All blank pages have been removed from this document.
EASTFIELD COLLEGE

Member of the Southern Association of Colleges and Schools
Member of the American Association of Community and Junior Colleges
Member of the Southern Association of Junior Colleges
Member of the Association of Texas Colleges and Universities
Member of the League for Innovation in the Community College
Recognized and sanctioned by the Coordinating Board of the Texas College and University System and the Texas Education Agency
An Affirmative Action Equal Opportunity Institution

This catalog contains policies, regulations, and procedures in existence at the time this publication went to press. The College reserves the right to make changes at any time to reflect current Board policies, administrative regulations and procedures, and applicable State and Federal laws and regulations. This catalog is for informational purposes and does not constitute a contract.
## ACADEMIC CALENDAR, 1980-81

### FALL SEMESTER, 1980

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug. 18 (M)</td>
<td>Faculty Reports</td>
</tr>
<tr>
<td>Aug. 19-21 (T-R)</td>
<td>Faculty Professional Development</td>
</tr>
<tr>
<td>Aug. 22 (F)</td>
<td>Faculty Professional Development</td>
</tr>
<tr>
<td>Aug. 23 (S)</td>
<td>Saturday classes begin</td>
</tr>
<tr>
<td>Aug. 25 (M)</td>
<td>Classes begin</td>
</tr>
<tr>
<td>Aug. 29 (F)</td>
<td>Last day for tuition refund</td>
</tr>
<tr>
<td>Sept. 1 (M)</td>
<td>Labor Day holiday</td>
</tr>
<tr>
<td>Sept. 8 (S)</td>
<td>12th class day</td>
</tr>
<tr>
<td>Nov. 27 (R)</td>
<td>Thanksgiving holidays begin</td>
</tr>
<tr>
<td>Dec. 1 (M)</td>
<td>Classes resume</td>
</tr>
<tr>
<td>Dec. 8 (M)</td>
<td>Last day to withdraw &quot;W&quot;</td>
</tr>
<tr>
<td>Dec. 13 (S)</td>
<td>Final exams for Saturday classes</td>
</tr>
<tr>
<td>Dec. 15 (M)</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>Dec. 16-19 (T-F)</td>
<td>Final examinations</td>
</tr>
<tr>
<td>Dec. 19 (F)</td>
<td>Semester closes</td>
</tr>
</tbody>
</table>

### SPRING SEMESTER, 1981

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 12 (M)</td>
<td>Faculty Reports</td>
</tr>
<tr>
<td>Jan. 13-15 (T-R)</td>
<td>Registration</td>
</tr>
<tr>
<td>Jan. 16 (F)</td>
<td>Faculty Professional Development</td>
</tr>
<tr>
<td>Jan. 17 (S)</td>
<td>Saturday classes begin</td>
</tr>
<tr>
<td>Jan. 19 (M)</td>
<td>Classes begin</td>
</tr>
<tr>
<td>Jan. 23 (F)</td>
<td>Last day for tuition refund</td>
</tr>
<tr>
<td>Jan. 30 (F)</td>
<td>12th class day</td>
</tr>
<tr>
<td>Mar. 6 (F)</td>
<td>Faculty Professional Development</td>
</tr>
<tr>
<td>Mar. 16 (M)</td>
<td>Spring Break begins</td>
</tr>
<tr>
<td>Mar. 20 (F)</td>
<td>Spring holiday for all employees</td>
</tr>
<tr>
<td>Mar. 23 (M)</td>
<td>Classes resume</td>
</tr>
<tr>
<td>Apr. 17 (F)</td>
<td>Easter holiday begins</td>
</tr>
<tr>
<td>Apr. 20 (M)</td>
<td>Classes resume</td>
</tr>
<tr>
<td>May 8 (F)</td>
<td>Last day to withdraw &quot;W&quot;</td>
</tr>
<tr>
<td>May 15 (F)</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>May 16 (S)</td>
<td>Final exams for Saturday classes</td>
</tr>
<tr>
<td>May 18-21 (M-R)</td>
<td>Final examinations</td>
</tr>
<tr>
<td>May 21 (R)</td>
<td>Graduation</td>
</tr>
<tr>
<td>May 21 (R)</td>
<td>Semester closes</td>
</tr>
</tbody>
</table>

### SUMMER SESSIONS, 1981

#### FIRST SESSION

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 29 (F)</td>
<td>Registration</td>
</tr>
<tr>
<td>June 1 (M)</td>
<td>Classes begin</td>
</tr>
<tr>
<td>June 2 (T)</td>
<td>Last day for tuition refund</td>
</tr>
<tr>
<td>June 4 (R)</td>
<td>4th class day</td>
</tr>
<tr>
<td>June 29 (M)</td>
<td>Last day to withdraw &quot;W&quot;</td>
</tr>
<tr>
<td>July 3 (F)</td>
<td>Independence Day holiday</td>
</tr>
<tr>
<td>July 6 (M)</td>
<td>Final examinations</td>
</tr>
<tr>
<td>July 6 (M)</td>
<td>Session closes</td>
</tr>
</tbody>
</table>

#### Second Session

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 7 (T)</td>
<td>Registration</td>
</tr>
<tr>
<td>July 9 (R)</td>
<td>Classes begin</td>
</tr>
<tr>
<td>July 10 (F)</td>
<td>Last day for tuition refund</td>
</tr>
<tr>
<td>July 14 (T)</td>
<td>4th class day</td>
</tr>
<tr>
<td>Aug. 6 (R)</td>
<td>Last day to withdraw &quot;W&quot;</td>
</tr>
<tr>
<td>Aug. 12 (W)</td>
<td>Final examinations</td>
</tr>
<tr>
<td>Aug. 12 (W)</td>
<td>Session closes</td>
</tr>
</tbody>
</table>

### 1980

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

### 1981

<table>
<thead>
<tr>
<th>January</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<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>
</tr>
<tr>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
</tr>
</tbody>
</table>

#### OCTOBER

<table>
<thead>
<tr>
<th>October</th>
<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>
<td>9</td>
</tr>
<tr>
<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>
</tr>
<tr>
<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>
</tr>
<tr>
<td>30</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### NOVEMBER

<table>
<thead>
<tr>
<th>November</th>
<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>
<td>9</td>
</tr>
<tr>
<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>
</tr>
<tr>
<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>
</tr>
<tr>
<td>30</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### DECEMBER

<table>
<thead>
<tr>
<th>December</th>
<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>
<td>13</td>
</tr>
<tr>
<td>14</td>
<td>15</td>
<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>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### JUNE

<table>
<thead>
<tr>
<th>June</th>
<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>
<td>13</td>
</tr>
<tr>
<td>14</td>
<td>15</td>
<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>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>28</td>
<td>29</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### AUGUST

<table>
<thead>
<tr>
<th>August</th>
<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>
<td>17</td>
</tr>
<tr>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CONTENTS

EASTFIELD COLLEGE

Eastfield Administration and Staff ........................................... 4
Campus Information ................................................................. 5
Faculty ......................................................................................... 9
DCCCD Trustees and Administrators ............................................ 16

GENERAL INFORMATION

For the Seven Member Colleges of the DCCCD

General Information ....................................................................... 18
  History of the DCCCD
  Philosophy, Goals, Responsibilities
  Public Policies

Admissions and Registration ......................................................... 21
  Admissions Information
  Tuition and Fees
  Advisement and Scheduling

Academic Information .................................................................... 26
  Degree Requirements
  Scholastic Standards

Educational and Special Opportunities ......................................... 31

Student Services ........................................................................... 35

Financial Aid .................................................................................. 38

Student Codes and Expectations ................................................... 42

GENERAL EDUCATION COURSES

For the Seven Member Colleges of the DCCCD ............................... 47

TECHNICAL/OCCUPATIONAL PROGRAMS AND COURSES

Technical/Occupational Information .............................................. 86
Technical/Occupational Programs ................................................ 89
Technical/Occupational Courses .................................................. 119

INDEX ............................................................................................... 142
EASTFIELD COLLEGE STAFF

President .................................................. Eleanor Ott
Vice President of Instruction ...................... Jerry Henson
Vice President of Student Services ................ Lee Graupman
Vice President of Business Services ............... Richard A. Solo
Dean of Instructional Services ....................... Don C. Yeager
Associate Dean of Continuing Education ........ Callie Foster Struggs
Associate Dean of Technical and Occupational Programs .... Virginia Dobbs
Associate Dean of Instructional Development ............................
and Director of Learning Resources .................. Robert L. Lhota
Assistant Dean of Community Services Programs .... Don C. Yeager
Administrative Assistant ................................. Felix Zamora
Director of Public Information ......................... Raymond Campbell, III
Director of Student Development .................... David Amidon
Director of Counseling ................................. Larry G. Carter
Director of Admissions and Registrar ............... Bobbie J. Trout
Director of Financial Aids and Placement ........ Furman Milton
Director of Health Services ............................. Marveen Kirk
EASTFIELD COLLEGE

Eastfield College serves the eastern part of Dallas County, including East Dallas, Garland, and Mesquite. It was the third college constructed in the Dallas County Community College District and is located at the intersection of I-30 and Motley Drive in Mesquite.

COLLEGE HISTORY

The College site was the frontier homestead of Zachariah Motley. He left his Bowling Green, Kentucky, home in 1853 to carve a new life for his family in the fertile soil and rich grasslands of the then new state of Texas. Although the original boundaries of the homestead have long disappeared, the tree-shaded Motley family cemetery enclosed by wrought iron, remains today inside the main entrance of Eastfield's 244-acre site.

Eastfield opened in the fall of 1970 with more than 3,500 day and evening students and an additional 1,300 students in Community Service Programs. By the fall of 1979, almost 8,000 students were enrolled in day and evening classes, and there were an additional 4,500 students in Community Service Programs.
COLLEGE SEAL

Eastfield's seal is a square, representing the shape of Dallas County. A central symbol works the architectural flavor of Eastfield's distinctive village design into the letters "E" and "C". The lower part of the square is earth brown, depicting the land and fields. The upper part is golden orange, as the morning sun might appear on the eastern horizon.

The design of the central symbol evolved by separating the letter "E" into individual parts and matching each with elements of the Eastfield design—a building with a pitched roof, recessed base, and central courtyard. Through gradual alterations, this graphic treatment of the "E" became a simplified silhouette of the Eastfield village design.
EASTFIELD COLLEGE GOALS

1) To maintain a long-range comprehensive planning system that includes self-study for accreditation.

2) To make a continuous effort to help employees understand and support our philosophy, organizational structure and decision-making processes.

3) To continuously assess the educational and cultural needs of students and of the community in order to provide appropriate programs to address those needs.

4) To maintain a high priority for the improvement of student communications, computation and other skills for living.

5) To provide a comprehensive and effective system of instructional and non-instructional services to meet the needs of a diverse student population.

6) To maintain high professional standards for our staff through a comprehensive staff improvement program which will support the development of skills, attitudes and abilities reflecting the College’s philosophy.

7) To provide excellence in educational opportunities while maintaining sound and effective financial accountability.

8) To promote positive and productive relationships with the leadership of the business community and with external agencies as long as the relationships are consistent with the College’s philosophy.

9) To provide excellence in educational opportunities in quality facilities and sound financial accountability.

10) To maintain an atmosphere of acceptence and trust in which students and staff have maximum opportunity for personal growth and self-fulfillment.

11) To maintain a long-range comprehensive planning and evaluation system.
EASTFIELD COLLEGE FACULTY AND STAFF

Allison, Joe F. .................................................. Mathematics
Stephen F. Austin State College, B.S.; Texas A&M Univ., M.Ed., Ph.D.

Amidon, David C., Jr. ........................................... Director Of Student Development
Univ. of Houston, B.A., M.Ed.; Further study: East Texas State Univ.

Arnold, Jackie .................................................. Auto Body
Study: East Texas State Univ.; Paris Junior College; General Motors

Attner, Donnelle K. ............................................. Mid-Management
Univ. of North Carolina at Chapel Hill, B.A.; Univ. of Oklahoma, M.Ed.

Bailey, Kenneth .................................................. Graphic Arts
Springfield College, B.S., M.S.; Further study: Ohio State Univ., Azusa Pacific College

Baldwin, Kenneth ............................................... Physical Education

Bayham, James D. ................................................ Mid-Management
Eastfield College, A.A.S.; Abilene Christian Univ., B.B.A.

Bennett, James R. ............................................... Developmental Mathematics
Univ. of Texas at Austin, B.A.; Univ. of Houston, M.S.; Further study: East Texas State Univ.

Berry, Kathryn ............................................... Coordinator, Student Development
East Texas State Univ., B.S., M.S.; Further study: Texas Woman's Univ.

Blair, Oscar T. .................................................. Physical Education
North Texas State Univ., B.S., M.S.; Further study: North Texas State Univ., Texas Woman's Univ., East Texas State Univ.

Boldt, Chris E. .................................................. Mathematics
Texas Tech Univ., B.B.A.; Texas Christian Univ., M.S.; East Texas State Univ., Ed.D.; Further study: Texas Christian Univ., North Texas State Univ., Univ. of Texas at Austin, Syracuse Univ., Univ. of Colorado, Univ. of Hawaii, Stanford Univ.

Bowers, James .................................................. Developmental Reading
Arizona State Univ., B.A., M.A.

Bradshaw, Patti J. .............................................. Developmental Studies
North Texas State Univ., B.S., M.Ed.

Brown, Beverly ............................................... English
Birmingham-Southern College, B.S., Univ. of Alabama, M.A.; Further study: East Texas State Univ., North Texas State Univ.

Brown, Emmett D. ............................................... Counseling
North Texas State Univ., B.A., M.Ed.; Further study: El Centro College, Prairie View A&M, Naval School of Photography

Brumbaugh, Virginia ............................................. English

Budke, Arl ....................................................... Counselor

Burden, Jacqueline ............................................. History
State Univ. of New York College at Buffalo, B.A.; Univ. of Michigan, M.A.; Further study: Univ. of Pittsburgh

Campbell, Ray ................................................. Director of Public Information
Dallas Baptist College, B.A.; Further study: North Texas State Univ.

