family and medical staff. It will examine the behavioral and psychological components of cancer, including its effects on psychological, social and physical functions. Participants will explore their own responses to cancer and their patients. Participants will learn how their role as medical professional interacts with other health care professionals as part of a multidisciplinary team member. Coping strategies and typical crisis points for patients and families will be discussed. Included in this will be managing the consequences of treatment and receiving a terminal prognosis. Credit for this course does not apply to the associate in arts degree.  
Prerequisite: ENC 1101  
Corequisite: RAT 1810

RAT 2619L  
Computer Applications in Treatment Planning  
2 Credits  
Provides the students with the development of treatment plans utilizing radiation therapy treatment planning computers. All parameters of the plan are explained including isocenter, multiple fields’ utilization, tumor normalization minimization methods. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: RAT 2021, college level reading, writing and math skills are required.

RAT 2620  
Radiation Therapy and Physics III  
3 Credits  
Provides the student with the fundamentals of the physics involved with radiation protection, practical applications of dose calculations, the physics involved in generating isodose distributions and factors that influence dose distributions, the structure of matter, nuclear transformations, production of X-rays and clinical radiation generators. A review of mathematics as applied to radiology and radiation therapy will be included. Credit for this course does not apply to the associate in arts degree.  
Prerequisite: RAT 1618

RAT 2621C  
Radiation Therapy and Physics IV  
3 Credits  
Provides the students with the fundamentals of the physics involved with radiation protection, nuclear transformation and the interaction of radiation with matter. The measurement of ionizing radiation, the quality of radiation, measurement and calculations of absorbed doses will be covered. Integration of individual practical experiences in radiation therapy measurements and calculation of radiation doses. Students will perform data collection and analysis using radiation detection devices including ionization chambers, diodes, use of film densitometry and the various methods of dose measurements and clinical application of dose and beam data. Beam data collection, quality assurance and radiation safety labs will be inte-
grated with didactic portion of the class. Credit for this course does not apply to the associate in arts degree.

**RAT 2804**
**Radiation Therapy Clinical I**
3 Credits
The clinical experience is designed to allow the students to apply the knowledge gained in the classroom and laboratory toward developing the skills necessary to accurately treat and simulate the patient. Students must successfully complete the required competencies to obtain proficiency. Successful completion of all clinical courses demonstrates competence in the field of radiation therapy at the entry level position.
Prerequisite: RAT 1810

**RAT 2814**
**Radiation Therapy Clinical II**
3 Credits
The clinical experience is designed to allow the students to apply the knowledge gained in the classroom towards developing the skills and understanding necessary to accurately apply ionizing radiations for the treatment of malignant neoplasms. Credit for this course does not apply to the associate in arts degree
Prerequisite: RAT 2804
Corequisite: RAT 2901L

**RAT 2824**
**Radiation Therapy Clinical III**
3 Credits
The clinical experience is designed to allow the students to apply the knowledge gained in the classroom toward developing the skills and understanding necessary to accurately apply ionizing radiations for the treatment of malignant neoplasms. Students will refine that behavior which demonstrates competence in the field of radiation therapy at the level of job entry radiation therapists. Credit for this course does not apply to the associate in arts degree.
Prerequisite: RAT 2814

**RAT 2901**
**Simulation Lecture I**
1 Credit
Provides the student with the knowledge of simulation in preparation for the practical application in the simulation lab. All parameters of simulation and CT simulation of the virtual patient from simple to intermediate complexity will be discussed. Simulation parameters such as TAD/TSD, field size, custom shielding, tumor dose, critical structure and field arrangement will be discussed. Content in sectional anatomy and CT will be discussed. Credit for this course does not apply to the associate in arts degree.
Corequisite: RAT 2901L

**RAT 2901L**
**Simulation Lab I**
1 Credit
The simulation lab is designed to give the students individual hands on experience with a radiation therapy simulator and a general knowledge of the typical treatment methods for the types of cancers treated with external beam radiation therapy. Each student will use the simulator to perform simulated treatment areas on an anthropomorphic phantom, "Pixie." Each treatment area is reviewed in the simulation lecture to include the treatment technique, field arrangement, treatment parameters, dose prescription, and adjacent critical normal tissues with their tolerance doses and side effects. Credit for this course does not apply to the associate in arts degree.
Prerequisite: Admission to the Radiation Therapy and Radiation Therapy Specialist programs.
Corequisite: RAT 2901

**RAT 2902**
**Simulation Lecture II**
1 Credit
Content is designed to provide the student with the knowledge of simulation in preparation for the practical application in the simulation lab. All parameters of simulation including CT simulation of the virtual patient utilizing complex situations which required advanced thinking skills. Credit for this course does not apply to the associate in arts degree.
Corequisite: RAT 2902L

**RAT 2902L**
**Simulation Lab II**
1 Credit
The simulation laboratory is designed to give the students individual hands on experience with a radiation therapy simulator. Each student will use the simulator to perform simulated treatment areas on a phantom. Each treatment area is reviewed to include the techniques, treatment borders, dose prescription, adjacent normal structures and their tolerance doses and treatment side effects. Credit for this course does not apply to the associate in arts degree.
Prerequisite: RAT 2901L
Corequisites: RAT 2902, RAT 2021

**REA 0007** (formerly REA 0002)
**College Prep Reading I**
4 Credits
Develops basic reading skills necessary for success in a college program of studies. Topics include vocabulary and comprehension skills, test taking skills, outlining, time management, highlighting, and concentration as well as emphasis on flexible rate of varied reading tasks. This class does not satisfy general education requirements and generates compensatory credit only.

**REA 0017** (formerly REA 0002)
**College Prep Reading II**
4 Credits
Develops basic reading skills necessary for success in a college program of studies. Topics include vocabulary skills, structural analysis, context clues, word analogies, and denotation and connotation. Emphasis is placed on critical thinking through three levels of comprehension: literal, inferential and applied. This class does not satisfy general education requirements and generates compensatory credit only.
Prerequisites: REA 0007 or appropriate placement score.
REA 1105  
**College Reading I**  
3 Credits  
Designed to improve reading skills. Focuses on comprehension, vocabulary and study techniques. Individualized instruction based on pre-test scores is provided.  
Prerequisites: REA 0017 or college level reading skills.

REA 1106  
**College Reading II**  
3 Credits  
Designed to enhance reading skills. Focuses on developing critical reading skills such as comprehension, understanding inference, distinguishing facts and opinions, and recognizing the author's tone. Vocabulary and study skills are emphasized. Individual instruction based on pre-tests is provided.  
Prerequisite: REA 1105

REA 1605  
**College Study Skills**  
2 Credits  
This course prepares students for successful college careers through the development of efficient study skills, critical reading and thinking skills, effective test taking and effective management of test anxiety. It introduces students to college culture and the college environment and provides students with the opportunity to explore academic and career goals.

REA 2205  
**Advanced College Reading I**  
3 Credits  
Designed to improve college reading skills. Focuses on vocabulary, rate improvement, study techniques and critical and analytical reading, logical inferences, detecting bias and drawing conclusions. Individualized instruction, based on pre-test is provided.  
Prerequisite: REA 1106

REA 2206  
**Advanced College Reading II**  
3 Credits  
Designed to enhance college reading skills. Focuses on critical reading, rate flexibility and study techniques. Individualized instruction based on pre-test scores is provided. Prerequisites: REA 0017 or REA 0017C or college level reading skills are required.

REA 2505  
**Vocabulary Improvement**  
3 Credits  
Focuses on improving vocabulary through contextual practice and word usage. Topics include word analysis, context clues, affixes, specialized vocabularies, connotation/denotation and analogies.

REL 1210  
**Old Testament Survey**  
3 Credits  
A study of the history and writings of the Hebrew people through a review of the background, purpose and setting of books in the Old Testament.  
Prerequisites: College level reading and writing skills are required.

REL 1240  
**New Testament Survey**  
3 Credits  
A study of the background of the New Testament, the life and teachings of Jesus, the expansion of Christianity by early missionaries and an overview of the major Christian teachings.  
Prerequisites: College level reading and writing skills are required.

REL 2300  
**Introduction to Religion**  
3 Credits  
An introductory course which explores such topics as the nature of religion, features shared in world religions, differences among world religions, the relationship between belief and behavior, and methods and problems associated with classifying and studying religion.  
Prerequisites: College level reading and writing skills are required.

RET 1024C  
**Introduction Respiratory Care**  
8 Credits  
Provides an introduction to the Respiratory Care profession including licensure and credentialing. The course work includes basic cardiopulmonary anatomy and physiology, patient assessment skills, infection control and basic respiratory therapy procedures. Lab is included to allow for skills practice. The student will attend a clinical rotation in a hospital setting. Credit for this course does not apply to the associate in arts degree.

RET 1274C  
**Basic Respiratory Care**  
6 Credits  
Provides instruction of advanced cardiopulmonary anatomy and physiology. Course work includes basic theory of respiratory care procedures including airway care and arterial blood gas puncture and analysis. The lab portion of the course allows for hands on instruction in a controlled setting to acquire skills prior to performance in a clinical setting. Credit for this course does not apply to the associate in arts degree.

RET 1350  
**Pharmacology for Respiratory Care**  
3 Credits  
Provides a comprehensive understanding of the pharmacologic agents used in the practice of respiratory care and provides a fundamental understanding of other drugs used in anesthesia.
and critical care which involve the cardiopulmonary system. Credit for this course does not apply to the associate in arts degree.

**RET 1503**  
*Cardiopulmonary Pathophysiology*  
3 Credits  
Provides a study of the causes, characteristics and treatments of the most commonly encountered cardiopulmonary diseases. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: College level reading writing and math skills are required.

**RET 1832**  
*Respiratory Care Clinic I*  
2 Credits  
Provides the student with an opportunity to perform basic respiratory care procedures in the clinical setting. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: College level reading writing and math skills are required.

**RET 1833**  
*Respiratory Care Clinic II*  
1 Credit  
Provides an introduction to the practice of respiratory care in the intensive care environment. Advanced patient care skills are emphasized. The skills included are life support, physiologic monitoring, mechanical ventilation and communication skills. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: College level reading writing and math skills are required.

**RET 2264C**  
*Principles Mechanical Ventilation*  
5 Credits  
Instruction of the basic theory of mechanical ventilation including indications for artificial ventilation, classification of ventilators and monitoring patients on a ventilator. Provides hands-on laboratory experience with different ventilators to prepare the student for clinical practice. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: College level reading writing and math skills are required.

**RET 2283**  
*Respiratory Intensive Care*  
3 Credits  
Focuses on theory and application of respiratory care in the critical care unit. Coursework includes ventilator management, ECG interpretation and advanced assessment techniques. Credit for this course does not apply to the associate in arts degree.

**RET 2413C**  
*Pulmonary Diagnostics*  
2 Credits  
A focus on respiratory care theory and application in pulmonary function testing and interpretation. The course includes testing for volumes and ventilation, pulmonary distribution and diffusion, exercise physiology, cardiovascular stress testing and equipment maintenance. Lab will include performing pulmonary functions and interpretation of results. Credit for this course does not apply to the associate in arts degree.

**RET 2533C**  
*Advanced Respiratory Care*  
6.00 Credits  
Coursework focuses on hemodynamic monitoring, pulmonary function testing, sleep apnea, medical reimbursement, homecare and rehabilitation of the cardiopulmonary patient. The course work will include a lab to allow experience performing advanced diagnostic skills. Credit for this course does not apply to the associate in arts degree.

**RET 2714C**  
*Pediatric and Neonatal Respiratory Care*  
3 Credits  
Focuses on fetal development, neonatal and pediatric patient; assessment, treatment of cardiopulmonary disorders, mechanical ventilation, and homecare. Lab will be included for skills practice prior to clinical practice. Credit for this course does not apply to the associate in arts degree.