Carandang, Amado I. ............................................ Philosophy
King's College, B.A.; Univ. of Notre Dame, M.A., Ph.D.; Further study: California Institute of Asian Studies, San Francisco; Brock Univ., Ontario

Carpenter, Robert W. ............................................ Accounting
North Texas State Univ., B.B.A., M.B.A., C.P.A., State of Texas; Further study: North Texas State Univ., Western State College of Colorado

Carr, Laura V. .................................................. Training Paraprofessionals for the Deaf Program

Carver, James Damon ........................................... Automotive Technology
Southern Methodist Univ., N.I.A.S.E.; Further study; General Motors Training Center
<table>
<thead>
<tr>
<th>Name</th>
<th>Degree(s)</th>
<th>University(s)</th>
<th>Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cate, Franklin M.</td>
<td>B.A., M.A.</td>
<td>East Texas State Univ., Univ. of Virginia</td>
<td>History</td>
</tr>
<tr>
<td>Childrey, Dufer</td>
<td>Coordinator</td>
<td>School for Handicapped Students</td>
<td></td>
</tr>
<tr>
<td>Choate, Charles T.</td>
<td>M.S.</td>
<td>Southeastern Oklahoma State, East Texas State Univ.</td>
<td>Journalism</td>
</tr>
<tr>
<td>Christian, Allen L.</td>
<td>B.S., M.S.</td>
<td>Arlington State College, East Texas State Univ.</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Cinclair, Richard</td>
<td>Ph.D.</td>
<td>Northern State Univ., Univ. of Wisconsin</td>
<td>Division Chairman, Social Science</td>
</tr>
<tr>
<td>Clarke, Curtis R.</td>
<td>M.S.</td>
<td>Southern Methodist Univ., Texas State Univ.</td>
<td>Mid-Management</td>
</tr>
<tr>
<td>Clayton, Glenn N.</td>
<td>B.A., M.A.</td>
<td>North Texas State Univ., East Texas State Univ.</td>
<td>English</td>
</tr>
<tr>
<td>Clinton, Doyle L.</td>
<td>B.A., M.A.</td>
<td>Univ. of Southern Missouri, Univ. of Alabama</td>
<td>Spanish</td>
</tr>
<tr>
<td>Conger, John D.</td>
<td>B.A., M.A.</td>
<td>Freed-Hardeman College, Lipscomb College, Peabody College</td>
<td>Child Development</td>
</tr>
<tr>
<td>Daigh, John D.</td>
<td>B.S., M.S.</td>
<td>United States Military Academy, Univ. of Illinois</td>
<td>Division Chairman, Mathematics and Engineering</td>
</tr>
<tr>
<td>Dale, Charles W.</td>
<td>M.S.</td>
<td>Southeastern State College of Oklahoma</td>
<td>Electronics</td>
</tr>
<tr>
<td>Dennis, Vivian A.</td>
<td>B.A., M.S.</td>
<td>East Texas State Univ., Southern Illinois Univ.</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Dennis, Wilbur L.</td>
<td>B.S., M.S.</td>
<td>North Texas State Univ., East Texas State Univ.</td>
<td>Physical Education</td>
</tr>
<tr>
<td>DiPietro, Lawrence N.</td>
<td></td>
<td>Rutgers Univ., Drexel Univ., North Texas State Univ.</td>
<td>Learning Resource Center</td>
</tr>
<tr>
<td>Dobbs, Virginia</td>
<td>Associate Dean of Technical/Occupational Education</td>
<td>Univ. of Kentucky, B.S.</td>
<td></td>
</tr>
<tr>
<td>Drake, Helan N.</td>
<td>B.A., M.A.</td>
<td>Southern Methodist Univ., North Texas State Univ.</td>
<td>English</td>
</tr>
<tr>
<td>Erwin, Robert J.</td>
<td>M.F.A.</td>
<td>Univ. of South Florida, Univ. of Alberta</td>
<td>Theatre</td>
</tr>
<tr>
<td>Etheredge, John W.</td>
<td>B.A., M.S.</td>
<td>Baylor Univ., Univ. of Houston</td>
<td>Counseling</td>
</tr>
<tr>
<td>Ewing, George E.</td>
<td>B.S., M.S.</td>
<td>North Texas State Univ., Univ. of Arkansas</td>
<td>Drafting</td>
</tr>
<tr>
<td>Felder, Bob</td>
<td>B.A., M.A.</td>
<td>Sam Houston State Univ., Univ. of Denver</td>
<td>Business</td>
</tr>
<tr>
<td>Fleming, Delryn R.</td>
<td>B.A., M.A.</td>
<td>Southwestern Univ., East Texas State Univ.</td>
<td>Developmental Writing</td>
</tr>
<tr>
<td>Flickner, Robert E.</td>
<td>M.S.</td>
<td>Bethel College, Kansas Univ.</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Forrest, Mary L.</td>
<td>B.A., M.A.</td>
<td>North Texas State Univ., Southern Methodist Univ.</td>
<td>Speech</td>
</tr>
<tr>
<td>Fountaine, Oliver J.</td>
<td>M.S.</td>
<td>Tillotson College, Univ. of Denver</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Goldman, Aliene</td>
<td>B.A., M.A.</td>
<td>Colorado State Univ., Oregon State Univ.</td>
<td>Child Development</td>
</tr>
<tr>
<td>Gormly, Donna A.</td>
<td>B.A., M.A.</td>
<td>Texas Woman's Univ., Texas Christian Univ.</td>
<td>English</td>
</tr>
</tbody>
</table>
Graupman, Lee ........................................... Vice President, Student Services
LaCrosse State Univ., B.S.; Western State College of Colorado, M.A.; Further study: Fresno State College, San Francisco State College

Hall, Harvey ............................................. Air Conditioning and Refrigeration

Hamilton, Hance H. ..................................... Chemistry
Texas A&M Univ., B.S., Ph.D.

Hegar, A. Alylene ........................................ Counselor; Psychology
Texas Tech Univ., B.A.; North Texas State Univ., M.Ed.; Further study: North Texas State Univ.

Henry, Robert M. ........................................ Physical Education
Southern Methodist Univ., B.A.; Univ. of Illinois, M.S.; Further study: Univ. of Texas, North Texas State Univ., East Texas State Univ., Texas Tech Univ., Texas A&M Univ.

Henson, Jerry C. ......................................... Vice President of Instruction
Hardin-Simmons Univ., B.A.; Southwestern Baptist Theological Seminary, B.D.; Baylor Univ., Ph.D.

Herd, Clarence W. ....................................... Automotive Technology
East Texas State Univ., B.A.; Further study: East Texas State Univ.

Hill, H. Rayburn ......................................... Government
Paris Junior College, A.A.; East Texas State Univ., B.S., M.S.; Further study: Univ. of Oklahoma, East Texas State Univ.

Hinkle, John L. .......................................... English
Baylor Univ., B.A.; East Texas State Univ., M.A.; Further study: Baylor Univ., East Texas State Univ.

Holloway, Ralph ......................................... Director, Instructional Development
Amarillo College, A.A.; Hardin-Simmons Univ., B.A.; North Texas State Univ., M.L.S.; Further study: Univ. of Texas at Austin, East Texas State Univ.

Holman, Morris H. ....................................... History
East Texas State Univ., B.A., M.A.; Dallas Theological Seminary, M.A.S.; Further study: North Texas State Univ.

Holm, Diane A. .......................................... Counseling; Sociology
Univ. of Utah, B.S., M.S.; Union Graduate School, Ph.D.; Further study: Univ. of California at Los Angeles, San Diego State Univ.

Hughes, W. Tim, Jr. ..................................... History; Government
Henderson State Teachers' College, B.S.E.; George Peabody College for Teachers, M.A.; Further study: Baylor Univ., East Texas State Univ., Univ. of the Americas, Texas A&M Univ.

Hutchins, Michael E. .................................... Drafting
East Texas State Univ., B.S., M.S.

Jeffus, Larry ............................................. Welding
Hiwassee College, A.A.; Univ. of Tennessee, B.S.; Further study: Univ. of Tennessee

Jessen, Joel A. ........................................... Counselor; Human Development
Univ. of Iowa, B.A., M.A.

John, Margaret .......................................... Counselor
Austin College, B.A.; East Texas State Univ., M.A.

Kaner, Albert M. ....................................... Air Conditioning and Refrigeration
Study: Univ. of Oklahoma, Oklahoma State Univ., Univ. of Tulsa

King, H. Gill ................................................ Anthropology
Southern Methodist Univ., B.A., M.A., Ph.D.

Kirk, Marveen M. ........................................ Director of Health Services
Univ. of Texas at Austin, B.S.; Texas Woman's Univ., B.S.N.

Kirkpatrick, Michael J. ................................. Drafting
Oklahoma City Univ., B.A.; North Texas State Univ., M.Ed., Ed.D.

Knight, Carl E. ........................................... Biology
Michigan State Univ. B.S., M.S., Ph.D.

Koeppe, Larry G. ......................................... Counselor
North Texas State Univ., B.S., M.Ed.; Further study: North Texas State Univ.

Lagbara, Ga, O. ........................................... Speech
North Texas State Univ., B.S., M.S., Ph.D.; Further study: Harvard Univ., Univ. of Houston, Texas Southern Univ.
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Institution 1</th>
<th>Degree(s) 1</th>
<th>Institution 2</th>
<th>Degree(s) 2</th>
<th>Institution 3</th>
<th>Degree(s) 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latham, Jim</td>
<td></td>
<td>East Texas State Univ., B.A.</td>
<td>Further study: East Texas State Univ., Texas A&amp;M Univ.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lengyl, Peter M.</td>
<td></td>
<td>Glassboro State Univ., B.A.</td>
<td>Indiana Univ., M.M.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Little, Karin Lemme</td>
<td>Division Chairman, Developmental Studies</td>
<td>Northern Illinois Univ., B.S.</td>
<td>Illinois State Univ., M.S.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lopez, Frank</td>
<td>Mathematics</td>
<td>Southwest Texas State College, B.S.</td>
<td>Univ. of Texas at Austin, M.A.</td>
<td>Further study: Texas A&amp;M Univ.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lucky, Harrell C.</td>
<td>Music</td>
<td>Bethany Nazarene College, B.M.Ed.; Southwestern Baptist Seminary, M.C.M.</td>
<td>Further study: Academy of Music, Vienna, Austria</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lynch, Eileen</td>
<td>Government</td>
<td>North Texas State Univ., B.A., M.A.</td>
<td>Further study: Univ. of Texas at Austin, North Texas State Univ.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lynch, Maurice</td>
<td>Director of Physical Plant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Madriguera, Enric F.</td>
<td>Music</td>
<td>Royal Conservatory of Music, Madrid, Spain; Oscar Espla Conservatory of Music, Alicante, Spain; East Carolina Univ.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Martin, Diane M.</td>
<td>English</td>
<td>North Texas State Univ., B.A.; California State College at Fullerton, M.A.</td>
<td>Further study: East Texas State Univ., Univ. of Texas at Austin</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Martinez, Ivan O.</td>
<td>Government</td>
<td>Florida State Univ., B.A., M.S.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Massey, Aaron W.</td>
<td>Counselor</td>
<td>Southwest Texas State, B.S.; East Texas State Univ., M.S.; Further study: East Texas State Univ., North Texas State Univ., Abilene Christian Univ., Texas A&amp;M Univ.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matzen, Brent E.</td>
<td>Art</td>
<td>Southwestern Univ., B.A.; Univ. of Dallas, M.A., M.F.A.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McAden, Winston</td>
<td>Air Conditioning and Refrigeration</td>
<td>Texas Tech Univ., B.S.; Further study:Southern Methodist Univ.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McClennen, Lu W.</td>
<td>Child Development</td>
<td>Baylor Univ., B.A.; East Texas State Univ., M.Ed., Ed.D.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McClung, Ray O.</td>
<td>Counselor, Psychology</td>
<td>Texas A&amp;M Univ., B.S.; Univ. of Illinois, M.S.; North Texas State Univ., Ph.D.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McCoy, David L.</td>
<td>Assistant Director of Classroom Resources</td>
<td>Southeastern State College of Oklahoma, B.A.; East Texas State Univ., M.S.; Further study: East Texas State Univ.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McMahon, Jerry D.</td>
<td>Chemistry</td>
<td>Texas Tech Univ., B.S.; Princeton Univ., M.A.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McNeill, Earlene</td>
<td>Child Development</td>
<td>North Texas State Univ., B.S.; Southern Methodist Univ., M.L.A.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milton, Furman D.</td>
<td>Director of Financial Aids and Placement</td>
<td>Troy State Univ., B.S.; East Texas State Univ., M.Ed., Ph.D.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mouldous, Pierrette M.</td>
<td>Piano</td>
<td>Performer's Certificate, Ecole Normale de Musique; Southern Methodist Univ., M.M.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neil, Mary Lou</td>
<td>English</td>
<td>Texas Christian Univ., B.A.; Univ. of Dallas, M.A.; Further study: Univ. of Dallas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Olson, Margot</td>
<td>Instructional Development Consultant</td>
<td>Carnegie-Mellon Univ., B.S.; Florida State Univ., M.S., Ph.D.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ott, Eleanor</td>
<td>President</td>
<td>Rice Univ., B.A.; Southern Methodist Univ., M.A.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Palmer, Ursula J. ................................................. Training Paraprofessionals for the Deaf Program
Salve Regina College, B.A.; Univ. of Arizona, M.S.; Further study: Univ. of Arizona

Penney, Jane A. .................................................. Sociology/Human Services
East Texas State Univ., B.S., M.S.

Phillips, Harry .................................................. Music
State Univ. of College at Potsdam, New York, B.S.; Univ. of Michigan, M.M.; Boston Univ., Mus.A.D.

Phillips, Jim G. .................................................. Counselor, Psychology, Sociology, Child Development
East Texas State Univ., B.A., M.A., Ph.D.; Further study: North Texas State Univ.

Pitt, J. Michael .................................................. Physics
Southern Methodist Univ., B.S.E.E.; Univ. of Texas at Austin, Ph.D.

Pleasant, P. Leon, Jr. ............................................ Accounting
North Texas State Univ., B.B.A.; East Texas State Univ., M.B.A.; Further study: North Texas State Univ.

Preston, David E. ................................................ Sociology
East Texas State Univ., B.S., M.S.; North Texas State Univ., Ed.D.

Priest, Andy J. .................................................... Automotive Technology and Engineering
North Texas State Univ., B.S.; Southern Methodist Univ., M.L.A.; Further study: East Texas State Univ.

Privette, Parnell ................................................. Electronics
Univ. of Texas at Austin, B.S.E.E.

Purdy, Earlyne ................................................... Secretarial Science
North Texas State Univ., B.S.; East Texas State Univ., M.S.

Preece, Rex, Jr. .................................................. Art
Louisiana State Univ., B.S.; George Peabody College, M.A.

Preston, David E. ................................................ Sociology
East Texas State Univ., B.S., M.S.; North Texas State Univ., Ed.D.

Priest, Andy J. .................................................... Automotive Technology and Engineering
North Texas State Univ., B.S.; Southern Methodist Univ., M.L.A.; Further study: East Texas State Univ.

Purkey, Earlene .................................................. Secretarial Science
North Texas State Univ., B.S.; East Texas State Univ., M.S.

Priebe, Robert .................................................... Division Chairman, Business
Southwest Texas State Univ., B.B.A., M.B.A.; North Texas State Univ., Ph.D. Candidate

Robinson, Yvonne ............................................... Secretarial Science
D.C. Teachers College, B.S.; North Texas State Univ., M.B.E.

Roy, DeWayne ................................................... Welding

Ruggiero, Ed ..................................................... Division Chairman, Science
Fordham Univ., B.S.; City Univ. of New York, M.S.; Further study: City Univ. of New York, Univ. of Texas at Dallas

Rizzo, Vic. .......................................................... Division Chairman, Business
Southwest Texas State Univ., B.B.A., M.B.A.; North Texas State Univ., Ph.D. Candidate

Robinson, Yvonne ............................................... Secretarial Science
D.C. Teachers College, B.S.; North Texas State Univ., M.B.E.

Roy, DeWayne ................................................... Welding

Ruggiero, Ed ..................................................... Division Chairman, Science
Fordham Univ., B.S.; City Univ. of New York, M.S.; Further study: City Univ. of New York, Univ. of Texas at Dallas

St. Clair, Anita J. ............................................... Secretarial Science
Abilene Christian College, B.S.E.; North Texas State Univ., M.B.E.; Further study: Southern Methodist Univ.,
North Texas State Univ., East Texas State Univ.

Sanders, Marla-Terttu ........................................... Spanish
El Centro College, A.A.; North Texas State Univ., B.A., M.A.; Further study: East Texas State Univ., Texas
Tech Univ.

Schmitt, Allan B. ................................................. Electronics
Univ. of Texas at Austin, B.S., M.S.E.E., Ph.D.E.E.

Schrup, Sara J. ................................................... Art
Art Institute of Chicago, B.F.A.; Univ. of Dallas, M.A., M.F.A.

Scott, Ray R. .................................................... Physics
North Texas State Univ., B.A.; East Texas State Univ., M.S.; Purdue Univ., M.S.; Further study: East Texas
State Univ.

Sharp, Robert G. ................................................ American History
Whitworth College, B.A.; Purdue Univ., M.A.; Further study: Univ. of Denver, Univ. of New Mexico

Sherrill, Theodore B., III ..................................... Biology
Lamar State Univ., B.S.; East Texas State Univ., M.S.; Further study: Southern Methodist Univ., North Texas
State Univ., East Texas State Univ.

Shofner, Robert W. .............................................. English
East Texas State Univ., B.S., M.A.
<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Department</th>
<th>Institutions/Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simpson, Deborah</td>
<td>Child Development</td>
<td>Stephen F. Austin, B.S.; North Texas State Univ., M.Ed.</td>
</tr>
<tr>
<td>Slovak, Pauline A.</td>
<td>English</td>
<td>Univ. of Arkansas at Monticello, B.S.E.; East Texas State Univ., M.A., Ed.D.</td>
</tr>
<tr>
<td>Smith, Maryle Bea</td>
<td>Business</td>
<td>North Texas State Univ., B.A., M.S.E.; Further study: East Texas State Univ.</td>
</tr>
<tr>
<td>Solganick, Harvey</td>
<td>Division Chairman, Communications; Philosophy</td>
<td>North Texas State Univ., B.A., M.Ed.; Southern Methodist Univ., M.A.; Further study: Univ. of Texas at Arlington, Univ. of Dallas, Univ. of Texas at Dallas, Univ. of California at Santa Barbara</td>
</tr>
<tr>
<td>Solo, Richard A.</td>
<td>Vice-President of Business Services</td>
<td>Villanova Univ., B.S.; Certified Public Accountant; Further studies: Univ. of Dallas</td>
</tr>
<tr>
<td>Solomon, Brad</td>
<td>Assistant Director, Learning Resources Center</td>
<td>Univ. of Florida, B.A., M.Ed.; Indiana Univ., Ed.S.</td>
</tr>
<tr>
<td>Starling, Susanne</td>
<td>American History</td>
<td>Baylor Univ., B.A.; North Texas State Univ., M.A.; Further study: North Texas State Univ.</td>
</tr>
<tr>
<td>Stewart, John D.</td>
<td>Division Chairman, Humanities; Music</td>
<td>East Texas State Univ., B.A., M.Ed.; Indiana Univ., Ph.D.</td>
</tr>
<tr>
<td>Stewart, Ronda A.</td>
<td>Physical Education</td>
<td>Texas Western College, B.A.; East Texas State Univ., M.Ed.; Further study: East Texas State Univ.</td>
</tr>
<tr>
<td>Stewart, W. Gene</td>
<td>Mid-Management</td>
<td>Univ. of Arkansas, B.S.E.; Southern Methodist Univ., M.Ed.; Further study: North Texas State Univ., Univ. of Texas at Dallas</td>
</tr>
<tr>
<td>Streeter, C. Allen</td>
<td>Engineering</td>
<td>Louisiana State Univ., B.S., M.S.; Further study: Southern Methodist Univ.; Professional Engineer Registration</td>
</tr>
<tr>
<td>Streng, Adolph C. J.</td>
<td>Psychology</td>
<td>Texas Lutheran College, B.A.; Wartburg Seminary, M.Div.; The Univ. of Chicago, M.A.; Roosevelt Univ., M.A.; Further study: Univ. of Mainz, Iowa State Univ., Univ. of Colorado</td>
</tr>
<tr>
<td>Struggs, Callie Foster</td>
<td>Associate Dean, Extended Day Program</td>
<td>Southern Methodist Univ., B.A.; Occidental College, M.A.U.S.</td>
</tr>
<tr>
<td>Swindling, James A.</td>
<td>Developmental Reading</td>
<td>Daytona Beach Community College, A.A.; Florida State Univ., B.A., M.S.; Further study: Univ. of Nevada, East Texas State Univ.</td>
</tr>
<tr>
<td>Thorne, John M.</td>
<td>Accounting</td>
<td>East Texas State Univ., B.A., M.B.A.; Further study: East Texas State Univ., Univ. of Oklahoma</td>
</tr>
<tr>
<td>Thornton, Carolyn</td>
<td>Counseling</td>
<td>Univ. of Cincinnati, B.A.; East Texas State Univ., M.S.</td>
</tr>
<tr>
<td>Tinnin, Joe M.</td>
<td>Psychology</td>
<td>Southern Methodist Univ., B.A.; Texas Christian Univ., M.A.; Further study: North Texas State Univ., Southwestern Medical School</td>
</tr>
<tr>
<td>Tinsley, Sammy J.</td>
<td>Developmental Mathematics</td>
<td>Ouachita Baptist Univ., B.A.; Univ. of Mississippi, M.S., Ph.D.</td>
</tr>
<tr>
<td>Trout, Bobbie</td>
<td>Registrar</td>
<td>Univ. of Texas at Austin, B.A.; Univ. of Texas at Dallas, M.A.</td>
</tr>
<tr>
<td>Weaver, Gayle M.</td>
<td>Biology</td>
<td>East Texas State Univ., B.S., M.S., Univ. of Oklahoma, M.S.; East Texas State Univ., Ph.D.; Further study: Oak Ridge Institute of Nuclear Studies</td>
</tr>
<tr>
<td>Weeks, Roger D.</td>
<td>Business</td>
<td>East Texas State Univ., B.A., M.B.A.; Further study: Univ. of Missouri</td>
</tr>
<tr>
<td>Williams, Jerome</td>
<td>Biology</td>
<td>East Texas State Univ., B.S., M.S.; Further study: East Texas State Univ., North Texas State Univ.</td>
</tr>
</tbody>
</table>
Wilson, Mary C. ......................................................... English
   East Texas State Univ., B.A., M.A.; Further study: Texas Christian Univ., Southern Methodist Univ., East
   Texas State Univ.

Winn, Jerry M. .............................................................. Developmental Mathematics
   Oklahoma Univ., B.S.E.E.; Southern Methodist Univ., M.S.

Wilson, Hardy M. .......................................................... Auto Body Technology
   North Texas State Univ., B.S.

Yeager, Don C. .............................................................. Dean of Instructional Services
   Arizona State Univ., B.A., M.A., Ph.D.

Zamora, Felix .............................................................. Administrative Assistant to the President
   School for International Training, B.S.; Southern Methodist Univ., M.P.A.
DALLAS COUNTY COMMUNITY COLLEGE DISTRICT BOARD OF TRUSTEES:
Seated, left to right: Jerry Gilmore, vice-chairman; Pattie T. Powell, chairman; Bill J. Priest, chancellor and secretary to the Board; and Robert H. Power. Standing, left to right: Bob Beard; Bart Rominger; J. D. Hall; and Don Buchholz.

DALLAS COUNTY COMMUNITY COLLEGE DISTRICT
Chancellor ..................................................... Bill J. Priest
Vice Chancellor of Academic Affairs ...................... R. Jan LeCroy
Vice Chancellor of Business Affairs ...................... Walter L. Pike
Assistant to the Chancellor ................................ Ruth G. Shaw
Special Assistant to the Chancellor ....................... Jan Sanders
Director of Computer Services .............................. James R. Hill
Director of Development .................................. Carole Shlipak
Director of Personnel .................................... Quincy Ellis
Director of Planning and Accreditation . ................. Bill Tucker
Director of Program Development ......................... Linda Coffey
Director of Public Information ............................. Claudia Robinson
Director of Special Services ............................... Bonny S. Franke
Director of Technical Services ............................. Paul E. Dumont
Legal Counselor ............................................. Robert Young
General Information

For the Seven Member Colleges of the Dallas County Community College District
I. GENERAL INFORMATION

HISTORY OF THE DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

The Dallas County Community College District is comprised of seven colleges located strategically throughout Dallas County. Together the colleges enroll approximately 75,000 students and employ over 1,900 full-time faculty and staff members. The growth of the District into an educational system with such impact was not by chance. It took the careful planning and hard work of many people over a period of 15 years. In May, 1965, voters created the Dallas County Junior College District and approved a $41.5 million bond issue to finance it. The next year the District's first college, El Centro, began operation in downtown Dallas. Eastfield College and Mountain View College enrolled their first students in 1970, and the plans for a multi-campus district became a reality. Richland College became the District's fourth college in 1972. The voters of Dallas County approved the sale of an additional $85 million in bonds in September, 1972. This step provided for expansion of the four existing colleges and the construction of three more colleges. A key part of the expansion program was the remodeling and enlarging of El Centro College, a project completed in 1979. Construction of new facilities resulted in the opening of Cedar Valley College and North Lake College in 1977. Brookhaven College, the final campus in the seven-college master plan, opened in 1978.

DISTRICT PHILOSOPHY AND GOALS

Since 1972, the District has been known as the Dallas County Community College District. The name shows that the District has outgrown the term "junior college." The name also reflects the District's philosophy. The colleges truly are community institutions, meeting the varied educational needs of the growing Dallas County region. The primary goal of the District and its colleges is to help students of all ages achieve effective living and responsible citizenship in a fast-changing region, state, nation, and world. Each college is therefore committed to providing a broad range of educational programs for the people it serves. The needs, abilities, and goals of each student are considered important. The focus is on creating an educational program for the individual rather than squeezing or stretching the individual to fit an "educational mold."
The District therefore has a place for different kinds of students. There is a place for the young person setting forth toward a degree in medicine, and a place for the adult delving into an interesting hobby to enrich leisure hours. There is a place for the person preparing to enter a trade or technical field with a year or two of studies, and a place for the employed individual wanting to improve occupational skills. There is a place for the very bright high school student ready to begin college work in advance of high school graduation, and a place for the high school dropout who now sees the need for education in today’s complex society. In short, there is a place for everyone.

How do the colleges meet the educational needs of such a varied family? The answer is found in four categories of programs:

1. For the student working toward a bachelor’s or higher degree, the colleges offer a wide range of first-year and second-year courses which transfer to senior colleges and universities.

2. For the student seeking a meaningful job, the colleges offer one-year and two-year programs in technical and occupational fields.

3. For the employed person wishing to improve job skills or to move into a new job, the colleges offer credit and non-credit adult educational courses.

4. For the person who simply wants to make life a little more interesting, the colleges offer community service programs on cultural, civic and other topics.

Additional programs are available for the high school student, dropout, and others with special needs. The colleges help each student design the educational program that best meets individual needs. Every student is offered intensive counseling to define goals and identify abilities. Continued guidance is available throughout the student’s college career in case goals and plans change. This emphasis on counseling, rare for some institutions, is routine at all District colleges.

**DISTRICT RESPONSIBILITIES**

To carry out the District philosophy, the colleges obviously must offer a range of programs and courses, including guidance services. These programs and courses must help each individual attain a high level of technical competence and a high level of cultural, intellectual, and social development.

In addition, high professional standards for the academic staff must be maintained within a framework prescribed by the Board of Trustees. At the same time, the program and organization of each college must make maximum use of faculty and facilities.

The colleges have a basic responsibility to provide educational and cultural leadership to the community. They must be sensitive to changing community needs and adapt readily to those needs. Individuals capable of continuing their educational development should be given the opportunity to improve their skills. Finally, to continue to meet its responsibilities in changing times, the college system must guard against stagnation.

Creativity and flexibility are therefore fostered at the District level and on each campus.