**RET 2834**  
*Respiratory Clinic III*  
2 Credits  
Continuation of advanced respiratory care practice in the intensive care environment. Advanced patient care skills are emphasized. The skills included are life support, physiologic monitoring, mechanical ventilation and communications skills. Rotations through specialty areas such as pediatrics, neonatal, pulmonary function, management and arterial blood gas lab will also be included. Credit for this course does not apply to the associate in arts degree.

**RET 2835**  
*Respiratory Care Clinic IV*  
2 Credits  
Continuation of advanced respiratory care practice in the intensive care environment. Advanced patient care skills are emphasized. The skills included are life support, physiologic monitoring mechanical ventilation and communication skills. Rotations through specialty areas such as pediatrics, neonatal, pulmonary function, management and arterial blood gas lab will also be included. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: College level reading writing and math skills are required.

**RET 2836**  
*Respiratory Care Clinic V*  
1 Credit  
Continuation of advanced respiratory care practice in the intensive care environment. Advanced patient care skills are emphasized. The skills included are life support, physiologic monitoring, mechanical ventilation and communication skills. Rotation will include a complete evaluation of afferent, cogni-
tive, and motor skills. Credit for this course does not apply to the associate in arts degree.

Prerequisites: RET 1832, RET 1833, RET 2834, RET 2835

RET 2930
Respiratory Care Seminar
3 Credits
Includes an overview of advance respiratory care skills and preparation for the NBRC exams. Self-assessment exams will be taken. A case study presentation will be required. Credit for this course does not apply to the associate in arts degree.

Prerequisites: College level reading, writing and math skills are required.

RTE 1000
Introduction to Radiography
1.5 Credits
Covers all aspects of radiographic image production from the x-ray tube to the image receptor with emphasis on basic radiation protection practices. Radiographic formulae are introduced and fundamental concepts of radiation interactions are addressed. Credit for this course does not apply to the associate in arts degree.

Corequisite: HSC 1220

RTE 1111
Introduction to Radiography and Patient Care
1.5 Credits
Designed to introduce the first year Radiography students to basic medical terminology/medical abbreviations, patient care procedures and general body mechanics needed for effective patient transfers (wheelchair/stretcher). Emphasis is placed on the importance of obtaining accurate patient information and the necessary required confidentiality as expressed in the Patient’s Bill of Rights. Credit for this course does not apply to the associate in arts degree.

Corequisites: RTE 1000, HSC 1220

RTE 1157
Medical Imaging of the Human Structure
3 Credits
Focuses on examining the body through medical imaging, with an emphasis on nuclear medicine, sonography, radiography, thermography and the applications of radiation therapy. Credit for this course does not apply to the associate in arts degree.

Prerequisites: RAT 1614, RAT 2001C

RTE 1308
Radiation Protection and Safety
2 Credits
Focuses on radiation safety/protection practices for both patients and personnel. Laboratory exercises are included in this course. Credit for this course does not apply to the associate in arts degree.

Prerequisite: Admission to the Radiography program, RTE 1000.

RTE 1418
Principles of Radiographic Exposure I
3 Credits
Covers the principles of radiographic exposure to include prime factors, radiographic quality, latent image formation, intensifying screens, tube rating charts and radiographic accessory devices. Credit for this course does not apply to the associate in arts degree. Admission to Radiography program required.

Prerequisites: RTE 1000, RTE 1607

Corequisite: RTE 1418L

RTE 1418L
Principles of Radiographic Exposure I Lab
1 Credit
Provides the students the opportunity to radiographically demonstrate Viz lab exercises exposure concepts as delivered in lectures. Credit for this course does not apply to the associate in arts degree. Admission to the Radiography program required.

Prerequisites: RTE 1000, RTE 1607

Corequisite: RTE 1418

RTE 1457
Principles Radiographic Exposure II
1 Credit
Focuses on darkroom chemistry, processor design and sensitometry used to monitor processor conditions. Credit for this course does not apply to the associate in arts degree.

Prerequisites: RTE 1418, RTE 1418L

RTE 1503
Radiographic Positioning I
3 Credits
Focuses on proper positioning for various projections of the chest, abdomen and skeletal system. Credit for this course does not apply to the associate in arts degree.

Prerequisite: Admission to the Radiography program.

Corequisite: RTE 1503L

RTE 1503L
Radiographic Positioning I Lab
1 Credit
Designed to give the students the opportunity to practice positioning skills introduced in the lectures dealing with radiography of the chest, abdomen and skeletal system. Credit for this course does not apply to the associate in arts degree.

Prerequisite: Admission to the Radiography program.

Corequisite: RTE 1503

RTE 1513
Radiographic Positioning II
3 Credits
Focuses on radiographic procedures and anatomical identification, with an emphasis on the urinary, biliary and gastrointestinal systems, as well as the vertebral column. Topics include the use, composition and effects of contrast media on the hu-
RTE 1513L
**Radiographic Positioning II Lab**
1 Credit
Designed to coincide with the lecture material of RTE 1513. This will give the student an opportunity to practice positioning techniques, which have been covered in RTE 1513. It also enables the student to become more familiar with film evaluation and identification. Credit for this course does not apply to the associate in arts degree.
Prerequisite: RTE 1503, RTE 1503L
Corequisite: RTE 1513

RTE 1523
**Radiographic Positioning III**
3 Credits
Focuses on radiographic procedures and anatomical identification, with an emphasis on the skull and facial bones. Credit for this course does not apply to the associate in arts degree.
Prerequisites: RTE 1513, RTE 1513L
Corequisite: RTE 1523L

RTE 1523L
**Radiographic Positioning III Lab**
1 Credit
Provides experience in positioning the skull phantom to demonstrate various projections of the skull and facial bones. Credit for this course does not apply to the associate in arts degree.
Prerequisites: Admission to the Radiography program, RTE 1513, RTE 1513L
Corequisite: RTE 1523

RTE 1607
**Radiographic Science Principles**
1 Credit
Focuses on the basic natural laws, metric conversions, atomic structure and mathematical formulae. Credit for this course does not apply to the associate in arts degree.
Prerequisite: Admission to the Radiography Program.

RTE 1613
**Radiographic Physics I**
3 Credits
Includes the fundamental of electrical and radiation physics and basic principles underlying the operation of x-ray equipment and auxiliary devices. Credit for this course does not apply to the associate in arts degree.

RTE 1782
**Pathology of Medical and Surgical Diseases**
3 Credits
Focuses on terminology, the nature of diseases and their affect on tissues and organs. Prerequisite: Admission to the Diagnostic Medical Sonography, Nuclear Medicine Technology, Occupational Therapy Assistant, Radiation Therapy, or Radiography programs. Credit for this course does not apply to the associate in arts degree.

RTE 1800
**Introduction to Radiography Practicum**
2 Credits
Designed to introduce the entering first year radiography students to the clinical education settings and associated patient care methodologies. Credit for this course does not apply to the associate in arts degree.
Prerequisite: Admission to the Radiography program.

RTE 1804
**Radiography Practicum I**
3 Credits
See the description for RTE 2844. Credit for this course does not apply to the associate in arts degree.
Prerequisites: Admission to the Radiography program, HSC 1220, RTE 1800

RTE 1814
**Radiography Practicum II**
3 Credits
See course description for RTE 2844. Credit for this course does not apply to the associate in arts degree.
Prerequisite: Admission to the Radiography program, RTE 1804.

RTE 1824
**Radiography Practicum III**
3 Credits
See the description for RTE 2844. Credit for this course does not apply to the associate in arts degree.
Prerequisite: Admission to the Radiography program, RTE 1814.

RTE 1949
**Radiography Internship**
3 Credits
A coordinated work study course involving class work and field experience. Objectives determined by the students and teacher coordinator will be used to evaluate the students. Additional prerequisite: Successful completion of one half of all clinical competencies to include all contrast studies and must have earned a grade of “C” on all previous radiology internship sections. Co op/Independent Study. This course may be taken four times for credit. Credit for this course does not apply to the associate in arts degree.

RTE 2061
**Radiographic Seminar**
2 Credits
Provides the students a comprehensive review of all aspects of the Radiography Program. Credit for this course does not apply to the associate in arts degree.
Prerequisites: Admission to Radiography program, RTE 1613, RTE 2385
RTE 2385
Radiation Biology
3 Credits
Focuses on the interaction of radiation with physiological systems, genetics, radiation injury and radiation dosimetry with an emphasis on the principles of radiation safety. Credit for this course does not apply to the associate in arts degree.
Prerequisite: Admission to the Nuclear Medicine Technology, Radiation Therapy, Radiation Therapy Specialist, or Radiography programs.

RTE 2473L
Quality Assurance
1 Credit
Covers all aspects of quality assurance. Laboratory exercises are included. Credit for this course does not apply to the associate in arts degree.
Prerequisite: Admission to the Radiation Therapy, Radiation Therapy Specialist, or Radiography programs.

RTE 2563
Special Radiographic Processes
2.5 Credits
Focuses on special radiographic and angiographic procedures with an emphasis on procedural tasks and anatomical structures. Credit for this course does not apply to the associate in arts degree.
Prerequisites: Admission to the Radiography program, RTE 1523, RTE 1523L.

RTE 2834
Radiography Practicum IV
3 Credits
See the description for RTE 2844. Credit for this course does not apply to the associate in arts degree.
Prerequisites: Admission to the Radiography program, RTE 1824.

RTE 2844
Radiography Practicum V
1.5 Credits
Focuses on hands on experience in radiographic procedures through clinical rotations designed for radiography students only. Practicums require 24 hours per week. Designed to meet the requirements of the American Registry of Radiologic Technologists. Includes potentially strenuous skills such as lifting and carrying. Credit for this course does not apply to the associate in arts degree.
Prerequisite: Admission to the Radiography program, RTE 2834.

RTV 1941
Radio and TV Internship I
3 Credits
An opportunity to study and gain experience by working on-the-job with a broadcast film, or multimedia organization. Designed for students enrolled in the Digital Television and Media Production program.
Prerequisites: RTV 2000, RTV 1245, RTV 2201, RTV 2270.

RTV 2000
Introduction Broadcasting
3 Credits
This is an introductory course in principles, tools, and skills involved in the broadcasting field today.

RTV 2201
Broadcasting Techniques
3 Credits
An introduction to multi-camera television studio production with an emphasis on directing. Students will learn to direct a "live" three-camera studio production as well as assume studio crew positions. Students will learn about and act as a technical director, assistant director, lighting director, audio director, floor director, and camera operator.
Prerequisite: RTV 2000.

RTV 2240
Radio Production
3 Credits
This course includes the production of music (live and recorded) and talk, sports, interview, discussion, and documentary programs, including direction and performance.
Prerequisite: RTV 2201.

RTV 2242
Advanced TV Studio Production
3 Credits
This course is designed to provide students with more practical experience in producing live and live-to-tape three-camera television studio productions from pre to post production.
Prerequisite: RTV 2201.

RTV 2246
Advanced Electronic Field Production
3 Credits
This course builds on what the student has learned in the beginning electronic field production class. It's a very practical approach toward learning the techniques of how to write, produce, direct and edit short form field productions such as corporate demonstration, short documentary and fictional short.
Prerequisite: RTV 1245.

RTV 2270
Radio Production and Programming
3 Credits
This course covers the development of announcing and audio production skills for radio and other media. Students will learn to operate a professional audio console and use professional multi-track audio software to produce content for the college.
radio station. Students will also study radio formats, learn how
to analyze radio ratings, program a station, and build a station
promotions campaign.

RTV 2300
Broadcast News
3 Credits
Designed to increase student employment potential and to
maintain job performance in news and documentaries for ra-
dio, television, or closed circuit through basic and practical
familiarization with the mechanics and procedures of the news
room. Adaptation of local and wire copy for audio and film,
placement of commercials, approaches to information sources,
methods of applying for work are discussed.

RTV 2460
Broadcasting Practicum
3 Credits
A course that allows the student to get hands-on experience in
producing actual programming for radio, television or the In-
ternet.
Prerequisites: RTV 2201, RTV 2000, RTV 2270, RTV 2300, RTV
1245

RTV 2942
Radio and TV Internship II
3 Credits
The second Radio/TV internship allows the student an oppor-
tunity to work at another broadcast film, or media production
company to gain more on the job practical experience and ex-
tend their professional network. Designed for students en-
rolled in the Digital Television and Media Production
program.
Prerequisite: RTV 1941

RTV 2944
Radio and TV Internship III
3 Credits
The final Radio/TV internship experience is designed to pro-
vide the Digital Television and Media Production student with
an opportunity to develop entry level competence in the prac-
tical skills required for employment as a broadcast director.

SBM 2000
Small Business Management
3 Credits
Introduces the fundamentals of small business management,
including planning, choosing the types and forms of business,
raising capital, using business information, managing employ-
ees, and marketing products and services. The course is ori-
ented toward principles needed to operate a small business
and is designed for those who may eventually have their own
businesses or for those who desire to upgrade their skills in
their present businesses. Students will prepare a feasibility
study and present a comprehensive small business startup
plan.
Prerequisites: ACG 2021, ENT 1000, MAR 1011 or permission
of instructor. College level math skills are required.

SCC 1000
Introduction to Security
3 Credits
This course will examine the origins and development of secu-
rity from medieval England to current times. The concept of
security will be covered as a response to and a reflection of
society’s structure. This course will cover the various aspects of
security to include community, retail, corporate, business, and
industrial problems and concerns as well as the governmental
and legal aspects of security. The use of security equipment
and loss prevention will also be covered.

SCC 1001
Introduction to Private Investigation
3 Credits
This course will provide students with an overview of the pri-
vate investigation field. The course will focus on employment
opportunities, history, evolution, methods, and management
of private investigation, sources of information, investigative
technology, and ethical, public policy, and legal considerations
related to investigations in the private sector.

SLS 1101
Orientation
1 Credit
An introduction to the campus facilities, student services and
college policies and procedures. Provides assistance in plan-
ning a two-year program of study and offers guidance in trans-
ferring to other educational institutions.

SLS 1261
Personal Skills/Business
3 Credits
Prepares students, business managers, and supervisors to meet
the challenges of today’s rapidly changing, technological world
by helping them examine and perfect the personal skills re-
quired for an understanding of self and others on the job. Pro-
vides students with the skills necessary to recognize and cope
with life’s challenges. Emphasis is placed on making good
business decisions goal setting, problem solving, time and
stress management, and coping and leadership skills Credit for
this course does not apply to the associate in arts degree.

SLS 1301
Career Decision Making
3 Credits
Emphasizes the development of decision-making skills needed
to make realistic career choices in terms of values, interests,
and educational goals, using the facilities of the Career Lab.

SLS 1501
College Success
3 Credits
This interdisciplinary course empowers students by preparing
them for a successful college experience and providing them
with additional opportunities to develop intellectual potential
and life skills. It enhances student understanding of library
resources, student services, and other areas of academic sup-
port. Topics include goal assessment, time management, pow-

er reading, creative and critical thinking, test taking, memory, note taking, communication skill.

SON 1000
Basic Sonography
3 Credits
Designed to present the fundamental principles of sonography to the entry level sonography student. The focus of the course will be the role of the sonographer in the health care environment, professionalism and the legal issues facing the health care provider. Students will be introduced to the relevance of sonography in abdominal, obstetrical and gynecologic imaging and basic sonographic physics and instrumentation. Credit for this course does not apply to the associate in arts degree.
Prerequisite: BSC 1085
Corequisite: SON 1804C

SON 1053
Sonographic Imaging of Medical and Surgical Diseases
1 Credit
Students shall review their knowledge base of gross anatomy, scan planes, patient positions and the proper terminology associated with these concepts. Anatomical and sonographic relationships female pelvis and the developing fetus will be discussed. Students shall be guided in how to adapt protocols to anatomical variations or in the demonstration of pathology. Credit for this course does not apply to the associate in arts degree.
Prerequisite: SON 1000
Corequisites: RTE 1782, SON 1311

SON 1100
Sonographic Scanning Protocol I
1 Credit
Students shall review their knowledge base of gross anatomy, scan planes, patient positions and the proper terminology associated with these concepts. Anatomical and sonographic relationships female pelvis and the developing fetus will be discussed. Students shall be guided in how to adapt protocols to anatomical variations or in the demonstration of pathology. Credit for this course does not apply to the associate in arts degree.
Prerequisites: SON 1000, SON 1804C.
Corequisites: SON 1840, SON 1311

SON 1101
Sonographic Scanning Protocol II
1 Credit
Students shall review their knowledge base of gross anatomy, scan planes, patient positions and the proper terminology associated with these concepts. Anatomical and sonographic relationships female pelvis and the developing fetus will be discussed. Students shall be guided in how to adapt protocols to anatomical variations or in the demonstration of pathology. Credit for this course does not apply to the associate in arts degree.
Prerequisite: SON 1311
Corequisite: SON 1850

SON 1110
Introduction Sonographic Physics and Instrumentation
3 Credits
Designed to expand upon the basic physics and instrumentation concepts that were presented in Basic Sonography. Discussion will include how each component is interrelated and how all components contribute to the production of a sonographic image. Basic sonographic physics will be introduced. Introduction to computers hardware and software. An introductory computer literacy course for the Diagnostic Medical Sonography student with emphasis on current technology and the implications for and the effects on our society. Topics will include cyberspace; communications, including the impact of the Internet and World Wide Web; ethical, privacy, environmental, and health related issues. Software applications will include a brief introduction to Windows, word processing, spreadsheets, and graphics. Credit for this course does not apply to the associate in arts degree.
Prerequisites: SON 1000, SON 1804C
Corequisite: SON 1840

SON 1311
Introduction Cross Sectional Anatomy I
1 Credit
Provides an introduction to sonographic representation of the abdominal/pelvic areas and developing fetus. Topics include scanning planes, patient positions and terminology. Credit for this course does not apply to the associate in arts degree.
Prerequisites: Admission to Diagnostic Medical Sonography Program, SON 1000, SON 1804C.
Corequisite: SON 1840

SON 1312
Introduction Cross Section Anatomy II
1 Credit
Designed to introduce the student to the sonographic representation of the female pelvis and the developing fetus. Students shall review their knowledge base of gross anatomy and embryological development. Students will then be introduced to scan planes, patient positions and the proper terminology associated with these concepts. Anatomical and sonographic relationships female pelvis and the developing fetus will be discussed extensively. From this basis, the course is then designed to assist the student in visualizing gross anatomy as it is represented sonographically. Credit for this course does not apply to the associate in arts degree.
Prerequisite: SON 1311
Corequisite: SON 1850
SON 1313  
Introduction Cross Section Anatomy III  
1 Credit  
Students shall review their knowledge base of these structures. Students will then be introduced to scan planes, patient positions and the proper terminology associated with these concepts. This course is designed to introduce the student to the sonographic representation when imaging small parts, neonatal brains and vascular structures. Anatomical and sonographic relationships of these structures, vessels and organs will be discussed extensively. From this basis, the course is then designed to assist the student in visualizing gross anatomy as it is represented sonographically. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: SON 1312, SON 1850  
Corequisites: SON 2814, SON 1101

SON 1804C  
Introduction to Practicum I  
2 Credits  
Introduction to the patient/sonographic role in a simulated environment. Designed to ease the student into the hospital situation by becoming familiar with the role and responsibilities of a sonographer and the basic fundamentals of a career such as darkroom chemistry, medical terminology and machine operations. Students will spend a minimum of 50 minutes per week in lecture and eight clock hours in simulated hospital/clinical experience each week in the on campus laboratory. Credit for this course does not apply to the associate in arts degree.  
Prerequisite: Admission to Diagnostic Medical Sonography Program, BSC 1085.  
Corequisite: SON 1000

SON 1840  
Introduction to Practicum II  
1 Credit  
Continues to explore the role of the sonographer in a simulated as well as an actual clinical environment. This course is designed to expose the student to the role and responsibilities of a clinical sonographer in the hospital situation by allowing observation of the sonographer in daily hospital routine. The student will begin the initial phase of instruction in scanning protocols. The student will spend eight clock hours a week in the clinical and/or laboratory setting. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: SON 1804C, SON 1000.  
Corequisite: RTE 1782

SON 1850  
Introduction to Practicum III  
1 Credit  
Provides 8 hours per week of clinical sonographic experience in various health care settings. Topics include scanning protocols, sonographic equipment, terminology and patient care. Credit for this course does not apply to the associate in arts degree.  
Prerequisite: Admission to Diagnostic Medical Sonography Program, SON 1840  
Corequisite: SON 1312

SON 2061  
Seminar in Sonography  
3 Credits  
Provides a comprehensive review of all aspects of the sonography program to include abdominal, obstetrics, gynecology, physics and instrumentation, and miscellaneous small parts. Topics include quality assurance in sonography labs, bioeffects related to sonography, sonographic artifacts, an introduction to Doppler, an introduction to neurosonography, pediatric sonography and resume preparation and job hunting. Credit for this course does not apply to the associate in arts degree.  
Prerequisites: Admission to Diagnostic Medical Sonography program, SON 2122, SON 2211, SON 2112  
Corequisite: SON 2834

SON 2111  
Abdominal Sonography I  
3 Credits  
Designed to give the student an understanding of the anatomy, physiology and pathology of the abdomen. Emphasis will be placed on sonographic features and characteristics of normal anatomy as well as the various disease processes that affect each organ. Remaining course content will integrate clinical procedures, diagnostic procedures, etc., common to all and specific to each organ. Credit for this course does not apply to the associate in arts degree.  
Prerequisite: Admission to Diagnostic Medical Sonography Program, SON 1312  
Corequisite: SON 2814

SON 2112  
Abdominal Sonography II  
3 Credits  
Designed to give the student an understanding of the anatomy, physiology and pathology of the abdominal aorta, pancreas, biliary system and liver. Emphasis will be placed on sonographic features and characteristics of normal anatomy as well as the various disease processes that affect each organ. Remaining course content will integrate clinical procedures, diagnostic procedures, etc., common to all and specific to each organ. Credit for this course does not apply to the associate in arts degree.  
Prerequisite: Admission to Diagnostic Medical Sonography program, SON 2111  
Corequisites: SON 2211, SON 2211L

SON 2121  
Obstetrics and Gynecology Sonography I  
4 Credits  
Designed to give the student an understanding of the anatomy, physiology and pathology of the female pelvis as well as its normal and abnormal sonographic appearance. Also introduces the student to the first trimester of pregnancy and its related anatomy, physiology and possible pathology and/or complications. Embryology, early fetal development, sonographic identification and imaging of the embryo and fetus, trans-abdominal and trans-vaginal scanning techniques will be covered. Credit for this course does not apply to the associate in arts degree.  
Prerequisite: Admission to Diagnostic Medical Sonography program, SON 1311 (waiver by permission of instructor)
SON 2122
Obstetrics and Gynecology Sonography II
3 Credits
Designed to give the student detailed instruction in the role of sonography in the second and third trimesters of pregnancy. Fetal development, physiology, all major fetal anomalies, and maternal complications directly related to the second and third trimesters of pregnancy will be covered in detail. Credit for this course does not apply to the associate in arts degree.
Prerequisite: Admission to Diagnostic Medical Sonography program, SON 2121
Corequisites: SON 2211, SON 2211L

SON 2211
Sonographic Physics and Instrumentation
3 Credits
Designed to present to the student a detailed explanation of ultrasound physics and instrumentation. The theory of physics principles and their practical applications, basic principles of instrumentation, and practical applications are presented. Credit for this course does not apply to the associate in arts degree.
Prerequisite: Admission to Diagnostic Medical Sonography program, SON 1210
Corequisite: SON 2211L

SON 2211L
Sonographic Physics and Instrumentation Lab
1 Credit
Designed to parallel the sonographic physics and instrumentation lecture course. The student will apply the concepts and mathematical calculations in clinical projects and various exercises. Credit for this course does not apply to the associate in arts degree.
Prerequisite: Admission to the Diagnostic Medical Sonography Program, SON 1210
Corequisite: SON 2211