**LEAGUE FOR INNOVATION**

The Dallas County Community College District is a member of the League for Innovation in the Community College. The League is composed of 16 outstanding community college districts throughout the nation. Its purpose is to encourage innovative experimentation and the continuing development of the community college movement in America.

Membership commits the District to research, evaluation, and cooperation with other community college districts. The goal is to serve the community with the best educational program and the fullest use of resources.
EQUAL EDUCATIONAL AND
EMPLOYMENT OPPORTUNITY POLICY

Dallas County Community College District is committed to providing equal educational and employment opportunity regardless of sex, marital or parental status, race, color, religion, age, national origin, or handicap. The District provides equal opportunity in accord with Federal and State laws. Equal educational opportunity includes admission, recruitment, extra-curricular programs and activities, access to course offerings, counseling and testing, financial aid, employment, health and insurance services, and athletics. Existing administrative procedures of the College are used to handle student grievances. When a student believes a condition of the College is unfair or discriminatory, the student can appeal to the administrator in charge of that area. Appeals to higher administrative authority are considered on the merits of the case.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974

In compliance with the Family Educational Rights and Privacy Act of 1974, the College may release information classified as "directory information" to the general public without the written consent of the student. Directory information includes: (1) student name, (2) student address, (3) telephone number, (4) dates of attendance, (5) educational institution most recently attended, and (6) other information, including major field of study and degrees and awards received. A student may request that all or any part of the directory information be withheld from the public by giving written notice to the Registrar’s Office during the first twelve class days of a fall or spring semester or the first four class days of a summer session. If no request is filed, information is released upon inquiry.

No telephone inquiries are acknowledged; all requests must be made in person. No transcript or academic record is released without written consent from the student stating the information to be given, except as specified by law.

STUDENT CONSUMER INFORMATION SERVICES

Pursuant to Public Law 178, the College provides all students with information about its academic programs and financial aid available to students.

STANDARDS OF CONDUCT

The college student is considered a responsible adult. The student’s enrollment indicates acceptance of the standards of conduct published in this catalog.
II. ADMISSIONS AND REGISTRATION

GENERAL ADMISSIONS POLICY
The College has an "open door" admissions policy. It insures that all persons who can profit from post-secondary education have an opportunity to enroll. The College may require certain assessment procedures for use in course placement, but the assessment is not used to determine admissions.

ADMISSION REQUIREMENTS

Beginning Freshmen
Students enrolling in college for the first time who fit one of the following categories may apply for admission:

a. Graduates from an accredited high school.
b. Graduates from an unaccredited high school who are 18 years of age.
c. Students who are not high school graduates but who are 18 years of age and whose high school class has graduated.
d. High school students recommended by their high school principal. The College admits a limited number of students in this category. The students are concurrently enrolled for a maximum of 6 hours of special study each semester. Students must continue to make normal progress toward high school graduation.

Transfer Students
Transfer applicants are considered for admission on the basis of their previous college record. Academic standing for transfer applicants is determined by the Registrar's Office according to standards established by the College. Students on scholastic or disciplinary suspension from another institution must petition the Committee on Admissions and Academic Relations for special approval. Contact the Admissions Office for further information.

Former Students
Students formerly enrolled in the Dallas County Community College District must submit an application for readmission to any District college. Students with unsettled financial debts at any District college will not be readmitted.

Non-Credit Students
Students enrolling for non-credit courses apply through Community Services.

International Students
The College is authorized under federal law to enroll non-immigrant alien students. International students are not admitted, however, until all admissions requirements are complete. International students must:

a. complete a personal interview with the international student counselor and receive approval from the College administration,
b. present TOEFL (Test of English as a Foreign Language) test scores of 525 or higher,
c. be proficient in English and provide a letter in their own handwriting indicating educational and vocational plans,
d. show evidence of sufficient financial support for the academic year,
e. complete a health information form,
f. fulfill all admission requirements for international students at least 30 days prior to registration,
g. enroll as a full-time student (minimum of 12 credit hours),
h. complete one full year at the admitting institution if the student has already been accepted by other U.S. educational institutions. (See government form I-20.)

Contact the Admissions Office for further information.
APPLICATION AND ADMISSION PROCEDURES

Applications may be submitted any time prior to registration, but applicants should submit materials at least three weeks before registration to insure effective counseling and schedule planning. Earlier application is desirable because the student's place in registration is determined by the date an applicant's admission file is complete. A late place in registration may mean that the student cannot register for some courses because they are already filled.

Applicants must submit the following material to the Admissions Office to have a complete admissions file:

a. An official application, available from the Admissions Office.
b. An official transcript from the last school (high school or college) attended. Students seeking certificates or associate degrees must submit official transcripts of all previous college work. The College's accrediting agency requires transcripts, and the College uses them in program advisement.
c. Written proof from a medical office of (1) a negative tuberculin skin test or chest X-ray, (2) a polio immunization if the applicant is under 19 years of age, and (3) a diphtheria/tetanus injection within the last 10 years. This medical proof is required by state law (Senate Bill 27).

Once the above materials are submitted, the applicant is assigned a place in registration. All applicants may select only those classes available when they register. Students may enroll in certain courses at times other than regular semester registration. See Flexible Entry Courses in this catalog and contact the Registrar's Office for additional information.

TUITION

Tuition is charged on a sliding scale according to the number of credit hours for which a student is enrolled and the student's place of legal residence.

ADDITIONAL FEES

Additional fees may be assessed as new programs are developed with special laboratory costs. These fees will always be kept to a practical minimum. A graduation fee is not assessed, but each student must pay for cap and gown rental.

SPECIAL FEES AND CHARGES

Laboratory Fee: $2 to $8 a semester (per lab).
Physical Education Activity Fee: $5 a semester.
Bowling Class Fee: Student pays cost of lane rental.
Private Music Lesson Fee:* $35 for one hour per week (maximum) for one course, $20 for one half hour per week.
Audit Fee: The charge for auditing a course is the same as if the course were taken for credit, except that a student service fee is not charged. Credit by Examination: Fee of $20 per examination per course.**

* Available only to music majors enrolled for 12 hours or more.
** This fee can change without prior notice.
### Tuition and Student Services Fee

#### Fall and Spring Sessions, 1980-81

<table>
<thead>
<tr>
<th>Semester</th>
<th>Dallas County*</th>
<th>Out-of-District**</th>
<th>Out-of-State, or Out-of-Country***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cr. Hours</td>
<td>Tuition Fee Total</td>
<td>Tuition Fee Total</td>
<td>Tuition Fee Total</td>
</tr>
<tr>
<td>1</td>
<td>25 1 26</td>
<td>25 1 26</td>
<td>40 1 41</td>
</tr>
<tr>
<td>2</td>
<td>25 2 27</td>
<td>40 2 42</td>
<td>80 2 82</td>
</tr>
<tr>
<td>3</td>
<td>25 3 28</td>
<td>60 3 63</td>
<td>120 3 123</td>
</tr>
<tr>
<td>4</td>
<td>26 4 32</td>
<td>80 4 84</td>
<td>160 4 164</td>
</tr>
<tr>
<td>5</td>
<td>35 5 40</td>
<td>100 5 105</td>
<td>200 5 205</td>
</tr>
<tr>
<td>6</td>
<td>42 6 48</td>
<td>120 6 126</td>
<td>240 6 246</td>
</tr>
<tr>
<td>7</td>
<td>49 7 56</td>
<td>140 7 147</td>
<td>280 7 287</td>
</tr>
<tr>
<td>8</td>
<td>56 8 64</td>
<td>160 8 168</td>
<td>320 8 328</td>
</tr>
<tr>
<td>9</td>
<td>63 9 72</td>
<td>180 9 189</td>
<td>360 9 369</td>
</tr>
<tr>
<td>10</td>
<td>70 10 80</td>
<td>200 10 210</td>
<td>400 10 410</td>
</tr>
<tr>
<td>11</td>
<td>75 10 85</td>
<td>205 10 215</td>
<td>440 10 450</td>
</tr>
<tr>
<td>12</td>
<td>80 10 90</td>
<td>210 10 220</td>
<td>480 10 490</td>
</tr>
<tr>
<td>13</td>
<td>85 10 95</td>
<td>215 10 225</td>
<td>520 10 530</td>
</tr>
<tr>
<td>14</td>
<td>90 10 100</td>
<td>220 10 230</td>
<td>560 10 570</td>
</tr>
<tr>
<td>15</td>
<td>95 10 105</td>
<td>225 10 235</td>
<td>600 10 610</td>
</tr>
<tr>
<td>16</td>
<td>100 10 110</td>
<td>230 10 240</td>
<td>640 10 650</td>
</tr>
<tr>
<td>17</td>
<td>105 10 115</td>
<td>235 10 245</td>
<td>680 10 690</td>
</tr>
<tr>
<td>18</td>
<td>110 10 120</td>
<td>240 10 250</td>
<td>720 10 730</td>
</tr>
<tr>
<td>19</td>
<td>115 10 125</td>
<td>245 10 255</td>
<td>760 10 770</td>
</tr>
<tr>
<td>20</td>
<td>120 10 130</td>
<td>250 10 260</td>
<td>800 10 810</td>
</tr>
</tbody>
</table>

#### Tuition Schedule for Summer Sessions, 1981

<table>
<thead>
<tr>
<th>Semester</th>
<th>Dallas County*</th>
<th>Out-of-District**</th>
<th>Out-of-State, or Out-of-Country***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cr. Hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>25</td>
<td>30</td>
<td>45</td>
</tr>
<tr>
<td>2</td>
<td>25</td>
<td>60</td>
<td>90</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
<td>90</td>
<td>135</td>
</tr>
<tr>
<td>4</td>
<td>40</td>
<td>120</td>
<td>180</td>
</tr>
<tr>
<td>5</td>
<td>50</td>
<td>150</td>
<td>225</td>
</tr>
<tr>
<td>6</td>
<td>60</td>
<td>180</td>
<td>270</td>
</tr>
<tr>
<td>7</td>
<td>64</td>
<td>194</td>
<td>310</td>
</tr>
<tr>
<td>8</td>
<td>68</td>
<td>188</td>
<td>350</td>
</tr>
<tr>
<td>9</td>
<td>72</td>
<td>192</td>
<td>390</td>
</tr>
</tbody>
</table>

*The Dallas County Community College District Board of Trustees has waived the difference in the rate of tuition for non-resident and resident students for a person or his dependent, who owns property which is subject to ad valorem taxation by the District.

**The DCCCD Board of Trustees defines an Out-of-District student as: (1) a student eighteen (18) years of age or older who resides in a Texas county other than Dallas County; (2) a student who is less than eighteen (18) years of age whose parents do not live in Dallas County.

***A non-resident student is hereby defined to be a student less than eighteen (18) years of age living away from his family and whose family resides in another state, or whose family has not resided in Texas for twelve (12) months immediately preceding the date of registration; or a student of eighteen (18) years of age who resides out of the state or who has not been a resident of the state twelve (12) months.

These definitions are intended as a guideline for the student. The student is referred to the Director of Admissions for a more complete definition.
REFUND POLICY

Student tuition and fees provide only a fraction of the cost of education. When students enroll in a class, they reserve places which cannot be made available to other students unless they officially drop the class during the first week of the semester. Also, the original enrollment of students represents a sizable cost to the District whether or not they continue in the class. Therefore, a refund is made only under the following conditions:

a. No 100% refund is granted unless College error is involved.
b. An 80% refund of tuition and fees may be obtained through the date noted in the college calendar. An 80% refund may be given through the first two class days of a six-week summer session or fast track semester. Refunds for Flexible Entry Courses are considered through completion of the second day of class from the date of enrollment.
c. No refund is given for advanced placement or College Level Examination Program (CLEP) tests.
d. A physician's statement must be submitted along with petitions when medical reasons account for withdrawal. Requests for refunds must be submitted before the end of the semester for which the refund is requested.
e. No refund of less than $4 for tuition and fees is made.

Refund Petition Forms are available in the Counseling Center and the Office of the Vice President of Student Services. Students who believe their refund requests are due to extenuating circumstances beyond the limits of the refund policy should state explicitly their circumstances on the Refund Petition Form. All requests for refunds are referred to the Refund Petition Committee. The Committee's recommendations are made to the Vice President of Student Services who notifies the student of the action taken. Refund checks normally require a minimum of one month from date of approval for processing.

RETURNED CHECKS

Checks returned to the Business Office must be paid with cash or a cashier's check within the time limits prescribed by the notification letter. An additional fee is added for returned checks. If a check for tuition payment is returned, the student's enrollment is considered void.

ADVICEMENT PROCEDURES

When students are admitted to the College, they are invited to an advisement session. This session may be conducted individually or in a group with a counselor. New students are expected to attend a Self-Assessment Lab or New Student Orientation for advisement. These sessions help students choose courses and programs of study. They are designed for students who are enrolling in college for the first time and who expect to attend full-time. The College may use tests and other means to counsel students about placement in courses and programs. Developmental studies are available for students who need skill development in reading, writing, or math. Test data, transcripts, previous work, and counseling may be used to determine placement in this program.

COURSE PREREQUISITES

Prerequisites are established for certain advanced courses to help assure that students have sufficient background in the subject area to maximize their probability of success in the course. The College recognizes that certain related life experiences may also provide necessary background for success in these courses. Therefore, the division chairperson is authorized to waive a course prerequisite.
CHANGE OF SCHEDULE
Students should be careful in registering to schedule courses only for the days and hours they can attend. Students requesting class changes should contact the Registrar’s Office during the time specified in the class schedule. No change is complete until it has been processed by the Registrar’s Office.

AUDITING A COURSE
Any person 18 years of age or older may, with the consent of the instructor, enroll in a course as an “audit student.” Audit students may attend classes but do not take examinations or receive credit for the course unless they enroll in the course again as a regular student. The charge for auditing a course is the same as for taking it for credit, except that a student services fee is not assessed. Procedures for auditing a course are administered by the Registrar. No audits are approved prior to the first day of the second week of classes in the fall or spring semester. The deadline for auditing is the twelfth class day for a fall or spring semester and the fourth class day for a summer session. Most courses with laboratories may not be audited.

TRANSFER OF CREDITS
Transfer of credit is generally given for all passing work completed at accredited colleges and universities. The Registrar’s Office evaluates all transfer credit. Transfer students admitted with a grade point deficiency cannot graduate until the deficiency is cleared by earning additional grade points. Credits earned in military service schools or through the U.S. Armed Forces Institute are reviewed by the Registrar and credit granted if applicable.