SON 2814
Sonographic Clinical Practicum I
3 Credits
Provides on campus instruction in scanning protocols of the abdominal aorta, pancreas and gallbladder. Patient care, the role and duties of the sonographer in the health care environment and instruction in the use of various types of ultrasound equipment will be discussed. Students receive instruction and guidance in producing quality sonographic images and the parameters used to evaluate the images. Affiliate: Student rotation through clinical affiliates provides experience in the performance of ultrasound procedures in dynamic health care environments. Credit for this course does not apply to the associate in arts degree.
Prerequisites: Admission to Diagnostic Medical Sonography Program, SON 1311
Corequisites: SON 2111, SON 2121

SON 2824
Sonographic Clinical Practicum II
3 Credits
Provides on campus instruction in scanning protocols of the abdominal aorta, pancreas and gallbladder. Patient care, the role and duties of the sonographer in the health care environment and instruction in the use of various types of ultrasound equipment will be discussed. Students receive instruction and guidance in producing quality sonographic images and the parameters used to evaluate the images. Affiliate: Student rotation through clinical affiliates provides experience in the performance of ultrasound procedures in dynamic health care environments. Credit for this course does not apply to the associate in arts degree.
Prerequisite: SON 2814
Corequisites: SON 2122, SON 2112

SON 2834
Sonographic Clinical Practicum III
3 Credits
Provides on campus instruction in scanning protocols of the thyroid, female pelvis and the total abdomen. This course further expands upon the sonographer’s role and responsibilities, and use of ultrasound equipment. The student receives additional instruction in film evaluation and image quality. Off campus: Student rotates through clinical affiliates gaining continued experience and knowledge in the performance of ultrasound procedures. Credit for this course does not apply to the associate in arts degree.
Prerequisite: SON 2814
Corequisite: SON 2061

SOP 1740
Feminine Psychology
3 Credits
Focuses on theories of feminine personality using a social psychological approach, with an emphasis on gender differences and roles, family, work and the socialization process.

SPA 2001
Survey of Communication Disorders
3 Credits
Introduces beginning level students to speech, hearing and language characteristics of the deaf and hard-of-hearing population across varying levels of hearing loss. Hearing assessment, the use of amplification, speech and language development, and speech reading will be described as they relate to spoken and signed language competence. Language development in the normal hearing and hearing impaired will be discussed.

SPC 1006
Speech Improvement
1 Credit
Focuses on the basic methods of speech presentation and critical listening. For those students that began prior to the fall term 2002 and have had continuous enrollment, this meets the speech component of the general education communication requirements.
SPC 1065
Business and Professional Speaking
3 Credits
Focuses on analyzing interpersonal communications such as oral reporting, interviewing and conferences in complex business and professional organizations.

SPC 1608
Public Speaking
3 Credits
Focuses on practical methods of speech composition organizational pattern and presentation; addresses the individual needs of students. Meets speech component of the general education communication requirement.
Prerequisites: College level reading and writing skills are required.

SPC 1608H
Honors Public Speaking
3 Credits
Same as SPC 1608 with honors content. Honors Institute Program permission required.

SPC 2300
Interpersonal Communication
3 Credits
Provides students with working definitions, conceptual knowledge and practical examples regarding the development and improving of interpersonal communication skills in personal and professional settings. Topics such as self disclosure, verbal and non-verbal message sending and receiving, interpersonal and family relationships and conflict are addressed. While not designed to be therapeutic, the course offers practical, real world examples of interpersonal interactions.
Prerequisites: College level reading and writing skills are required.

SPC 2300H
Honors Interpersonal Communications
3 Credits
Same as SPC 2300 with honors content. Honors Institute Program permission required.

SPN 1015
Spanish for Professional Programs
3 Credits
Focuses on developing basic work-related vocabulary and conversational skills. Credit for this course does not apply to the associate in arts degree.
Prerequisites: College level reading and writing skills are required.

SPN 1120
Elementary Spanish I
4 Credits
Covers the fundamental of reading, writing, listening and speaking the Spanish language while developing an understanding of the Spanish and Hispanic cultures. Native speakers of Spanish will be asked to seek credit by exam.
Prerequisites: College level reading and writing skills are required.

SPN 1120H
Honors Elementary Spanish I
4 Credits
Same as SPN 1120 with honors content. Honors Institute Program permission required. Native speakers of Spanish will be asked to seek credit by exam.
Prerequisites: College level reading and writing skills are required.

SPN 1121
Elementary Spanish II
4 Credits
Enhances skills learned in SPN 1120. Native speakers of Spanish will be asked to seek credit by exam.
Prerequisites: SPN 1120 with a minimum grade of "C" or instructor's permission. College level reading and writing skills are required.

SPN 1121H
Honors Elementary Spanish II
4 Credits
Same as SPN 1121 with honors content. Honors Institute program permission required. Native speakers of Spanish will be asked to seek credit by exam.
Prerequisites: SPN 1120H with a minimum grade of "C" or instructor's permission. College level reading and writing skills are required.

SPN 2220
Intermediate Spanish I
4 Credits
Designed to help students reach fluency in understanding, speaking, reading, writing, and cross-cultural awareness. Emphasis on written composition and oral presentation as well as values and ideas of the Spanish and Hispanic cultures.
Prerequisite: SPN 1121 with a minimum grade of "C" or instructor's permission.

SPN 2221
Intermediate Spanish II
4 Credits
A continuation of SPN 2220, this course further develops fluency in the basic skills through systematic review. Continued emphasis on cross-cultural awareness as well as exposure to Spanish and Hispanic values and ideas.
Prerequisite: SPN 2220 with a minimum grade of "C" or instructor’s permission. College level reading and writing skills are required.
SPN 2240  
Intermediate Spanish Conversation  
3 Credits  
Stresses the acquisition of greater fluency in the language with an emphasis on comprehension and communication in the Spanish language. Prerequisite: SPN 1121 with a minimum grade of "C" or instructor's permission. College level reading and writing skills are required.

STA 2023  
Elementary Statistics  
3 Credits  
This course introduces the student to the concepts of statistical design and data analysis with emphasis on introductory descriptive and inferential statistics. Topics include data organization and analysis, probability, discrete and continuous probability distributions, confidence intervals, hypothesis testing, correlation and simple linear regression. Prerequisites: MAT 1033 or any MAC course with a grade of C or better or appropriate score on placement test.

STA 2023H  
Honors Elementary Statistics  
3 Credits  
Same as STA 2023 with honors content. Honors Institute permission required. Prerequisites: MAT 1033 with a C or better or appropriate score on placement test.

SUR 2000C  
Surveying I  
3 Credits  
Introduces the basic methods of plant surveying, use of instruments and note recording, with an emphasis on site plan development for use in building and construction projects.

SWS 1102  
Soils and Fertilizers  
3 Credits  
Focuses on the fundamental concepts of soil fertility in regard to the chemical and biological factors affecting soil and plant relationships. Topics include soil classification, pH, natural fertility, texture and plant absorption of nutrients.

SYG 2000  
Introduction to Sociology  
3 Credits  
Emphasizes the scientific method in examining society. Topics include group structure, roles, social stratification, socialization, deviance, collective behavior, ethnic diversity and globalization. Prerequisites: College level reading and writing skills are required.

SYG 2000H  
Honors Introduction to Sociology  
3 Credits  
Same as SYG 2000 with honors content. Honors Institute permission required. Prerequisites: College level reading and writing skills are required.

SYG 2010  
Social Problems  
3 Credits  
Focuses on the description and analysis of current social problems, with an emphasis on cause and effect and possible solutions. Topics include racism, sexism, poverty, pollution, over population, crime, drugs, and other social issues.

SYG 2010H  
Honors Social Problems  
3 Credits  
Same as SYG 2010 with honors content. Honors Institute permission required.

SYG 2012  
Introduction to Globalization  
3 Credits  
Globalization is an umbrella term that encompasses changes in economies, politics, cultures, technologies and societies. The course will help students understand globalization and adopt a global perspective. Converging global institutions and cultures, and the consequences of global interdependence will be studied. Issues of poverty, food, energy, development and democratization will be assessed. Protests against western corporations and the challenges posed to small businesses and local cultures will be evaluated. The relationship between globalization and inequity, the fate of cultural diversity in a globalizing world, immigration trends, integration and xenophobia will be investigated. Challenges to environment and issues of social justice will also be identified. Finally, resistance movements to globalization that have helped steer it, but not retard it will be analyzed.

SYG 2430  
Marriage and Family  
3 Credits  
Focuses on marriage and the family, with an emphasis on changing values and structures. Topics include sex roles, love relationships, sexuality, dating, singlehood, parenthood, husband wife interaction, divorce and remarriage.

SYG 2930  
Selected Topics in Sociology  
3 Credits  
Provides an in-depth study of topics in Sociology not covered in other courses. May be repeated once for credit. Prerequisite: SYG 2000
SYG 2930H
Honors Selected Topics in Sociology
3 Credits
Same as SYG 2930 with honors content. Honors Institute permission required. This course may be repeated once for credit under a different topic.
Prerequisite: SYG 2000

TAR 1120
Architectural Drawing I
3 Credits
Covers the basic fundamentals of architectural drawing, with an emphasis on geometric constructions, orthographics, perspectives and isometric projections. Topics include an introduction to forms, materials, vocabulary used in construction and elements of geometry. Completion of BCN 1250 and BCN 2272 strongly recommended. Students enrolled in a degree or college credit certificate program must complete all prerequisites.
Prerequisite: BCN 1250

TAR 1122C
Architectural Drawing II
3 Credits
Concentrates on piping, air conditioning, heating and electrical construction, drawing, structural steel drafting and topographic site drawing. Elements of descriptive geometry are included.
Prerequisites: TAR 1120, BCN 1250

TAR 2053
Introduction to CADD
3 Credits
An introductory course on working effectively with computer-aided drafting and design applications: focuses on using the microcomputer and AutoCAD (full version) software as tools for the development of drawings.

TAR 2054
Intermediate Computer Aided Design and Drafting
3 Credits
An introductory course on working effectively with computer-aided drafting and design applications: focuses on using the microcomputer and AutoCAD (full version) software as tools for the development of drawings.
Prerequisites: BCN 1250, TAR 2053

TAR 2055
Advanced Computer Aided Design and Drafting
3 Credits
Advanced CAD application with emphasis on 3D drawing, 3D modeling and 3D rendering techniques.
Prerequisites: BCN 1250, TAR 1120, TAR 2053, TAR 2054

TAX 2000
Federal Tax Accounting I
3 Credits
Covers the basics of individual income taxation and applicable IRS code. Topics include returns, exemptions, gross income, deductions, tax liability, gains and losses.
Prerequisite: ACG 2021 or APA 1111

TAX 2010
Federal Tax Accounting II
3 Credits
Covers advanced individual income taxation procedures with an introduction to basic concepts of partnerships, corporations and fiduciary returns. Emphasis is on solving practical problems by researching IRS code.
Prerequisite: TAX 2000

THE 1000
Introduction to Theatre Arts
3 Credits
Provides an orientation to theater as an art form, with an emphasis on reading and reviewing dramatic plays.
Prerequisites: College level reading and writing skills are required.

THE 1000H
Honors Introduction to Theatre Arts
3 Credits
Same as THE 1000 with honors content. Permission of Honors Institute required.
Prerequisites: College level reading and writing skills are required.

THE 1304
Script Analysis
3 Credits
Teaches the techniques of closing reading of dramatic texts for the purpose of acting, directing and designing for the stage.
Prerequisite: THE 1000

TPA 1200
Stagecraft
3 Credits
An introductory course in technical production including scenic construction, sound and properties, state lighting, and theatre organization.

TPA 1248
Makeup for the Stage
3 Credits
The study of principles, materials, and applications of theatrical makeup.