DROPPING A COURSE OR WITHDRAWING FROM COLLEGE
To drop a class or withdraw from the College, students must obtain a drop or withdrawal form from a counselor and follow the prescribed procedure.

ADDRESS CHANGES AND SOCIAL SECURITY NUMBER
Each student has the responsibility to inform the Registrar’s Office of changes in name or address. Each applicant for admission is asked to furnish a Social Security number. This number doubles as a student identification number and insures accuracy of student records. If a student does not have a Social Security number, another number is assigned for record keeping.
III. ACADEMIC INFORMATION

DEGREE REQUIREMENTS
The College confers the Associate in Arts and Sciences Degree upon students who have completed all general and specific requirements for graduation. Each degree candidate must earn the last 15 hours as a resident student in the District colleges or accrue 45 hours in residence. The degree is granted by the District college at which the student took the last 15 hours or where the majority of hours were accrued. Correspondence work must be approved by the Registrar for graduation credit. No more than one-fourth of the work required for any degree or certificate may be taken by correspondence.

ASSOCIATE IN ARTS AND SCIENCES DEGREE
Students must have a minimum of 60 credit hours and a grade point average of at least "C" (2.0) to receive the Associate in Arts and Sciences Degree. These 60 hours may be earned at any District college. They must include:
• English 101-102 plus an additional 6 hours of English for a total of 12 credit hours in English.
• 8 credit hours in Laboratory Science (Music majors are exempt from this requirement. Check listing under subject field).
• 12 credit hours of History 101-102 and Government 201-202. No substitutions are allowed. Only 3 credit hours of history or 3 credit hours of government may be earned through credit by examination. CLEP credit may not be used to meet this requirement.
• 3 credit hours in Humanities, selected from Theater 101, Art 104, Music 104, Humanities 101 or Philosophy 102. A maximum of 4 physical education activity hours may be counted as credit toward requirements for graduation. Courses numbered 99 and below cannot be included to meet degree or certificate requirements. Music 199, Art 199, and Theatre 199 may not be counted toward the 60 hour minimum. All students planning to transfer to a four-year institution may complete their four semester requirements in physical education during their freshman and sophomore year. Students are urged to consult the catalogs of the institutions to which they may transfer for their special requirements. These catalogs should be used by students and advisors in planning programs.

ASSOCIATE IN APPLIED ARTS AND SCIENCES DEGREE AND CERTIFICATE CAREER PROGRAMS
Students must have a minimum of 60 credit hours and a grade point average of at least "C" (2.0) to receive the Associate in Applied Arts and Sciences Degree. For some programs, more than 60 credit hours are required. All prescribed requirements for the specific Technical/Occupational Program in which the student is enrolled must be completed. These programs may also have other criteria in addition to degree requirements. See the Technical/Occupational Programs section of this catalog for a more detailed explanation. The requirements for certificates are detailed under specific programs listed in the Technical/Occupational Programs section of this catalog. A "C" (2.0) grade point average is required.
A maximum of 4 physical education activity hours may be counted as credit toward graduation. Courses numbered 99 and below may not be included to meet degree or certificate requirements. Music 199, Art 199, and Theatre 199 may not be counted toward the 60-hour minimum.
PROCEDURE FOR FILING DEGREE AND CERTIFICATE PLANS AND FOR GRADUATION

Students should request a degree plan from the Registrar's Office at the end of their freshman year. Official transcripts of all previous college work must be on file at the time of request for degree plans. Students following a one-year certificate program should request an official plan during the first semester of their enrollment. Application for the granting of the degree or certificate should be filed in the Registrar's Office prior to the deadline announced by the Registrar.

An annual graduation ceremony is held at the conclusion of the spring semester. Participation is ceremonial only and confers on a student no rights to a degree. January and August graduates may participate in the next commencement if they desire, but they are not required to do so. The Registrar's Office should be notified if the student wishes to participate. Instructions for graduation are mailed to all candidates thirty days prior to commencement.

Candidates for any degree or certificate must meet the requirement set forth in the catalog for the year of first enrollment unless they elect to graduate under the requirements of a later catalog. Candidates must indicate the catalog of their choice when they file a degree or certificate plan.

RECOMMENDED ACADEMIC LOAD

The maximum academic load is 18 credit hours of course work per semester or five classes plus physical education. Students must receive permission of the Registrar or the appropriate college official to carry a heavier load. Employed students carrying a full load (12 credit hours or more) should not work more than twenty hours per week. Students working more hours should reduce their academic load proportionately. The recommended load limit for day or evening students who are employed full-time is 6 credit hours.

The recommended load limit in a six-week summer session is 6 credit hours. A total of 14 credit hours is the maximum that may be earned in any twelve-week summer period.

CLASS ATTENDANCE

Students are expected to attend regularly all classes in which they are enrolled. Students have the responsibility to attend class and to consult with the instructor when an absence occurs. Instructors are responsible for describing attendance policy and procedures to all students enrolled in their classes. Generally, when absences reach a total equal to the number of credit hours for the course, the instructor files a drop for excessive absences. The student is notified by a letter from the Registrar's Office sent to the student's address of record. The effective drop date is stated in the letter. A student who desires to remain in class must contact the instructor within the time specified in the instructor's letter. With the instructor's approval, a student may be reinstated. Students dropped for excessive absences prior to the published withdrawal deadline receive a grade of "W." Students who do not attend class during the first twelve days of a long semester or the first four days of a summer session are dropped.
SCHOLASTIC STANDARDS:
GRADES AND GRADE POINT AVERAGE

Final grades are reported for each student for every course according to the following grading system:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Interpretation</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4 points</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3 points</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
<td>2 points</td>
</tr>
<tr>
<td>D</td>
<td>Poor</td>
<td>1 point</td>
</tr>
<tr>
<td>P</td>
<td>Progress</td>
<td>Not Computed</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
<td>0 points</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>Not Computed</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawn</td>
<td>Not Computed</td>
</tr>
<tr>
<td>CR</td>
<td>Credit</td>
<td>Not Computed</td>
</tr>
</tbody>
</table>

Grade points earned for each course are determined by multiplying the number of points for each grade by the number of credit hours the course carries. For example, a student who takes a three hour course and earns an "A" accumulates 12 grade points for that course. A student's grade point average is computed by adding the total grade point values for all courses and dividing by the number of credit hours attempted during the same period. For example, a student who takes the following courses and earns the following grades has a grade point average 2.93:

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Grade</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-hour course</td>
<td>A</td>
<td>8</td>
</tr>
<tr>
<td>3-hour course</td>
<td>B</td>
<td>9</td>
</tr>
<tr>
<td>4-hour course</td>
<td>B</td>
<td>12</td>
</tr>
<tr>
<td>3-hour course</td>
<td>C</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Credit Hours: 12
Total Grade Points: 35

35 ÷ 12 = 2.93

For repeated courses, only the latest grade earned is included in cumulative grade point averages. Transcripts do, however, indicate all work completed in the District, even if the latest grade is lower than a preceding grade. When a student withdraws from a course being repeated, the cumulative grade point average is calculated by using the immediately preceding grade in the same course. An incomplete grade "I" may be given when an unforeseen emergency prevents a student from completing the work in a course. The "I" must be converted to a performance grade (one with a grade point value) within ninety days after the first day of classes in the subsequent semester. If the work is not completed after ninety days, the "I" is converted to a performance grade. An Incomplete Contract is used to convert an incomplete grade to a performance grade and states the requirements for the satisfactory completion of the course. The Incomplete Contract must be agreed upon and signed by the instructor, the student and the division chairperson and submitted with the final grade report. When an Incomplete Contract must be submitted without the student's signature, the instructor must include a statement indicating that the student is aware of and in agreement with the contract. The "P" grade (Progress) may be awarded when a student has attended class regularly and the instructor has evidence that the student has made significant progress toward meeting course objectives, but the student has not met those objectives at a level appropriate for a performance grade (A-F). "P" grade may be computed as an "F" grade at some receiving colleges and universities. To earn credit for a course in which the student has a "P" grade, the student must re-enroll in that course.

ACCEPTABLE SCHOLASTIC PERFORMANCE

College work is measured in terms of credit hours. The number of credit hours offered for each course is given with the course description. Acceptable scholastic performance is the maintenance of a grade point average of 2.0 (on a 4.0 scale) or better. Students may not be graduated from any degree or certificate program unless they have a cumulative grade point average of 2.0 or better. Grade points and hours earned in courses numbered 99 and below are included...
in computing a student’s scholastic standing, but they cannot be used to meet graduation requirements.

HONORS
Full-time students who complete at least 12 hours of credit and earn a grade point average of 3.00-3.49 are listed on the College’s Honor Roll. Full-time students who complete at least 12 hours of credit and average 3.50-4.00 are placed on the Vice President’s Honor List. Part-time students who take 6-11 credit hours and maintain a 3.5 or higher grade point average are placed on the Academic Recognition List. The Honor Roll, the Vice President’s Honor List, and the Academic Recognition List are published each semester.

SCHOLASTIC PROBATION AND SCHOLASTIC SUSPENSION
Full-time and part-time students who have completed a total of 12 credit hours are placed on probation if they fail to maintain a 2.0 cumulative grade point average. Students may be removed from probation when they earn a 2.0 cumulative grade point average. Students on scholastic probation who achieve either a cumulative grade point average of 1.5 or above or a previous semester grade point average of 2.0 or above are continued on scholastic probation. Students previously enrolled in college who are placed on scholastic probation are encouraged to enroll in a Human Development Course. Under special circumstances this course may be required for probationary students. Students on probation who do not meet the requirements for continued probation are placed on scholastic suspension. Students on suspension for the first time may not register for one regular semester. For subsequent suspensions, students may not register for two regular semesters. Suspended students must file a petition for readmission. The conditions for readmission are established and administered by the Vice President of Student Services.

GRADE REPORTS
A grade report is issued to each student at the end of each semester and gives the grade earned in each course that semester. A transcript is the official record of college work and gives all grades earned throughout the college career. Transcripts are withheld from students who have not met financial or other obligations to the College. (See Student Codes and Expectations: “Financial Transactions with the College.”)

WAIVING OF SCHOLASTIC DEFICIENCY
Any student in an academic transfer program may transfer to a career program. In such a case, the student may choose to have any grades below “C” disregarded. However, the procedure for disregarding low grades may only be exercised while the student is in a career program. If the student changes to an academic transfer program, the original
conditions of the academic transfer program must be followed, including the calculation of a cumulative grade point average of all college credits earned. The procedure for waiving scholastic deficiency applies both to students of this college and to students transferring from other institutions. The student who wishes to use this opportunity should state his or her intentions in writing to the Registrar prior to registration. The student should also inform a counselor during the pre-registration advisement session.

**TRANSCRIPTS OF CREDIT**

Upon the written request of a student, the Registrar's Office will send an official transcript to the individual student or to any college or agency named. The transcript may be withheld, however, until the student has settled all obligations with the College. The first request for a transcript is filled without charge. Later requests are filled for a $1 charge.

**CLASSIFICATION OF STUDENTS**

Freshman:
A student who has completed fewer than 30 credit hours.

Sophomore:
A student who has completed 30 or more credit hours.

Part-time:
A student carrying fewer than 12 credit hours in a given semester.

Full-time:
A student carrying 12 or more credit hours in a given semester.

**INSTRUCTORS**

Instructors are not only educators from this college and other institutions of higher learning but also professional men and women from businesses, government, and the community. All share with students the knowledge and practical insight gained from years of experience in successful careers and avocations.

**LEARNING RESOURCES CENTER AND LIBRARY OBLIGATIONS**

The Learning Resources Center (LRC) supports classroom instruction. It is a place where students can find books and non-print materials to supplement classroom learning or where—if they choose—they can actually take a course. The LRC helps students to learn in their own ways and at their own speeds. It provides books, slides, tapes, and films. The College has a growing collection of books on a wide variety of general information areas to support Academic Transfer Programs and Technical/Occupational Programs. In addition, there are special collections of career materials and pamphlets. The library also subscribes to current popular and technical periodicals as well as to area and national newspapers.

Classroom Resource Services is a part of the LRC and supports the instructional program. It is responsible for all campus audio-visual equipment and non-print materials used in the classroom or by individual students and for the production of instructional materials.

Willful damage to library materials (or property) or actions disturbing users of the library may lead to the loss of library privileges. Damage cases are referred to the appropriate authorities for further action. All books and other library materials must be returned before the end of each semester. No transcript is issued until the student's library record is cleared.
IV. EDUCATIONAL AND SPECIAL OPPORTUNITIES

ACADEMIC TRANSFER STUDIES
Students who desire to earn a bachelor's degree may complete the first two years at this college before transferring to a four-year institution. The academic transfer curriculum is coordinated with senior colleges and universities to facilitate the transfer of credits to these schools.

TECHNICAL/OCCUPATIONAL PROGRAMS
Students who desire to enter a chosen field as a skilled employee after one or two years of college work may enroll in one of the many Technical/Occupational Programs offered by the College. Technical/occupational courses carry college credit leading to a Certificate of Completion or an Associate in Applied Arts and Sciences Degree. These programs are established only after studies verify that employment opportunities will exist at the time the student completes training. The College attempts to match the community's labor requirements with the ambitions and goals of its students. This realistic approach to occupational education is made possible by the excellent cooperation of local industry, business, and public agencies. They increasingly depend on DCCC D colleges to supply skilled personnel. A continuous liaison is maintained with prospective employers to help place graduates and to keep the training programs current with job requirements. Recommendations for adding new programs to the College offerings are made periodically and are based on community studies which identify additional training needs.