TPA 1290
Performance Workshop
3 Credits
Provides the opportunity for participation in a major theatrical production as an actor. This course may be repeated two times for credit.

TPP 1110
Acting I
3 Credits
Emphasizes the basic techniques of acting, with an emphasis on the Stanislavsky system.
TPP 1111
Acting II
3 Credits
Emphasizes the use of the Stanislavsky system in more advanced scenes. Additional prerequisite: consent of instructor.
Prerequisite: TPP 1110

TPP 1160
Voice and Movement Techniques for the Stage
3 Credits
An exploration of basic vocal skills. Exercises for self-awareness, physical strength, flexibility, and versatility for the actor. Required for all theatre majors. (Also open for non majors.)
Prerequisite: THE 1000

VIC 1202
Film and TV Graphics
3 Credits
The production and use of visual graphics for television and film covering the standards and procedures of the art, techniques and materials used.

WOH 1022
World History Since 1500
3 Credits
Examines the major political, economic, social, and cultural trends of the world since 1500. This material will be presented through a combination of lecture, reading the textbook, videos, internet research, and classroom discussion.
Prerequisites: College level reading and writing skills are required.

ZOO 1010C
General Zoology
3 Credits
Basic course pertaining to the development, anatomy, physiology, genetics, ecology, and natural relationships of the animal kingdom combined and integrated with a hands-on laboratory component. A special fee will be charged for this course.
Prerequisites: College level reading, writing, and math skills are required.

ZOO 1450
Ichthyology
3 Credits
Designed to provide an introduction to the study of fish. Topics introduced include fish anatomy, reproduction, physiology, nutrition, classification and differences among the families of fish.
Prerequisites: College level reading and writing skills are required.
Corequisite: ZOO 1450L

ZOO 1450L
Ichthyology Lab
1 Credit
Focuses on fish identification.
Prerequisites: College level reading and writing skills are required.
Corequisite: ZOO 1450
PSAV Course Descriptions

AER 0010C
Introduction to Automotive Technology
Vocational Credits 5
Clock Hours 150
A general introduction to the procedures related to automotive shop safety, tool and equipment orientation, hazardous waste handling and disposal, the use of service information, mathematical computations commonly used in the automotive industry, preventive maintenance services, employability and communication skills.

AER 0199C
Engine Repair
Vocational Credits 5
Clock Hours 150
An in-depth study of engine operations, engine components, construction and materials, engine problem diagnosis to include engine removal and replacement, engine disassembly, inspection and reassembly to manufacturer’s specifications.

AER 0299C
Automatic Transmissions and Transaxles
Vocational Credits 5
Clock Hours 150
Student technicians will learn the theory of operation, inspection, testing, diagnosis, in-vehicle services, and overhaul of automatic transmissions and transaxles. Component analysis includes: planetary gears, multiple disc clutches, bands, hydraulic systems and controls, torque converters, electrical, and electronic controls.

AER 0399C
Manual Transmissions and Drivelines
Vocational Credits 5
Clock Hours 150
A theoretical and practical application course of study that includes the diagnosis, service and repair of four and five speed manual transmissions and transaxles, mechanical and hydraulic clutch systems, front and rear wheel drive axles, all wheel drive systems (AWD) and 4X4 transfer cases and drive systems.

AER 0499C
Suspension and Steering Systems
Vocational Credits 5
Clock Hours 150
Students will learn the design, components, theory of operation, inspection, diagnosis, and service of suspension and steering systems. Component analysis will include front and rear suspensions, steering linkages, steering gears, steering columns, wheels, tires, and alignment angle measurement and adjustment.

AER 0599C
Brake Systems
Vocational Credits 5
Clock Hours 150
Students will learn the theory of operation, testing, diagnosis, and service of brake systems. Specific component analysis will include drum and disc brakes, hydraulic controls, power assist units, parking brakes, braking electrical circuits, and antilock braking systems.

AER 0691C
Electrical/Electronic Systems I
Vocational Credits 5
Clock Hours 150
This course provides an in-depth study of automotive electrical systems including interpreting wiring diagrams and using testing and diagnostic equipment. Specific component analysis includes batteries, starting systems, charging systems, lighting systems, gauges, and power accessories (windows, door locks, windshield wipers, etc.).

AER 0692C
Electrical/Electronic Systems II
Vocational Credits 5
Clock Hours 150
This course facilitates an advanced study of automotive electrical systems including interpreting wiring diagrams and using testing and diagnostic equipment. Specific activities include the testing, diagnosis, and service of cruise control systems, supplemental restraint systems, anti theft systems, and body electronic controls.

AER 0797C
Air Conditioning and Heating Systems
Vocational Credits 5
Clock Hours 150
Provides the student with an in depth examination of air conditioning and heating system operation including Title IV of the Clean Air Act. Students will receive hands-on instruction in industry accepted practices for recovery and recycling of refrigerants, service, repair, testing, and diagnosis of automotive air conditioning systems using state-of-the-art tools and equipment.

AER 0891C
Engine Performance I
Vocational Credits 5
Clock Hours 150
Provides an in-depth study of the fuel, ignition, and emission control systems of an automobile. Major topics include engine operation, solid state ignition, electronic fuel injection and the use of comprehensive engine systems tests to isolate and repair common engine performance and emission system malfunctions.
AER 0892C
Engine Performance II
Vocational Credits 5
Clock Hours 150
An advanced course that focuses on electronic engine control, component identification, and diagnostic methods servicing engines. Students will learn to use modern diagnostic tools including scan tools, exhaust gas analyzers, digital storage oscilloscopes and chassis dynamometers.

AER 0949C
Auto Tech Co-Op Work Experience
Vocational Credits 5
Clock Hours 150
Designed to provide the student with on-the-job experience in all phases of the automotive service and repair industry.

ARR 0020
Estimating
Vocational Credits 3.3
Clock Hours 100
Covers topics related to analyzing damage, creating a damage report using manual and computerized methodologies.

ARR 0110
Welding and Cutting
Vocational Credits 3.3
Clock Hours 100
Covers topics related to MIG (GMAW) welding, cutting and heating processes and advanced welding methods.

ARR 0121
Refinishing
Vocational Credits 10
Clock Hours 300
Covers topics related to safety and environmental practices, understanding automotive finishes, preparing the equipment, paint area and finish materials, tinting, applying the finish, blending, solving paint application problems, finish defects causes and cures, and detailing.

ARR 0240
Plastic Repair
Vocational Credits 3.3
Clock Hours 100
Covers topics related to identification and repair decisions, adhesive repairs, welding repairs, repair of padded dashes, SMC repairs and refinishing of plastics.

ARR 0290
Structural Repair
Vocational Credits 5
Clock Hours 150
This course covers topics related to damage analysis, straightening structural parts, full or partial panel replacement, stationary glass replacement and restoring corrosion protection.

ARR 0310
Non-Structural Repair
Vocational Credits 5
Clock Hours 150
Covers topics related to preparation, panel replacement and alignment, trim and hardware, metal straightening, body fillers, door skin and intrusion beam replacement, quarter panel replacement and moveable glass and hardware.

ARR 0374
Mechanical and Electrical Repair
Vocational Credits 3.3
Clock Hours 100
This course covers topics related to steering and suspension, electrical and electronic systems, brake systems, air conditioning, cooling systems, drive trains, fuel, intake and exhaust systems and restraint systems.

ARR 0940
Auto Collision Internship
Vocational Credits 13.3
Clock Hours 400
Designed to provide students with the occupational experience of an auto collision repair technician on a daily and ongoing basis.

ARR 0071
Lot Porter
Vocational Credits 5
Clock Hours 150
Prepares the student with the knowledge of recreational vehicle skills, customer relations, employability, entrepreneurship, electrical, heating and mechanical principles.

ARR 0072
Pre-Delivery Inspection Technician
Vocational Credits 10
Clock Hours 300
Prepares the student with the knowledge of recreational vehicle skills, electrical, heating and mechanical principles, gas, metal processing and troubleshooting water and towing systems and pre-delivery inspections.

ARR 0073
Recreational Vehicle Technician I
Vocational Credits 9
Clock Hours 275
Prepares the student with the knowledge of recreational vehicle skills, customer relations, employability, entrepreneurship, electrical, heating and mechanical principles.

ARR 0074
Recreational Vehicle Technician II
Vocational Credits 9
Clock Hours 275
Prepares the student with the knowledge of recreational vehicle skills, electrical, brake, towing systems, suspension, air conditioning, absorption refrigerators, heating and water systems, and interior and exterior troubleshooting.
CJD 0236  
Police Service Aide  
Vocational Credits 6.9  
Clock Hours 206  
Course will introduce the students to the job tasks of parking enforcement and traffic crash management. These tasks, with other functions are performed by civilian service aides employed within police agencies.

CJD 0632  
Field Supervision

CJD 0704  
Criminal Justice Defensive Tactics  
Vocational Credits 3.5  
Clock Hours 106  
Provides skills needed by officers to understand the incarcerated society, with emphasis upon supervision methods. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJD 0705  
Criminal Justice Weapons  
Vocational Credits 2.1  
Clock Hours 64  
Provides instruction in the use of firearms, including handguns and shotguns, safety procedures and ammunition use. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJD 0710  
Criminal Justice Legal I Comb  
Vocational Credits 1.8  
Clock Hours 54

CJD 0711  
Criminal Justice Legal II Comb  
Vocational Credits 1.7  
Clock Hours 52

CJD 0712  
Criminal Justice Communication Comb  
Vocational Credits 2.1  
Clock Hours 62

CJD 0713  
Interpersonal Skills Comb  
Vocational Credits 2.2  
Clock Hours 66

CJD 0715  
Physical Conditioning  
Vocational Credits 0.80  
Clock Hours 24  
A physical conditioning curriculum, as developed by the Hillsborough County Sheriff’s Office, to properly assess fitness levels of corrections and law enforcement recruits, and to provide an exercise program to enhance their performance.

CJD 0723  
Vehicle Operations  
Vocational Credits 1.1  
Clock Hours 32  
The components of the police driving environment are explored and practical exercises on the driving range are conducted. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJD 0730  
Law Enforcement Legal III  
Vocational Credits 1.1  
Clock Hours 32  
Provides an overview of various criminal laws and the proper application of these laws by officers.

CJD 0731  
Law Enforcement Patrol  
Vocational Credits 2.1  
Clock Hours 64  
Addresses the daily skills and techniques needed by officers to perform patrol tactics and respond to various types of calls. Methods of approach to various high risk situations are explored, with practical exercises included. Unusual occurrence events, including firefighting and crowd control, are addressed. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJD 0732  
Law Enforcement Traffic  
Vocational Credits 1.5  
Clock Hours 46  
Studies traffic enforcement and control, with the inclusion of DUI offenses and enforcement, traffic accident investigation, scene management and reporting procedures. Objectives are addressed as specified by the Criminal Justice Standard and Training Commission.

CJD 0734  
Law Enforcement Investigations  
Vocational Credits 2.1  
Clock Hours 64  
Addresses the investigation of various crimes, including property, person, vice, search and seizure concepts, rules of evidence, and surveillance techniques. Techniques are developed from initial observation methods, through the processing of crime scene and case preparation.

CJD 0760  
Criminal Justice Legal I  
Vocational Credits 1.5  
Clock Hours 46  
Provides an introduction to the criminal justice system. The Criminal Justice Standards and Training Commission, professional behavior, human behavior and needs, as well as, crime prevention techniques, organized crime, the law enforcement organization, court procedure and demeanor are demonstrated, with emphasis on rules, trial procedures, and legal defenses.
CJD 0762
Communications
Vocational Credits 1.9
Clock Hours 56
The report writing process, from interview, taking statements, note taking, through the final report is addressed. Communication skills are covered, along with radio and telephone procedures. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJD 0763
Law Enforcement Interpersonal Skills I
Vocational Credits 2.2
Clock Hours 66
Provides insight into the intervention techniques for various situations, with emphasis on the needs of diverse group’s juveniles, elderly, ethnic, and cultural. Offered for law enforcement academy students.