CREDIT BY EXAMINATION
Students who believe they already meet the requirements of a course by experience or previous training may request credit by examination. The Counseling Center has a list of courses available through this method. The examination may be a section of the College Level Examination Program (CLEP), Advanced Placement Exams (CEEB), or a teacher-made test, depending on the course. The student pays an examination fee of $20 per course examination. This fee must be paid prior to taking the examination and is not refundable. The colleges credit by examination program is coordinated with similar programs of four-year institutions. Final acceptance of credit by examination for specific degree purposes is determined by the degree-granting institution. Students planning to use credit by examination to meet degree requirements at other institutions should check the requirements of the receiving institution. Students must be currently enrolled at this college to receive credit by examination. Students may not request credit by examination in courses for which they are currently enrolled. Students may earn as many credits through examination as their ability permits and needs require, but the last 15 credit hours required for graduation in any degree or certificate program must be earned in residency. Credit by examination may be attempted only one time in any given course, and a grade of 'C' or better must be earned in order for credit to be recorded. A student may use credit by examination for only three (3) credit hours to apply toward the degree requirements in history and only three (3) credit hours to apply toward the degree requirements in government.
NON-TRADITIONAL LEARNING

The College is committed to serve students and the community in the most effective manner possible while maintaining high standards of education. Students learn in a variety of ways and through a multitude of experiences, therefore, the College shall assess these learning activities and grant equivalent college credit according to the following guidelines:

1. A student must be currently enrolled in the College to receive equivalent credit for non-traditional learning.

2. Credit may be granted for non-traditional learning as it relates to specific courses offered by the college assessing the learning experiences. Credit will be awarded on a course by course basis only.

3. A student is required to complete at least 12 semester hours of course work with the District prior to awarding of equivalent credits for non-traditional activities. The “CR” grade is awarded for non-traditional course work accepted for credit.

4. Credit may be granted for occupational courses approved by the Texas Education Agency.

5. The number of equivalent credits awarded may not exceed the total number of credits required for the student’s specific associate degree objective. No graduation, residency, degree or program requirements will be waived as a result of credits earned as provided by this policy.

Students desiring to take advantage of this opportunity should consult with the College Advocate For Non-traditional Learning for additional information. Students making application for assessment of prior learning through life experiences are required to enroll in a Human Development Course to facilitate the process.

FLEXIBLE ENTRY COURSES

In keeping with its commitment to meet individual educational needs, the College makes available Flexible Entry Courses. These courses are self-paced, allowing students to work at their own speed. Students are cautioned to be aware of the time specified by the College as to when the course requirements need to be completed. Students may register for Flexible Entry Courses during the pre-semester registration periods or at regular times during the semester. Students should check with the Registrar to determine times for registration in these courses. Approval must be obtained for enrollment.

TELECOURSES

Students may take a variety of college credit courses via television. The schedule of telecourses varies each semester and may include courses in anthropology, astronomy, business, earth science, ecology, biology, English, economics, government, history, humanities, psychology, religion, and sociology. Content and credit for these courses are the same as for similar courses taken on campus. Telecourses include the viewing of television programs on KERA/Channel 13, plus reading, study guide and writing assignments. Students come to the campus for an orientation session at the beginning of the semester, for one to four discussion meetings, for three or four tests, and for laboratory sessions in science courses having laboratories. These campus visits are normally scheduled for a time convenient to the students. Field trips are required in some courses. Telecourses may be taken in conjunction with on-campus courses or by persons who are not enrolled in any on-campus courses. Students may register for telecourses by mail or through the regular on-campus registration process.
COOPERATIVE WORK EXPERIENCE
EDUCATION

Students may enrich their education in certain career programs by enrolling in Cooperative Work Experience Courses. These courses allow students to combine classroom study with on-the-job experience at training stations approved by the College. Students must have completed at least two courses in their occupational major to be eligible for Cooperative Work Experience.

A full-time student (carrying 12 credit hours or more) must take two courses which relate to the student’s work experience, and a maximum of 4 credit hours may be in Cooperative Work Experience. Part-time students (carrying under 12 credit hours) may take a maximum of 4 credit hours of work experience. They must be concurrently enrolled in a course related to their work experience (or a support course to be applied toward their occupational degree or certificate).

To enroll in a Cooperative Work Experience Course, students must have the approval of their instructor/coordinator. Course credit is awarded at the rate of 1 credit hour for each 80 hours of approved work experience during the semester. The 80 hours is approximately 5 hours per week during a fall or spring semester.

Additional information regarding Cooperative Work Experience may be secured from the Cooperative Education Office. The Technical/Occupational Programs having work experiences are indicated in the Course Descriptions Section of this catalog.

INTERNATIONAL STUDIES

Selected programs combine learning experiences with foreign travel. This travel-study is under the direct supervision of regular faculty members of this college or other colleges in the District. These courses support specific learning objectives, and college credit may be earned by students who successfully meet the objectives.

HUMAN DEVELOPMENT

In Human Development Courses students can explore the relationship between meaningful education and some of the dilemmas or questions commonly brought to college. "Why learn" and "how to learn" are put in a perspective of "who is to learn." These courses are taught by counselors and other-qualified instructors. They offer academic credit which transfers to most surrounding four-year institutions. The courses in human development enhance the total curriculum and blend in with the total concept of the community college.

EVENING AND WEEKEND COLLEGE

In dynamic, growing communities such as those encompassing this college, people have continuing educational needs, yet many of them have work schedules and personal involvements which make it impossible for them to attend college during normal daytime hours. For this reason, evening and weekend college courses offer the same broad spectrum of programs available for full-time day students. Courses are offered both on campus and at selected community locations. Evening and weekend courses offer high quality instruction, excellent facilities, and a variety of student services, including counseling, health, library, bookstore, food services, financial aid, and recreation.

Instructors are selected from the College's own full-time staff, from outstanding Dallas area educators, and from other professional specialists interested in teaching. To enroll in the evening and weekend courses, contact the Director of Admissions. Information may also be obtained by contacting the Extended Day Administration Office.
SERVICEMEN’S OPPORTUNITY COLLEGE

In cooperation with other community colleges in the United States, colleges of the Dallas County Community College District participate in the Servicemen’s Opportunity College. Through this program, students can plan an educational experience regardless of location requirements of the military.

For further information, contact the Admissions Office.

COMMUNITY SERVICE PROGRAMS

Community Service Programs are an important element in the concept of the community college. They greatly expand the available opportunities for persons of all ages to participate in college programs and activities. And courses are offered throughout the year to meet a variety of community needs.

Community Service Programs are offered in the following categories:

- Continuing education opportunities for individuals who want to broaden their knowledge or learn new skills for different occupational fields.
- Cultural and community enrichment studies for groups and individuals seeking to enhance their quality of life.
- Personal entertainment and recreation for individuals wishing to explore new activities for personal growth and enjoyment.
- Resources for industry, government and professional groups needing to supplement their own training and development programs.

Community Service Programs offer short courses, seminars, workshops, and institutes. The type of course offering is determined by the nature of the material, instructional approach, and needs of the requesting individuals or organizations.

Generally there are no entrance requirements or examinations. Some courses may have age restrictions or may require a certain amount of experience for enrollment. Admission is on a first-come, first-served basis. All one need do to register is fill out the form and pay the fee. Classes and activities are held on campus and in a variety of locations throughout the community. Most classes and activities are conducted on weekday evenings, but many are also held on weekdays and weekends.

Community Service Program instructors are professional men and women from the community who have proven experience in their fields. Their objective is to share their knowledge, insight, and experience, and to insure that students acquire a greater perspective of the subject and have a meaningful experience.

Although most Community Service Courses do not require textbooks, the nature of some special offerings do require the purchase of books or supplies. Students are notified of the need for texts and other materials at the first meeting.

Library privileges are available for Community Service students during the term they are registered. Contact the Community Service Office for further information.

CONTINUING EDUCATION UNITS (CEU’S)

Although no college credit is awarded for Community Service class participation, Continuing Education Units are transcripted for successful completion of most courses. The CEU, by nationwide definition, is “ten contact hours of participation in an organized continuing adult education or extension experience under responsible sponsorship, capable direction, and qualified instruction.”

The CEU is a means of recording and accounting for the various continuing education activities one accumulates over a period of years.
V. STUDENT SERVICES

The College is committed to providing opportunities for each individual student's total educational development. Specific student services are integrated with the instructional program of the College to address individual needs for educational, personal, social, cultural, and career development.

STUDENT DEVELOPMENT AND ACTIVITIES

The Student Development Office plans and presents programs and activities for the general campus population. Programs often are coordinated with the various instructional divisions to provide students with valuable educational experiences. Many programs and activities are offered to help the student develop life enriching skills. Other programs provide students with interesting and entertaining ways to spend leisure time on campus. The goal of all programs is to facilitate the development of cultured and well-rounded human beings. Student participation in the operation of programs is highly encouraged.

GUIDANCE AND COUNSELING SERVICES

Individuals may find the counseling services helpful as they make plans and decisions in various phases of their development. For example, counselors can assist students in selecting courses of study, determining transferability of courses, choosing or changing careers, gaining independence, and confronting problems of daily living. Confidential assistance is provided by the counseling staff in the following areas:

1. Career counseling to explore possible vocational directions, occupational information, and self-appraisals of interest, personality and abilities.

2. Academic advisement to examine appropriate choices of courses, educational plans, study skills, and transferability of courses.

3. Confidential personal counseling to make adjustment and life decisions about personal concerns.

4. Small group discussions led by counselors and focusing on such areas as interpersonal relationships, test anxiety, and assertiveness. Counselors will consider forming any type of group for which there is a demand.

5. Standardized testing to provide additional information about interests, personality and abilities needed in planning and making decisions.

6. Referral sources to provide indepth assistance for such matters as legal concerns, financial aid, tutoring, job placement, medical problems, or psychological problems.
TUTORING SERVICES
For students needing special temporary assistance in course work, tutoring services are available. Students are encouraged to seek services through self referral as well as through instructor referral.

TESTING AND EVALUATION CENTER
The Testing Center administers various tests. Types of tests include:
1. Psychological tests of personality, vocational interests, and aptitudes.
2. Academic tests for college instructional programs. Many courses are individualized and self-paced, permitting students to be tested at appropriate times.
3. Diagnostic tests for appropriate class placement. These tests are very strongly recommended to insure student success.
4. Tests for selected national programs.

HEALTH CENTER
Health is the most fundamental human need, and a high standard of physical and mental health is a basic right of every human being. The Health Center helps maintain and promote the health of students, faculty, and staff. Services provided by the Health Center include education and counseling about physical and emotional health, emergency first aid treatment, referral services to community agencies and physicians, free tuberculin skin tests and other screening programs, and programs of interest to students and faculty.
Students are encouraged to make an appointment with the nurse to discuss specific health problems. No information on a student’s health is released without written permission from the student, except as required by law.

SERVICES FOR HANDICAPPED STUDENTS
The Services for Handicapped Students Office offers a variety of support services to enable handicapped students to participate in the full range of college experiences. Services are arranged to fit the individual needs of the student and include interpreters, notetakers, tutors, mobility assistants, loan of wheelchairs, readers for the blind, and tape recorders. Handicapped students should contact the office at least one month before registration. The office will provide students with an orientation session and registration information. For additional information, contact the Services for Handicapped Students Office or the Counseling Center.

STUDENT ORGANIZATIONS
Information about participation in any organization may be obtained through the Student Development Office. The development of student organizations is determined by student interest. Categories of organizations include:
- Co-curricular organizations pertinent to the educational goals and purposes of the College.
- Social organizations to provide an opportunity for friendships and promote a sense of community among students.
- Service organizations to promote student involvement in the community.
- Pre-professional and academic organizations to contribute to the development of students in their career fields.
INTERCOLLEGIATE ATHLETICS
Participation on athletic teams is voluntary on a non-scholarship basis for students who meet requirements established by the Metro Athletic Conference. For more information regarding eligibility, rules, standards, and sports offered, contact the Physical Education Office.

INTRAMURAL SPORTS
The College provides a campus intramural program for students and staff and encourages participation. For additional information contact the intramural director in the Physical Education Office or the Student Development Office.

HOUSING
The College does not operate dormitories of any kind or maintain listings of available housing for students. Students who do not reside in the area must make their own arrangements for housing.

CAMPUS SECURITY
Campus security is required by State law to "protect and police buildings and grounds of state institutions of higher learning." Because all laws of the state are in full force within the campus community, specially trained and educated personnel are commissioned to protect College property, personal property, and individuals on campus. Security officers are certified peace officers. They have the power to enforce all Texas laws and rules, regulations, and policies of the College, including the Code of Student Conduct.
VI. FINANCIAL AID

Students who need financial aid to attend college can apply for grants, scholarships, loans, or job opportunities. These aid opportunities are provided in the belief that education should not be controlled by the financial resources of students.

Students needing financial assistance are encouraged to complete an application well in advance of registration for the semester they wish to attend. Early application allows the Financial Aid Office to prepare a realistic financial aid package.

Some of the grant, scholarship, loan and job programs available to students are outlined in the following paragraphs. Contact the Financial Aid Office for detailed information about any program.

**BASIC EDUCATIONAL OPPORTUNITY GRANT (BEOG)**

The Basic Grant is a federally funded program designed to help undergraduate pre-baccalaureate students continue their education. The purpose of this program is to provide eligible students with a “foundation” of financial aid to assist with the costs of attending college.

All students applying for financial assistance through the College must apply for a Basic Grant. Other types of financial aid may be awarded if the student applies and qualifies. Eligibility for Basic Grant is based on “financial need” and satisfactory academic progress. Applications and additional information concerning the Basic Grant Program are available in the Financial Aid Office and in the counseling offices of most high schools.

The application process takes approximately four to six weeks. In response to the Basic Grant application, a Student Eligibility Report (SER) will be mailed directly to the student. The student should immediately review the SER to make sure it is correct and bring it to the Financial Aid Office. The exact amount of the Basic Grant award will depend upon the eligibility index on the SER and the number of hours for which the student enrolls. In order to be eligible, a student must enroll for at least 6 credit hours for each semester.

**SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (SEOG)**

The SEOG is a Federal program to help pre-baccalaureate students of exceptional need. The amount of a SEOG award depends on the individual student's needs, the total number of applicants, and funds available. The SEOG must be matched by other sources of aid, such as BEOG, College Work/Study Program, private scholarships, etc. To be eligible, students must enroll for at least 6 credit hours, make satisfactory progress toward their educational goal and have financial need. Students must apply each year for the SEOG.

**TEXAS PUBLIC EDUCATIONAL GRANT (TPEG)**

The TPEG is a State program to assist students attending state-supported colleges. To be eligible, students must make satisfactory progress toward their educational goal and have financial need according to an approved needs analysis system. Grants are awarded by eligibility on a first-come, first-served basis. Students must apply each year for the TPEG.