CJD 0781
Cross Over Enforcement
Vocational Credits 1.6
Clock Hours 48

CJD 0790
Correctional Probation Legal
Vocational Credits 2.0
Clock Hours 60

CJD 0791
Correctional Probation Operations
Vocational Credits 0.5
Clock Hours 16

CJD 0792
Correctional Probation Interpersonal
Vocational Credits 2.3
Clock Hours 68

CJD 0793
Correctional Probation Communication
Vocational Credits 2.3
Clock Hours 70
In this course the student will learn FCIC/NCIC systems, management information systems, report-writing procedures, note taking, taking statement procedures, and interviewing techniques.

CJD 0794
Correctional Probation Supervision
Vocational Credits 1.8
Clock Hours 54
In this course the student will learn supervision techniques, social service agency referral procedures, recognizing deception and manipulation, case management, community supervision programs, fiscal procedures, transferring supervision, victim/witness assistance procedures, domestic violence intervention, suicide intervention, recognition of commonly abused drugs, and child abuse.

CJD 0795
Correctional Probation Firearms
Vocational Credits 0.5
Clock Hours 16
In this course the student will learn firearms safety procedures, common types of ammunition used in handguns and shotguns, basic principles of shooting a handgun and shotgun, chemical agent terminology, types of chemical agents, exposure symptoms, first aid and decontamination procedures, dissemination methods, and procedures for donning a gas mask.

CJD 0939
Testing Review
Vocational Credits 0.5
Clock Hours 14

CJK 0006
Introduction to Law Enforcement 1-6
Vocational Credits 2.2
Clock Hours 67
This module includes units of instruction in the following topics: The Florida Criminal Justice System, Constitutional Law and Florida Statutes, Criminal Justice Values and Ethics, Communication and Interpersonal Skills, and Human Interaction.

CJK 0007
Introduction to Law Enforcement
Vocational Credits 0.4
Clock Hours 11

CJK 0008
Legal
Vocational Credits 2.3
Clock Hours 69
Students will learn to act properly and effectively as law enforcement officers without infringing on citizens rights, and to understand federal, state, and local laws. Students will also become familiar with case law and how it interprets and further explains enacted laws.

CJK 0010
Introduction to Law Enforcement 7 12
Vocational Credits 1.7
Clock Hours 50
This module includes units of instruction in the following topics: mental retardation, mental illness, substance abuse, physical disabilities, criminal street gangs and extremist groups and responding to the elderly.

CJK 0011
Human Issues
Vocational Credits 1.3
Clock Hours 40
Crisis intervention is a major aspect of a law enforcement officer’s job. The correct response to a crisis may be providing appropriate management, intervention, and referral for individuals. Students completing this course will be able to recognize
the issues specific to individuals in various situations involving a crisis in their life.

**CJK 0015**
**Introduction to Law Enforcement 13-22**
Vocational Credits 2.6  
Clock Hours 77  
This module includes instruction in the following topics: note taking, report writing, interviewing, taking statements, use of telecommunications, officer safety and survival, crisis intervention, community oriented policing, secure approach to problem solving and hazardous materials awareness.

**CJK 0017**
**Communications**
Vocational Credits 2.5  
Clock Hours 76  
This course covers telecommunications, communications and interpersonal skills, human interaction issues, interviewing ideology, and report writing principles and mechanics.

**CJK 0020**
**CMS Law Enforcement Vehicle Operations**
Vocational Credits 1.6  
Clock Hours 48  
This module includes instruction in the following topics: physiological and psychological factors which impact vehicle operation and control; legal considerations involved in the operation of emergency vehicles; civil and criminal liability; routine maintenance and inspection of police vehicles; vehicle dynamics; types of skids and their causes; and basic driving skills.

**CJK 0031C**
**CMS First Aid**
Vocational Credits 1.3  
Clock Hours 40  
This module includes instruction in the following topics: responding to medical emergencies; musculoskeletal and soft tissue injuries; medical related issues.

**CJK 0040C**
**Firearms, Module 4**
Vocational Credits 2.7  
Clock Hours 80  
This module includes instruction in the following topics: firearm familiarization; types of ammunition, fundamentals of marksmanship; drawing and holstering a weapon; loading and unloading a weapon; use of cover; weapon malfunctions; live fire exercises; weapon cleaning; qualification; and survival shooting.

**CJK 0051**
**CMS Defensive Tactics**
Vocational Credits 2.7  
Clock Hours 80  
This course teaches prospective officers how to control subjects and defend themselves using appropriate defensive tactics in accordance with the recommended response to resistance matrix.

**CJK 0061**
**Patrol I**
Vocational Credits 1.9  
Clock Hours 58

**CJK 0062**
**Patrol II**
Vocational Credits 1.3  
Clock Hours 40

**CJK 0071**
**Criminal Investigations**
Vocational Credits 1.9  
Clock Hours 56  
This course takes students through the sequence of events related to criminal investigations including determining whether a crime has occurred, identifying the type of crime and locating witnesses.

**CJK 0076**
**Crime Scene Investigations**
Vocational Credits 0.8  
Clock Hours 24  
The single most significant part of the initial stage of a criminal investigation is processing the crime scene. Students will learn to protect and preserve the scene to avoid contaminating evidence.

**CJK 0082**
**Traffic Stops**
Vocational Credits 0.8  
Clock Hours 24  
This course provides students with the skills necessary to conduct unknown, low risk and high risk traffic stops.

**CJK 0083**
**DUI Traffic Stops**
Vocational Credits 0.8  
Clock Hours 24  
This course provides students with the skills necessary to conduct DUI traffic stops.

**CJK 0086**
**Traffic Crash Investigations**
Vocational Credits 1.1  
Clock Hours 32
CJK 0090
Tactical Applications, Module 11-14
Vocational Credits 1.8
Clock Hours 54
This module includes units of instruction in the following topics: how courts relate to law enforcement; rules of court procedure; responsibilities of an officer in court proceedings; the first response to an emergency situation; recognition techniques for identifying bombs, explosives and weapons of mass destruction; and riot control procedures for parades, concerts, festivals and other public events.

CJK 0096
Physical Fitness
Vocational Credits 2.0
Clock Hours 60

CJK 0100
Interpersonal Skills I
Vocational Credits 2.1
Clock Hours 62
This course covers a variety of interpersonal skills used to communicate with special populations.

CJK 0101
Interpersonal Skills II
Vocational Credits 1.7
Clock Hours 50
Provides skills needed by officers to understand the incarcerated society with emphasis upon supervision methods. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJK 0102
Correctional Operations
Vocational Credits 2.1
Clock Hours 64
An overview of state rules and regulations, addressing issues involved with inmate rights, correctional officers rights and responsibilities, along with environmental issues.

CJK 0133
Law Enforcement Auxiliary Skills
Vocational Credits 2.0
Clock Hours 59
Prepares the auxiliary/reserve trainee for the duties and responsibilities of an auxiliary law enforcement officer. This preparatory training will include basic academic areas that are indigenous to the police function. The trainee will obtain the skills needed to be certified as an auxiliary officer.

CJK 0203
Cross Over Corrections
Vocational Credits 0.4
Clock Hours 13
The cross-over course will review topics including, but not limited to the following: civil and criminal liability, correctional officer rights and responsibilities, privileged communications, Baker Act, arrest laws, assault/battery, and assault with a deadly weapon.

CJK 0240
Auxiliary Introduction
Vocational Credits 0.9
Clock Hours 27

CJK 0241
Auxiliary Patrol and Traffic
Vocational Credits 0.6
Clock Hours 19
This course provides an overview of the law enforcement techniques and tactics officers use while on patrol. It focuses on community oriented policing, officer safety and survival skills, and basic instruction on receiving a call, interacting with vehicles, and making an arrest.

CJK 0242
Auxiliary Investigations
Vocational Credits 0.6
Clock Hours 17

CJK 0270
Criminal Justice Legal I
Vocational Credits 1.5
Clock Hours 46
Provides an introductory overview of the criminal justice system, and the history and philosophies of corrections.

CJK 0280
Physical Fitness
Vocational Credits 1.3
Clock Hours 40

CJK 0283
Interpersonal Skills I
Vocational Credits 2.1
Clock Hours 62
This course provides the students with the verbal skills necessary to communicate effectively with diverse inmate populations.

CJK 0285
Criminal Justice Legal II
Vocational Credits 1.4
Clock Hours 42
This course covers a variety of legal topics to include constitutional law, evidence rules, arrest laws, search and seizure, and crimes against persons.

CJK 0286
Criminal Justice Communications
Vocational Credits 1.4
Clock Hours 42
This course covers a variety of communications skills to include note taking, taking statements, report writing and radio procedures.
CJK 0422  
Dart Firing Stun Gun  
Vocational Credits 0.3  
Clock Hours 8  
Stun guns have been around since the 1960s. Technology has moved over the years from the basic hand-held stun gun to a weapon that now propels darts up to 35 feet and use electricity to incapacitate a non-compliant subject. The use of dart firing stun guns and their effects on the people who are stunned by them has recently been a frequent topic of discussion in the media, among law enforcement officers and administrators, and within the scientific and medical professions. This course will introduce you to the basics of both the stun gun and the dart-firing stun gun and give you some fundamental knowledge on this emerging tool in criminal justice.

CJK 0480  
Emergency Preparedness  
Vocational Credits 0.9  
Clock Hours 26  
The skills needed for riot and disturbance control and firefighting are studied and practiced. Lectures include methods of riot prevention, handling, and unusual occurrences. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJK 0520C  
Public Safety Telecom I  
Vocational Credits 6.9  
Clock Hours 208  
This course will prepare students for the challenging role of a 911 dispatcher. Students will learn the history of emergency communications and become familiar with the rewards and demands of this profession. Topics include: first responder, CPR, stress management, crises intervention, radio operations, keyboarding, HazMat and emergency call receiving.

CJK 0551C  
Public Safety Telecommunications II EMD  
Vocational Credits 0.8  
Clock Hours 24  
This course is a continuation of CJK 0520C, which prepares students for the challenging role of a 911 dispatcher. This course will further enhance the students’ EMD (Emergency Medical Dispatcher) skills. Topics include: roles and responsibilities, medical and legal aspects, dispatch life support, pre-arrival instructions, emergency medical complaints and quality assurance.

CJK 0771  
Criminal Justice Legal II  
Vocational Credits 0.7  
Clock Hours 22  
This course covers a variety of legal topics to include constitutional law, evidence rules, arrest laws, search and seizure and crimes against persons.

CJK 0990  
CP Firearms  
Vocational Credits 0.5  
Clock Hours 16  
This module includes instruction in the following topics: firearms safety procedures, types of ammunition use, service weapons use on the range, shotgun use on the range and chemical agent use.

DEA 0130  
Allied Dental Theory  
Vocational Credits 1.5  
Clock Hours 45  
Provides the student with fundamental knowledge of embryology and oral histology, microbiology, oral pathology, pharmacology, and nutrition. Students will research various topics related to each unit and provide a short, written report.

DEA 0134  
Dental Office Emergencies  
Vocational Credits 1.0  
Clock Hours 30  
Provides the student with theory and practice in basic emergency procedures to manage emergencies that may occur in the dental setting.

DEA 0800  
Clinical Practice I  
Vocational Credits 2.5  
Clock Hours 75  
This course is designed to introduce students to the basic theories and procedures involved in various dental specialties including restorative/cosmetic dentistry, endodontic, periodontics, pediatric dentistry, oral surgery, orthodontics, and fixed and removable prosthodontics. The course will also give the students additional time to practice chair-side skills.

DEA 0800L  
Clinical Practice I Lab  
Vocational Credits 5  
Clock Hours 150  
Designed to give the student closely supervised instruction and clinical experience involving patients and a dentist performing all functions required of a general dentistry chair-side assistant. The student will have additional responsibilities in the area of radiography, sterilization, patient management, expanded functions, and preventive oral hygiene care.

DEA 0801L  
Dental Practicum  
Vocational Credits 8.5  
Clock Hours 254  
Continuous practice in all the skill areas of the dental assisting curriculum. Included will be a supervised internship program utilizing the private dental offices and clinical settings. The student will apply all skills and competencies developed and increase her/his capabilities and proficiencies.
DEA 0931
Dental Assisting in Orthodontics
Vocational Credits 0.5
Clock Hours 15
This course includes instruction on the history of orthodontics, malocclusion, orthodontic vocabulary, photographs, bracket slot, wires, tooth movement, and all phases of bonding, wires, headgear, and retainer finishing. This course includes taking the State Expanded Functions Orthodontics Examination and is required for completion of the Dental Assisting Program.

DEA 0931L
Dental Assisting Orthodontics Lab
Vocational Credits 1.0
Clock Hours 30
This course includes instruction on the history of orthodontics, malocclusion, orthodontic vocabulary, photographs, bracket slot, wires, tooth movement, and all phases of bonding, wires, headgear, and retainer finishing. This course includes taking the State Expanded Functions Orthodontics Examination. This course is required for completion of the Dental Assisting Program.

DES 0021
Head, Neck and Dental Anatomy
Vocational Credits 1.5
Clock Hours 45
A study of the anatomy of the head and neck with emphasis on the maxilla and mandible. In addition, the anatomy of the deciduous and permanent dentitions and supporting structures is covered.

DES 0021L
Head, Neck and Dental Anatomy Lab
Vocational Credits 1.0
Clock Hours 30
This laboratory course provides the student an opportunity to use anatomical models and teeth to apply didactic information in a laboratory setting and begin to apply knowledge of anatomy to clinical dental practice.

DES 0053
Dental Pharmacology and Pain Control
Vocational Credits 1.0
Clock Hours 30
A study of agents used in dentistry for local anesthesia and pain control. Nitrous Oxide sedation and its use will be covered.

DES 0053L
Dental Pharmacology and Pain Control Lab
Vocational Credits 0.5
Clock Hours 15
This course is a study of agents used in dentistry for local anesthesia and pain control. Nitrous oxide sedation and its use will be covered.

DES 0103
Dental Materials
Vocational Credits 1.5
Clock Hours 45
Provides the student with the theoretical knowledge of the composition, preparation, and application of materials commonly used in dentistry.

DES 0103L
Dental Materials Lab
Vocational Credits 1.5
Clock Hours 45
Designed to provide basic knowledge and laboratory practice necessary for the proper manipulation of dental materials commonly employed in dentistry.

DES 0205
Dental Radiology
Vocational Credits 1.5
Clock Hours 45
Provides the student with fundamental knowledge of the nature, physics, and biological effects of radiation to maximize understanding of proper control and safety precautions to be used in exposing, processing, mounting, and evaluating diagnostically acceptable radiographs.

DES 0205L
Dental Radiology Lab
Vocational Credits 1.5
Clock Hours 45
A corequisite to DES 0200, this course provides the student with laboratory experience in exposing, processing, mounting, and critiquing diagnostically acceptable intraoral and extraoral radiographs.

DES 0300
Dental Psychology
Vocational Credits 0.5
Clock Hours 15
Designed to introduce students to the basic theories of psychology to have a better understanding of behavioral patterns and how those patterns relate to dentistry.

DES 0400
Dental Anatomy and Physiology
Vocational Credits 1.5
Clock Hours 45
A study of the development of the human body along with a survey of the structure, growth, and function of the body's organ system.

DES 0500
Computer Applications in Modern Dentistry
Vocational Credits 1.0
Clock Hours 30
Introduces the student to basic computer and word processing concepts including file management, system back up, equipment maintenance, diskette format and care, and DOS commands. In addition, the student may make use of the following
software capabilities: test creation and editing, macros, mailing labels, enhancement, spreadsheets, and database.

**DES 0501**  
**Dental Office Management**  
Vocational Credits 1.0  
Clock Hours 30  
This course enables the student to gain knowledge and proficiency in all procedures necessary for office management. The course includes telephone techniques, ordering supplies, recall system, appointment control, bookkeeping, billing, and insurance procedures.

**DES 0804**  
**Introduction to Clinical Procedures I**  
Vocational Credits 2.0  
Clock Hours 60  
This core course introduces the dental assisting and dental hygiene student to the basic concepts of clinical practice. Topics include the history of dentistry, dental health team members, professional organizations, medical/dental history, operation and maintenance of dental equipment, operator/patient, four handed techniques, oral evacuation, dental charting, cleaning of removable appliances, coronal polishing, and fluoride application techniques.

**DES 0804L**  
**Introduction to Clinical Procedures I Lab**  
Vocational Credits 1.0  
Clock Hours 30  
This core course is designed for the practical application of professionalism and clinical procedures. Development of introductory skills is practiced in the clinical setting. Demonstration of required procedures is evaluated using preset standards.

**DES 0830**  
**Expanded Functions for Dental Auxiliaries**  
Vocational Credits .5  
Clock Hours 15  
Designed to provide basic knowledge and clinical practice necessary for the dental assistant or hygienist to perform the expanded functions permitted by the Rules and Regulations of the Florida State Board of Dentistry.

**DES 0830L**  
**Expanded Functions for Dental Auxiliaries Lab**  
Vocational Credits 1.50  
Clock Hours 45  
This course is designed to provide basic knowledge and clinical practice necessary for the dental assistant to perform the expanded functions permitted by the Rules and Regulations of the Florida State Board of Dentistry.

**DES 0844**  
**Preventive Dentistry**  
Vocational Credits 1.0  
Clock Hours 30  
Students are introduced to the philosophy and principles of preventive dentistry. Emphasis is on the dental auxiliary's role in patient education and care. Topics include: development of plaque and calculus, development of carious lesions, plaque control techniques for the patient, fluorides, tooth stains, plaque indices, patient education and motivation, caries activity testing, and smoking cessation.

**DES 0936**  
**Dental Seminar**  
Vocational Credits 0.5  
Clock Hours 15  
This course is designed to provide students with a review for the Dental Assisting National Board Exam and to provide the student with an understanding of ethics, jurisprudence, and risk management as related to dentistry.

**DIM 0810**  
**Transit Equipment Preventative Maintenance**  
Vocational Credits 6.7  
Clock Hours 200  
The purpose of this course is to develop the competencies essential to the public transit bus technology industry. The competencies include understanding shop organization and management, demonstrating safety awareness and practices, and performing basic preventive maintenance procedures.

**DIM 0811**  
**Transit Basic Electrical Systems**  
Vocational Credits 4.0  
Clock Hours 120  
The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing transit bus electrical systems and components, and demonstrating the qualifications for employment.

**DIM 0812**  
**Transit Wheelchair Lift/Ramp**  
Vocational Credits 2.0  
Clock Hours 60  
The purpose of this course is to develop the competencies essential to the public transit bus technology industry. The competencies include demonstrating shop and occupational safety procedures, maintaining and repairing transit bus wheelchair lift and ramp systems and components, and demonstrating the qualifications for employment.

**DIM 0813**  
**Transit Diesel Engine Preventative Maintenance**  
Vocational Credits 4.0  
Clock Hours 120  
The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, performing diesel engine preventive maintenance, and demonstrating the qualifications for employment.
DIM 0814
Transit Steering and Suspension
Vocational Credits 4.0
Clock Hours 120
The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing transit bus steering and suspension, and demonstrating the qualifications for employment.

DIM 0820
Transit Hydraulics
Vocational Credits 2.0
Clock Hours 60
The purpose of the course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing transit bus hydraulic systems and demonstrating the qualifications for employment.

DIM 0821
Transit Diesel Electrical and Diesel Engine Electronics
Vocational Credits 4.0
Clock Hours 120
The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, identifying and applying electronic principles related to diesel technology, maintaining and repairing electrical systems, and demonstrating the qualifications for employment.

DIM 0822
Transit Drive Train
Vocational Credits 4.0
Clock Hours 120
The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing transit bus alternative fuels systems and components, and demonstrating the qualifications for employment.

DIM 0823
Transit Intermediate Electrical Systems
Vocational Credits 4.0
Clock Hours 120
The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing electrical systems and components, and demonstrating the qualifications for employment.

DIM 0824
Transit Brakes/Air System
Vocational Credits 6.6
Clock Hours 200
The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing transit bus brake and air systems, and demonstrating the qualifications for employment.

DIM 0830
Transit Alternative Fuels Systems
Vocational Credits 4.0
Clock Hours 120
The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing transit alternative fuels systems, and demonstrating the qualifications for employment.

DIM 0831
Transit Advanced Electrical Systems
Vocational Credits 4.0
Clock Hours 120
The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing advanced electrical systems and components, and demonstrating the qualifications for employment.

DIM 0832
Transit Heating and Air Conditioning
Vocational Credits 6.7
Clock Hours 200
The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing transit heating and air conditioning systems, and demonstrating the qualifications for employment.

DIM 0833
Transmission Diagnosis, Rebuild and Repair
Vocational Credits 4.0
Clock Hours 120
The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing transit transmissions, and demonstrating the qualifications for employment.

DIM 0834
Diesel Engine Diagnosis
Vocational Credits 4.0
Clock Hours 120
The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These
competencies include demonstrating shop and occupational safety procedures, maintaining and repairing diesel engines systems, and demonstrating the qualifications for employment.

**EMS 0020**
*Intro Emergency Communications Professionals*
Vocational Credits 0.1
Clock Hours 4
Provides an overview of the emergency communications profession.

**ETI 0470**
*Machinery Maintenance I*
Vocational Credits 5.0
Clock Hours 150
This course develops the competencies of applying safety rules and procedures relating the basic elements of physics, electricity and electronics to industrial machinery maintenance and repair, performing mathematical calculations, reading plans and drawings, performing measuring and layout operations, and performing computer applications in the industrial machinery maintenance technology industry. There is no occupational completion point associated with the completion of this course.

**ETI 0471**
*Machinery Maintenance II*
Vocational Credits 5.0
Clock Hours 150
This course develops the competencies of using and maintaining hand and portable power tools, handling and applying lubricants, applying basic bench work skills, and performing basic gas welding and cutting operations in the industrial machinery maintenance technology industry. There is no occupational completion point associated with the completion of this course.

**ETI 0472**
*Machinery Maintenance III*
Vocational Credits 5.0
Clock Hours 150
This course develops competencies in rigging and lifting, installing and removing machinery, conveyor maintenance, troubleshooting machinery performance, communicating, servicing customers obtaining employment, and entrepreneurship skills in the industrial machinery maintenance technology industry.

**ETI 0473**
*Machinery Maintenance IV*
Vocational Credits 5.0
Clock Hours 150
This course develops the competencies of planning an elementary predictive/preventive maintenance schedule, performing gas and arc welding, and performing machine shop operations, maintaining piping and tubing systems, troubleshooting electrical circuits, and maintaining and installing drive components in the industrial machinery maintenance technology industry. There is no occupational completion point associated with the completion of this course.

**ETI 0474**
*Machinery Maintenance V*
Vocational Credits 5.0
Clock Hours 150
This course develops the competencies of maintaining specific types of air compressors and maintaining, repairing, and troubleshooting fluid drive systems in the industrial machinery maintenance technology industry. There is no occupational completion point associated with the completion of this course.

**ETI 0475**
*Machinery Maintenance VI*
Vocational Credits 5.0
Clock Hours 150
This course develops the competencies for pump maintenance and repair and for pollution control along with knowledge of industrial pollution control systems in industrial machinery maintenance technology operations. It may include the development of optional competencies related to air conditioning and refrigeration, boilers, and small engines.

**ETI 0476**
*Machinery Maintenance VII*
Vocational Credits 5.0
Clock Hours 150
This course develops the competencies for preparing for machinery startup and performing vibration analysis and machine balancing for specialized operations in the industrial machinery maintenance technology industry. There is no occupational completion point associated with the completion of this course.