**TEXAS PUBLIC EDUCATIONAL GRANT STATE STUDENT INCENTIVE GRANT (TPEG-SSIG)**

The TPEG-SSIG is a State program. To qualify, students must enroll and remain in 12 credit hours per semester, make satisfactory progress toward their educational goal, be enrolled in an undergraduate course of study (not possess a bachelor's or graduate degree), be a Texas resident, and have financial need. Grants are awarded by eligibility on a first-come, first-served basis. Students must apply each year for the TPEG-SSIG.
HINSON-HAZLEWOOD COLLEGE
STUDENT LOAN PROGRAM

The Hinson-Hazlewood College Student Loan Program is a state operated, federally insured student loan program. To qualify, students must enroll on at least a half-time basis (6 credit hours in the fall or spring semester), be a Texas resident, and demonstrate financial need. Students must apply for all other types of aid before applying for this loan, and they must apply each year to renew the loan.

Repayment begins nine to twelve months after the student ceases to be enrolled for at least one-half the normal course load. Repayment may extend up to 10 years, but a minimum payment of $30 a month is required. The interest rate is 7% a year (adjusted).

SOCIAL SECURITY ADMINISTRATION

The Social Security Administration offers benefits to students who meet its criteria. The Admissions Office acts as liaison between students and the Social Security Administration. Students need to contact the regional Social Security Administration Office regarding eligibility.

BUREAU OF INDIAN AFFAIRS

The Bureau of Indian Affairs offers educational benefits to American Indian students. Students need to contact the regional Bureau of Indian Affairs Office regarding eligibility.

Bureau of Indian Affairs
1100 Commerce · Room 2C44
Dallas, Texas 75202

VOCATIONAL REHABILITATION

The Texas Rehabilitation Commission offers assistance to students who are vocationally handicapped as a result of a physical or mental disability. For further information, contact the closest office of the Texas Rehabilitation Commission listed in the telephone white pages under "Texas-State of" and "Rehabilitation Commission:"

VETERANS' BENEFITS PROGRAM

The Veterans' Benefits Program is coordinated by the Veterans' Affairs Office of the College. Services of this office include counseling the veteran concerning benefits, Veterans Administration loans, Veterans Administration work study programs, financial problems, career counseling, and other areas related to the veteran's general welfare.

When testing indicates that a veteran should enroll in developmental courses such as reading, writing, or math, the student may pursue these courses with no charge to his or her benefits. Tutoring services are also available to the veteran who is having learning difficulties in one or more subjects. The veteran student should be aware of some of the Veterans Administration guidelines. Violation of these guidelines causes complications in receiving monthly benefits or loss of those benefits.

1. Class attendance is mandatory. Failure to attend class results in suspension from class.

2. A veteran student who plans to enroll in developmental courses must be tested and show a need in basic skills before enrolling in these courses.
3. A veteran student enrolled in television courses must be pursuing more on-campus credit hours than hours taken by television.

4. A veteran student who has successfully completed credit hours at another college or university must submit a transcript from that college or university before applying for VA benefits. The transcript is evaluated and credit granted when applicable.

5. A veteran student must enroll in courses required for a degree program. Information on degree requirements may be obtained from the Registrar's Office.

6. A veteran student who withdraws or who is dropped from all courses attempted during a semester is considered as making unsatisfactory progress by the VA and may lose future benefits. A veteran student must also maintain a satisfactory grade point average as outlined in the catalog.

The above VA regulations are subject to change without notice. Students should contact the Veterans' Affairs Office in order to be aware of current regulations and procedures.

HAZLEWOOD ACT

Under the Hazlewood Act certain veterans who have exhausted remaining educational benefits from the Veterans Administration can attend Texas state-supported institutions and have their tuition and fees waived. To be eligible, students must have been residents of Texas at the time they entered the service, have an honorable discharge and must now be residents of Texas. To apply, students must submit a Hazlewood Act application and a copy of their discharge papers to the Financial Aid Office.

STUDENT EMPLOYMENT

The College Work/Study Program is a Federal program to assist students through jobs both on and off campus. To be eligible, students must demonstrate financial need, be enrolled in 6 or more credit hours, and make satisfactory progress toward their educational goal. Students may work a maximum of 20 hours per week. The Student Employment Program provides some jobs on campus for students who do not meet the financial need requirement of the College Work/Study Program. Students must be enrolled in 6 or more credit hours and make satisfactory progress toward their educational goal. Students may work a maximum of 20 hours per week. The Placement Office helps any student who wants on-campus employment. This part-time employment may be in the form of on-campus placement, work-study programs, and off-campus student assistantships. See also the "Job Placement" section in this catalog.

ACADEMIC PROGRESS REQUIREMENT

Students who receive financial aid are required by government regulations to make measurable progress toward the completion of their course of study.

The 2.0 Grade Point Average (GPA) Requirement

a. Students funded for full-time course loads must complete a full-time course load with a minimum GPA of 2.0 each semester an award is made.

b. Students funded for part-time course loads are expected to achieve a minimum GPA of 2.0 on all courses funded each semester. No drops or withdrawals are allowed.

Academic Compliance

a. If the 2.0 GPA requirement is not met once, a warning notice is mailed to the student. Transfer students entering the District on probation are considered to be in this category.

b. If the 2.0 GPA requirement is not met twice, no award is made for six months.

c. A third chance may be approved at the discretion of the Financial Aid Director after the six-month suspension period. The student must sign acknowledgement of conditional approval before the award is
made. If the 2.0 GPA requirement is not met three times, no award is made for two years.

d. A fourth chance may be approved at the discretion of the Financial Aid Director after the two-year suspension period. If approved, the student must sign a warning notice before the award is made.

Students may appeal the Financial Aid Director’s decisions to the Vice President of Student Services. The appeal must be in writing.

The Financial Aid Office reserves the right to review and cancel awards at any time because of (1) failure to maintain an acceptable academic record, (2) failure to meet the minimum course load requirements, (3) changes in the financial status of the student or the student’s family, or (4) failure by the student to meet any regulations governing the program from which the student is receiving aid. It is understood that the student is aware of the conditions under which aid is offered and agrees to meet all requirements.

SHORT-TERM LOANS

The College offers students short-term loans. Students may borrow up to $100 at no interest if funds are available. The loan must be repaid within sixty to ninety days or before the end of the semester in which the money is borrowed.

JOB PLACEMENT SERVICES

The Placement Office is available to assist any student in job placement, either on or off-campus. Job openings are listed in the Placement Office. The Placement Office also works directly with students and community employers to locate jobs and students qualified to fill them. Career placement assistance is available for students nearing the end of their course of study. In addition to listing full-time career opportunities, the Placement Office also assists students in developing resumes, preparing for interviews, and developing successful job search strategies.
VII. STUDENT CODES AND EXPECTATIONS


a. Purpose

(1) A student at a college of the Dallas County Community College District neither loses the rights nor escapes the responsibilities of citizenship. He is expected to obey both the penal and civil statutes of the State of Texas and the Federal Government and the Board of Trustees rules, college regulations and administrative rules. He may be penalized by the college for violating its standards of conduct even though he is also punished by State or Federal authorities for the same act.

(2) This code contains regulations for dealing with alleged student violations of college standards of conduct in a manner consistent with the requirements of procedural due process. It also contains descriptions of the standards of conduct to which students must adhere and the penalties which may be imposed for the violation of those standards.

b. Scope

(1) This code applies to individual students and states the function of student, faculty, and administrative staff members of the college in disciplinary proceedings.

(2) The College has jurisdiction for disciplinary purposes over a person who was a student at the time he allegedly violated a Board policy, college regulation, or administrative rule.

c. Definitions

In this code, unless the context requires a different meaning:

(1) "Class day" means a day on which classes before summer session final examinations are regularly scheduled or on which semester or summer session final examinations are given.

(2) "Participation in meetings" means one which results in suspension or expulsion for the semester or summer session.

(3) "Disciplinary proceedings" means one which results in suspension or expulsion for the semester or summer session.

(4) "Chancellor" means the Chancellor at the Dallas County Community College District:

(5) "Registrar" means a person who was a student at the time he allegedly violated a Board policy, college regulation, or administrative rule.

(6) "Student" means a person enrolled in a college of the Dallas County Community College District.

(7) "Complaint" is a written summary of the essential facts constituting a violation of a Board policy, college regulation, or administrative rule.

(8) "Protest" means a written summary of the essential facts constituting a violation of a Board policy, college regulation, or administrative rule.

(9) "Board" means the Board of Trustees, Dallas County Community College District.

(10) "Chancellor" means the Chancellor of the Dallas County Community College District.

(11) "Minor violation" means one which results in suspension or expulsion for the semester or summer session.

(12) "Major violation" means one which results in suspension or expulsion for the semester or summer session.

2. Standards of Conduct

a. Basic Standard: The basic standard of behavior requires a student to:

(1) Not to violate any municipal, State, or Federal laws, and

(2) Not to interfere with or disrupt the orderly educational processes of any college of the Dallas County Community College District.

A student is not entitled to greater immunities or privileges before the law than those enjoyed by other citizens generally.

b. Enumerated Standards: The succeeding regulations describe offenses for which disciplinary proceedings may be initiated, but the College expects from its students a higher standard of conduct than the minimum required to avoid discipline. The College expects all students to obey the law, to show respect for properly constituted authority, to perform contractual obligations, to maintain absolute integrity and a high standard of individual honor in scholastic work, and to observe standards of conduct appropriate for a community of scholars. In short, a student enrolled in the College assumes an obligation to conduct himself in a manner compatible with the College function as an educational institution.

(1) Student Identification:

(a) Issuance and Use: I.D. cards will be distributed during the first week of school and will be required for the following events and services: library usage, concerts, lectures, campus movies, use of student center facilities, voting in campus elections, and tickets for campus and community events. All I.D. cards are the property of the College. Students are required to be in possession of their I.D. cards at all times and are prohibited from loaning their I.D. cards to any other person for any reason. Likewise, it is prohibited to use any other card except the one issued by the College. On withdrawal from school, a student must return his I.D. card to the Registrar's Office.

(b) Replacement Cards: If lost, duplicate I.D. cards may be obtained in the Business Office by payment of a $4.00 charge.

(2) Use of District Facilities: Each college of the Dallas County Community College District is a public facility entrusted to the Board of Trustees and college officials for the purpose of conducting the process of education. Activities which appear to be compatible with this purpose are approved through a procedure maintained in the Student Development Office. Activities which appear to be incompatible or in opposition to the purposes of education are normally disapproved. It is imperative that a decision be made prior to an event in order to fulfill the trust of the public. No public facility could be turned over to the indiscriminate use of anyone for a platform or forum to promote random causes. Thus, reasonable controls are exercised by college officials of the use of facilities to ensure the maximum use of the College for the purpose for which it was intended.

Therefore, anyone planning an activity at one of the colleges of the Dallas County Community College District which requires space to handle two or more persons to conduct an activity must have prior approval. Application forms to reserve space must be acquired through the Student Development Office. This office also maintains a statement of procedures for reserving space.

(3) Speech and Advocacy: Students have the right of free expression and advocacy; however, the time, place and manner of exercising speech and advocacy shall be regulated in such a manner to ensure orderly conduct, non-interference with college functions or activities, and identification of sponsoring groups or individuals. Meetings must be registered with the Student Development Office. An activity may be called a meeting when the following conditions prevail at the activity:

(a) When two or more persons are sitting, standing, or lounging so as to hear or see a presentation or discussion of a person or a group of persons.

(b) When any special effort to recruit an audience has preceded the beginning of discussions or presentations.

(c) When a person or group of persons appears to be conducting a systematic discussion or presentation on a delinquent topic.

(4) Disruptive Activities: Any activity which interrupts the scheduled activities or processes of education may be classified as disruptive; thus, anyone who initiates in any way an assembly or gathering of others to disruptive activity will be violating college regulations and/or State law.

The following conditions shall normally be sufficient to classify behavior as disruptive:

(a) Blocking or in any other way interfering with access to any facility of the College.

(b) Initiating others to violence and/or participating in violent behavior, e.g., assault; loud or vulgar language spoken publicly; or any form of behavior acted out for the
purpose of inciting and influencing others.

(c) Holding rallies, demonstrations, or any other form of public gathering without prior approval of the College.

(d) Conducting any activity which causes college officials to be drawn off their scheduled duties to intervene, supervise or observe the activity in the interest of maintaining order at the College.

Furthermore, the Vice President of Student Services shall enforce the provisions of the Texas Education Code, Section 4.30.

Education Code Section 4.30 provides:

(a) No person or group of persons acting in concert may willfully engage in disruptive activity or disrupt a lawful assembly on the campus or property of any private or public school or institution of higher education or public vocational and technical school or institute.

(b) For the purposes of this section, disruptive activity means:

(1) Obstructing or restraining the passage of persons in an exit, entrance, or hallway of any building without the authorization of the administration of the school;

(2) Seizing control of any building or portion of a building for the purpose of interfering with any administrative, educational, research, or other authorized activity;

(3) Preventing, or attempting to prevent by force or violence or the threat of force or violence any lawful assembly authorized by the school administration.

(4) Disrupting by force or violence or the threat of force or violence a lawful assembly in progress;

(5) Obstructing or restraining the passage of any person at an exit or entrance to said campus or property or preventing or attempting to prevent by force or violence or by threats thereof the ingress or egress of any person to or from said property or campus without the authorization of the administration of the school;

(c) For the purposes of this section, a lawful assembly is disrupted when any person in attendance is rendered incapable of participating in the assembly due to the use of force or violence or due to a reasonable fear that force or violence is likely to occur.

(d) A person who violates any provisions of this section is guilty of a misdemeanor and upon conviction is punishable by a fine not to exceed $200 or by confinement in jail for not less than 10 days nor more than 6 months, or both.

(e) Any person who is convicted the third time of violating this section shall not thereafter be eligible to attend any school, college, or university receiving funds from the State of Texas for a period of two years from such third conviction.

(f) Nothing herein shall be construed to interfere upon any right of free speech or expression guaranteed by the Constitutions of the United States or the State of Texas.