**ETI 0477**
*Machinery Maintenance VIII*
Vocational Credits 5.0
Clock Hours 150
This course is a continuation of industrial maintenance 7, developing the competencies for preparing for machinery startup and performing vibration analysis and machine balancing for specialized operations in the industrial machinery maintenance technology industry. There is no occupational completion point associated with the completion of this course.

**ETI 0478**
*Machinery Maintenance IX*
Vocational Credits 5.0
Clock Hours 150
This course develops the competencies for preparing for machinery startup and performing vibration analysis and machine balancing for specialized operations in the industrial machinery maintenance technology industry.
FFP 0010
Fire Fighting I
Vocational Credits 6.9
Clock Hours 206
This course satisfies the requirement for NFPA Firefighter I certification. Topics of instruction include fire behavior, building construction, personal protective equipment, fire control, and wild land firefighting. This course follows the curriculum and standards from the Bureau of Fire Standard and Training.

FFP 0020
Fire Fighting II
Vocational Credits 6.4
Clock Hours 192
This course satisfies the requirement for a NFPA Firefighter II certification. This course consists of advanced fire control, hazardous materials and extrication operations. This course follows the curriculum and standards from the Bureau of Fire Standard Training.

FFP 0026
Fire Fighting III
Vocational Credits 1.2
Clock Hours 37
This course requires the student to demonstrate fire suppression skills and procedures learned in Fire Fighting I and II. This course follows the curriculum and standards from the Bureau of Fire Standard Training.

FFP 0141
Emergency Services First Responder
Vocational Credits 1.8
Clock Hours 53
Trains individuals to accept and recognize medical standards in emergency first aid procedures to include medical, environmental, and trauma related emergencies.

GEY 0300
Communication with Older Adults
Vocational Credits 3.3
Clock Hours 100
This course will help students understand the concept of cultural competence and develop strategies for communicating more effectively with older adults.

GEY 0304
Community Resources
Vocational Credits 0.3
Clock Hours 10
Provides an in-depth knowledge of the formal and informal community resources that are available for individuals aged 60+.

GEY 0624
Grief and Loss in Later Years
Vocational Credits 0.7
Clock Hours 20
Explores loss, grief, mourning, pain and the impact of the dying process. Examines how the hospice method can be utilized in working with the family and the dying person and identifies cultural influences surrounding practices related to death.

GEY 0653
Ethical and Legal Issues in Aging
Vocational Credits 1.7
Clock Hours 50
Provides an overview of the major legal and ethical issues in aging and its implications on policies, priorities and services. Emphasis will be placed on day-to-day application.

HEV 0008
Health, Wellness and Nutrition
Vocational Credits 3.3
Clock Hours 100
This course will provide basic concepts of health, wellness and nutrition related to aging. Emphasis will be placed on nutrition and diet, physical activity and exercise, and maintenance of well being.

HEV 0108
Child Abuse and Neglect
Vocational Credits 0.1
Clock Hours 4
A continuation of the basic child care training required for all child care employees in the State of Florida.

HEV 0111
Child Growth and Development I
Vocational Credits 0.2
Clock Hours 6
A continuation of the basic child care training required for all child care employees in the State of Florida.

HEV 0114
Rules and Regulations
Vocational Credits 0.2
Clock Hours 6
Course provides the basic child care training required for all child care employees in the State of Florida.

HEV 0126
DAP/Children with Special Needs
Vocational Credits 0.3
Clock Hours 10
A continuation of the basic childcare training required for all child care employees in the State of Florida. This course introduces the student to the appropriateness of providing quality care for children of all abilities.

HEV 0130
Child Growth and Development II
Vocational Credits 0.3
Clock Hours 10
A continuation of child growth and development principles primarily focusing on the characteristics of school age children.
HEV 0132
Developmentally Appropriate Activities
Vocational Credits 0.5
Clock Hours 15
Emphasizes the social, cognitive, emotional, physical and creative aspects of the child’s developmental process. Incorporates activity ideas designed to enhance these developmental areas.

HEV 0137
Learning Environments I
Vocational Credits 0.5
Clock Hours 15
Focuses on the elements of lesson planning for young children, and reviews various classroom designs. Also considers health and safety issues.

HEV 0141
Understanding and Guiding Children’s Behavior
Vocational Credits 0.3
Clock Hours 10

HEV 0142
Learning Environments II
Vocational Credits 0.3
Clock Hours 10
Focuses on various instructional strategies and curricula designs for the early childhood classroom. Reviews goals, objectives and learning outcomes for children involved in early childhood education programs.

HEV 0151
DAP/Young Child (Ages 3-5)
Vocational Credits 0.33
Clock Hours 10
A continuation of the basic childcare training required for all child care employees in the State of Florida. This course introduces the student to caring for the child ages 3-5 years in a specialized environment promoting individual learning styles and developmental readiness.

HEV 0152
The Early Childhood Professional
Vocational Credits 0.3
Clock Hours 10
Presents an overview of early childhood career options and responsibilities as an early childhood professional. Covers ethical behaviors, family relations, and positive communication techniques.

HEV 0163
Leadership
Vocational Credits 0.3
Clock Hours 10
Focuses on professional relationships, organizational skills, positive role modeling, community involvement, and other skills related to effective leadership qualities.

HEV 0164
Food and Nutrition
Vocational Credits 0.3
Clock Hours 8
A continuation of the basic child care training required for all child care employees in the State of Florida.

HEV 0172
Behavior Observation and Screening C/C
Vocational Credits 0.2
Clock Hours 6
This course is a continuation of the basic childcare training required for all childcare employees in the State of Florida. This course introduces the student to the purpose and key benefits of developmental screening in the childcare setting.

HEV 0175
DAP/Infants and Toddlers
Vocational Credits 0.3
Clock Hours 10
A continuation of the basic child care training required for all child care employees in the State of Florida. This course introduces the participant to caring for infants and toddlers in a specialized environment promoting individual learning styles and developmental readiness.

HEV 0181
Observing and Recording Behaviors
Vocational Credits 0.3
Clock Hours 10
Emphasizes various techniques and procedures used to observe children’s behaviors. Also focuses on objectivity, confidentiality, and interpretations of data.

HEV 0183
Child Care Practicum I
Vocational Credits 3.3
Clock Hours 100
Provides field experience to enable the practical application of concepts and techniques relating to teaching and guiding young children appropriately.

HEV 0184
Child Care Practicum II
Vocational Credits 8.3
Clock Hours 250
A continuation of Child Care Practicum I. Emphasis is on design and implementation of appropriate schedules and activities for young children.

HEV 0185
Child Care Practicum III
Vocational Credits 4.3
Clock Hours 130
A continuation of Child Care Practicum II. A minimum of 480 hours of direct involvement with young children (birth-age 8) in an early childhood education setting must be completed. Also, competence in all CDA areas must be demonstrated upon completion of this course.
HEV 0195
DAP/School Age Curriculum
Vocational Credits 0.3
Clock Hours 10
A continuation of the basic childcare training required for all
childcare employees in the State of Florida. This course intro-
duces the student to caring for children in after school settings.

HEV 0821
Physical Changes and Aging
Vocational Credits 3.3
Clock Hours 100
Examines the normal and pathological physical changes occur-
ing from middle age through older age. Emphasis will be on
basic age related changes from an applied perspective.

HEV 0831
Depression: Recognition and Treatment
Vocational Credits 0.7
Clock Hours 20
Examines depression in later life. Basic techniques and guide-
lines for working with depressed older adults will be present-
ed.

HSC 0003
Fundamentals Allied Health Occupations
Vocational Credits 0.5
Clock Hours 16
This course introduces the student to skills and procedures
common to allied health occupations, including basic first aid
and emergency care, safety, security, proper body mechanics,
vital signs, wellness, disease control, blood borne pathogens
and AIDS.

PMT 0011
Welder: Helper
Vocational Credits 8.3
Clock Hours 250
This course prepares the student with knowledge of basic shop
skills, gas cutting principles and practices with an understand-
ing of basic math, science and employability skills.

PMT 0012
Welder: Shielded Metal Arc
Vocational Credits 8.3
Clock Hours 250
This course prepares the student to apply intermediate Shield-
ed Metal Arc Welding (SMAW), examination skills, welding
symbols, metal identification, cutting principles and practices.
Prerequisite: PMT 0011

PMT 0013
Welder: Gas Metal Arc
Vocational Credits 4.16
Clock Hours 125
This course prepares the student to apply basic and interme-
diate Gas Metal Arc Welding (GMAW) skills.
Prerequisite: PMT 0012

PMT 0014
Welder: Flux Cored Arc Welding
Vocational Credits 3.3
Clock Hours 100
This course prepares the student to perform safety inspections
of equipment and accessories, make minor repairs and set up
carbon steel FCAW operations.
Prerequisite: PMT 0013

PMT 0015
Welder: Gas Tungsten Arc
Vocational Credits 5.8
Clock Hours 175
This course prepares the student to apply basic and interme-
diate Gas Tungsten Arc Welding (GTAW) skills.
Prerequisite: PMT 0014

PMT 0016
Welder: Pipe
Vocational Credits 9
Clock Hours 270
This course prepares the student to fabricate and weld pipe
joints.
Prerequisite: PMT 0015

PMT 0030
Sheet Metal Helper
Vocational Credits 15
Clock Hours 450
This course prepares the student with the knowledge to
demonstrate competence on all safety procedures for manufac-
turing technology equipment. Instruction includes an intro-
duction to basic manufacturing safety, math, hand tools,
power tools, blueprints, communication and employability
skills.

PMT 0032
Sheet Metal Fabricator
Vocational Credits 7.5
Clock Hours 225
This course prepares the student to fabricate and install me-
chanical systems, demonstrate knowledge and skills using
critical thinking and the importance of health, safety and envi-
ronmental regulatory compliance.
Prerequisite: PMT 0030

PMT 0033
Architectural Fabricator
Vocational Credits 7.5
Clock Hours 225
This course prepares the student to fabricate and install archi-
tectural/roofing sheet metal, use information technology tools,
describe the importance of professional ethics and legal re-
ponsibility, and demonstrate personal money management
procedures, strategies and concepts.
Prerequisite: PMT 0032
PMT 0034  
**Commercial Kitchen Fabricator**  
Vocational Credits 7.5  
Clock Hours 225  
This course prepares the student to fabricate and install specialty sheet metal to include food and beverage dispensing equipment, and to demonstrate leadership and teamwork.  
Prerequisite: PMT 0033

PMT 0035  
**Architectural Fabricator**  
Vocational Credits 7.5  
Clock Hours 225  
This course prepares the student to weld sheet metal, perform gas welding, cutting, and electrical bonding operations.  
Prerequisite: PMT 0034

SCY 0010  
**Bail Bonds**  
Vocational Credits 4.0  
Clock Hours 120  
In this course the student will learn how to apprehend and detain defendants, surrender defendants to the proper authorities, execute and sign bonds, handle collateral receipts, and deliver bonds to the proper authorities.

SCY 0051  
**Private Investigation I**  
Vocational Credits 0.8  
Clock Hours 24  
Prepares secondary and postsecondary students for the unarmed Private Investigation Intermediate, Class "CC" License.

SCY 0052  
**Private Investigation II**  
Vocational Credits 0.5  
Clock Hours 16  
Completes the training for a Private Investigator Intern to obtain a Class "CC" license.

SLS 0341  
**Employability Skills**  
Vocational Credits 0.5  
Clock Hours 15  
Provides instruction on obtaining employment such as conducting a job search, identifying sources for job information, making preparations for applying for a job, preparing a resume, preparing a job application letter, completing a job application form, and interviewing for a job. Includes instruction on maintaining employment such as proper work habits and attitudes, human relations, appropriate dress and grooming, acceptable health habits and job change techniques.

SLS 0504  
**Critical Thinking/Problem Solving**  
Vocational Credits 1.6  
Clock Hours 50  
Provide problem solving techniques and help students learn how to apply critical thinking skills in their daily activities.