(5) Drinking of Alcoholic Beverages: Each college of the Dallas County Community College District specifically forbids the drinking of or possession of alcoholic beverages on its campus.

(6) Gambling: State law expressly forbids gambling of any kind on State property.

(7) Hazing: Each college of the Dallas County Community College District, as a matter of principle and because it is a violation of State law, is opposed to and will endeavor to prevent hazing activities which involve any of the following factors singly or in conjunction:

(a) Any actions which seriously impair the physical well-being of any student (all walks and all calisthenics are held to be actions which seriously impair the physical well-being of students and are, therefore, accordingly specifically prohibited).

(b) Activities which are by nature indecent, degrading, or morally offensive.

(c) Activities which by their nature reasonably be assumed to have a degrading effect upon the mental or moral attitude of the persons participating therein.

The institutional policy is one discouraging all activities incompatible with the dignity of the college student and exercising disciplinary correction over such of these activities as escape from reasonable control, regulation, and decency. From the institution's point of view, the responsibility for the control of hazing activities, if engaged in by an organization, rests in the elected and responsible officials of the group, as individuals, and in the group as a whole, since it sets and approves the policy to be followed in these matters. It is accordingly recommended that all groups be informed that both their officers and the group itself will be held singularly and collectively responsible for any actions considered to be unreasonable, immoral, and irresponsible with the policy limits detailed above. Individual activity falling in this category shall be handled on an individual basis and will result in disciplinary action.

(8) Scholastic Dishonesty:

(a) The Vice President of Student Services may initiate disciplinary proceedings against a student accused of scholastic dishonesty.

(b) "Scholastic dishonesty" includes, but is not limited to, cheating on a test, plagiarism and collusion.

(c) "Cheating on a test" includes:

(i) Copying from another student's test paper;

(ii) Using, during a test, materials not authorized by the person giving the test;

(iii) Colluding with another student during a test without authority;

(iv) Knowingly using, buying, selling, stealing, transporting or soliciting in whole or in part the contents of an unadministered test;

(v) Substituting for another student, or permitting another student to substitute for one's self, to take a test;

(vi) Brining another person to obtain an unadministered test or information about an unadministered test.

(d) "Plagiarism" means the appropriation of another's work and the unacknowledged incorporation of that work in one's own written work offered for credit.

(e) "Collusion" means the unauthorized collaboration with another person in preparing written work for credit.

(9) Financial Transactions with the College:

(a) No student may refuse to pay or fail to pay a debt he owes to the College.

(b) No student may give the college a check, draft or order with the intent to defraud the College.

(c) A student's failure to pay the College the amount due on a check, draft or order, or on or before the fifth class day after the day the Business Office sends written notice that the drawee has rightfully refused payment on the check, draft or order, is prima facie evidence that the student intended to defraud the College.

(d) The Vice President of Student Services may initiate disciplinary proceedings against a student who has allegedly violated the provisions of this section.

(10) Other Offenses:

(a) The Vice President of Student Services may initiate disciplinary proceedings against a student who:

(i) Conducts himself in a manner that significantly interferes with college teaching, research, administration, disciplinary proceedings or other college activities, including its public service functions, or with any authorized activities on college premises;

(ii) Destroys, defaces or destroys college property or property of a member of the academic community or campus visitor;

(iii) Knowingly gives false information in response to requests from the College;

(iv) Engages in hazing, as defined by State law and college regulations;

(v) Forges, alters or misuses college documents, records, or I.D. cards;

(vi) Violates college policies or regulations concerning parking, registration of student organizations, use of college facilities, or the time, place, and manner of public expression;

(vii) Fails to comply with directions from college officials acting in the performance of their duties;

(viii) Conducts himself in a manner which adversely affects his suitability as a member of the academic community or endangers his own safety or the safety of others;
3. Disciplinary Proceedings

(a) Administrative Disposition
(1) Investigation, Conference, and Complaints:
(a) When the Vice President of Student Services Office receives information that a student has allegedly violated a Board policy, college regulation, or administrative rule, the Vice President or a subordinate delegated by him shall investigate the alleged violation. After completing the preliminary investigation, the Vice President may:
(i) Dismiss the allegation as unfounded, either before or after conferring with the student; or
(ii) Proceed administratively under 3(a) 3(d); or
(iii) Prepare a complaint based on the allegation for use in disciplinary hearings along with a list of witnesses and documentary evidence supporting the allegation.
(b) The President may take immediate interim disciplinary action, suspend the right of a student to be present on the campus and to attend classes, or otherwise alter the status of a student for violation of a Board policy, college regulation, or administrative rule, when in the opinion of such official the interest of the College would best be served by such action.
(c) No person shall search a student’s personal possession for the purpose of enforcing this code unless the individual's prior permission has been obtained. Searches by law enforcement officials of such possessions shall be only authorized as by law.
(2) Summons:
(a) A student may be summoned to appear in connection with an alleged violation by sending him a letter by certified mail, return receipt requested, addressed to the student at his address appearing in the Registrar's Office records. It is the student’s responsibility to immediately notify the Registrar's Office of any change of address.
(b) The letter shall direct the student to appear at a specified time and place not less than three class days after the date of the letter. The letter shall also describe briefly the alleged violation and shall state the Vice President of Student Services’ intention to handle the allegation as a major or minor violation.
(c) The Vice President of Student Services may place on disciplinary probation a student who fails without good cause to comply with a letter of summons, or the Vice President may proceed against the student under 3(a)(3).
(3) Disposition:
(a) At a conference with a student in connection with an alleged minor or major violation, the Vice President shall advise the student of his rights.
(b) A student may refuse administrative disposition of the alleged violation and, on refusal, is entitled to a hearing under 3(b) of this code. If a student accepts administrative disposition, he shall sign a statement that he understands the nature of the charges, his right to a hearing or to waive the same, the penalty imposed, and his waiver of the right to appeal.
(c) The Vice President of Student Services shall prepare an accurate, written summary of each administrative disposition and forward a copy to the student (and, if the student is a minor, to the parent or guardian of the student), to the Director of Student Development and to the Director of Campus Security.
(d) The Vice President of Student Services may impose disciplinary action as follows:
(i) For minor violations, any action authorized by 4a(1) through (8) of this code.
(ii) For major violations, any action authorized by 4a of this code.

8. Student Discipline Committee

(1) Composition; Organization:
(a) When a student refuses administrative disposition of either a major or a minor violation, he is entitled to a hearing before the Student Discipline Committee. This request must be made in writing on or before the third day following administrative disposition. The Committee shall be composed of any three administrative officers of the College. The Committee shall be appointed by the President for each hearing on a rotating basis or on a basis of availability.
(b) The Student Discipline Committee shall elect a Chairman from the three appointed members. The Chairman of the Committee shall rule on the admissibility of evidence, motions, and objections to procedure, but a majority of the committee members may overrule the Chairman’s ruling. All members of the Committee are eligible to vote in the hearing.
(c) Chairman: The Chairman shall set the date, time, and place for the hearing and may summon witnesses, and require the production of documentary and other evidence.
(d) The Vice President of Student Services shall represent the College before the Student Discipline Committee and present evidence to support any allegations of violations of Board policy, college regulation, or administrative rules. The Vice President of Student Services may be assisted by legal counsel when in the opinion of the Vice President of Student Services the best interests of the student or the College would be served by such assistance.
(2) Notice:
(a) The Committee Chairman shall by letter notify the student concerned of the date, time and place for the hearing. The letter shall specify a hearing date not less than three (3) nor more than ten (10) class days after the date of the letter. If the student is under 18 years of age, a copy of the letter shall be sent to the parents or guardian.
(b) The Chairman may for good cause postpone the hearing so long as all interested parties are notified of the new hearing date, time and place.
(c) The Student Discipline Committee may hold a hearing at any time if the student has actual notice of the date, time, and place of the hearing, and consents in writing thereto, and the President, or his designated representative in his absence, states in writing to the Committee that, because of extraordinary circumstances the requirements are inappropriate.
(d) The notice shall specify whether the charge or charges are considered minor violations or major violations, shall direct the student to appear before the Committee on the date and at the time and place specified, and shall advise the student of the following rights:
(i) To a private hearing;
(ii) To appear alone or with legal counsel if charges have been evaluated as a major violation or if the College is represented by legal counsel;
(iii) To have his parents or legal guardian present at the hearing;
(iv) To know the identity of each witness who will testify against him;
(v) To cause the Committee to summon witnesses, require the production of documentary and other evidence possessed by the College, and to offer evidence and argue in his own behalf;
(vi) To cross-examine each witness who testifies against him;
(vii) To have a stenographer present at the hearing to make a stenographic transcript of the hearing, at the student's expense, but the student is not permitted to record the hearing by electronic means;
(viii) To appeal to the Faculty-Student Board of Review, subject to the limitations established by 3(c)(2) of this code.
(e) The Vice President of Student Services may suspend a student who fails without good cause to comply with a letter sent under this section, or, at his discretion, the Vice President of Student Services may proceed with the hearing in the student's absence.
(3) Preliminary Matters:
(e) Charges arising out of a single transaction or occurrence, against one or more students, may be heard together or, at the option of the Committee or the
request by one of the students-in-interest, separate hearings may be held.

(b) At least three (3) class days before the hearing date, the student concerned shall furnish the Committee Chairman with:

(i) The name of each witness he wants summoned and a description of all documentary and other evidence possessed by the College which he wants produced;

(ii) An objection that, it sustained by the Chairman of the Student Discipline Committee, would prevent the hearing;

(iii) The name of legal counsel, if any, who appear with him;

(iv) A request for a separate hearing, if any, and the grounds for such a request;

(c) When the hearing is set under waiver of notice or for other good cause determined by the Committee Chairman, the student concerned is entitled to furnish the information described in paragraph (b) heard at any time before the hearing begins.

(4) Procedure:

(a) The hearing shall be informal and the Chairman shall provide reasonable opportunities for witnesses to be heard. The College may be represented by staff members of the Vice President of Student Services Office, legal counsel and other persons designated by the President. The hearing shall be open to the public so long as space is available, but may include the following persons on the invitation of the student:

(i) Representatives of the College Council;

(ii) A staff member of the College newspaper;

(iii) Representatives of the Faculty Association;

(iv) Student's legal counsel; and

(v) Members of the student's immediate family.

(b) The Committee shall proceed generally as follows during the hearing:

(i) The Vice President of Student Services shall read the complaint;

(ii) The Vice President of Student Services shall inform the student of his rights, as stated in the notice of hearing;

(iii) The Vice President of Student Services shall present the College's case;

(iv) The student may present his defense;

(v) The Vice President of Student Services and the student may present rebuttal evidence and argument;

(vi) The Committee will vote the issue of whether or not there has been a violation of Board policy, college regulation or administrative rule. If the Committee finds the student has violated a Board policy, college regulation or administrative rule, the Committee will determine an appropriate penalty.

(vii) The Committee shall inform the student of the decision and penalty, if any;

(viii) The Committee shall state in writing each finding of a violation of Board policy, college regulation or administrative rule, and the penalty determined. Each committee member concurring in the finding and penalty shall sign the statement. The Committee may include in the statement its reasons for the finding and penalty.

(5) Evidence:

(a) Legal rules of evidence shall not apply to hearings before the Student Discipline Committee, and the Committee may admit and give probative effect to evidence that possesses probative value and is commonly accepted by reasonable men in the conduct of their affairs. The Committee shall exclude irrelevant, immaterial and unduly repetitious evidence. The Committee shall recognize as privileged communications between a student and a member of the professional staff of the Health Center, Counseling and Guidance Center, or the Office of the Vice President of Student Services where such communications were made in the course of performance of official duties and when the matters discussed were understood by the staff members and the student to be confidential. Committee members may freely question witnesses.

(b) The Committee shall presume a student innocent of the alleged violation until it is convinced by clear and convincing evidence that the student violated a Board policy, college regulation or administrative rule.

(c) All evidence shall be offered to the Committee during the hearing and made a part of the hearing record. Documentary evidence may be admitted in the form of copies of extracts, or by incorporation by reference. Real evidence may be photographed or described.

(d) A student defendant may not be compelled to testify against himself.

(6) Record:

(a) The hearing record shall include: a copy of the notice of hearing; all documentary and other evidence offered or admitted in evidence; written motions, pleas, and any other materials considered by the Committee; and the Committee's decisions.

(b) If notice of appeal is timely given as hereinafter provided, the Vice President of Student Services, at the direction of the Committee Chairman, shall send the record to the Board of Review, with a copy to the student appellant on or before the tenth class day after the notice of appeal is given.

c. Faculty-Student Board of Review

(1) Right to Appeal:

(a) In those cases in which the disciplinary penalty imposed was as prescribed in 4a(b) through (11), the student may appeal the decision of the Student Discipline Committee, or the decision of the President in an interim action under 33l(b) to the Faculty-Student Board of Review. Disciplinary actions taken under 4a(11) through (5) cannot be appealed beyond the Student Discipline Committee. A student appeals by giving written notice to the Vice President of Student Services on or before the third class day after the day the decision or action is announced. This notice may be informal, but shall contain the student's name, the date of the decision or action, the name of his legal counsel, if any, and a simple request for appeal.

(b) Notice of appeal timely given suspends the imposition of penalty until the appeal is finally decided, but interim action may be taken as authorized under 33l(b).

(2) Board Composition:

(a) The President shall appoint Boards of Review to hear appeals under this Code. Each such Board shall have three faculty representatives and two students appointed by the President in alphabetical rotation from available members of the Review Panel.

(b) The Review Panel shall have twenty-five (25) members, selected as follows:

(i) Fifteen (15) representatives from the faculty, recommended by the President of the Faculty Association and appointed by the President of the College for three-year staggered terms.

(ii) Ten (10) students shall be appointed by the President of the College for one-year terms. Student members must have an overall 2.0 average on all college work attempted at the time of the nomination and must not have a discipline case pending.

(c) The President shall instruct the Board of Review members on students disciplinary policies, rules, and hearing procedures as soon as practicable after the members are appointed.

(3) Consideration of Appeal:

(a) The Board of Review shall consider each appeal on the record of the Student Discipline Committee and for good cause shown, original evidence and newly discovered evidence may be presented.

(b) Upon timely appeal, the President shall select a Board of Review as aforesaid and shall notify the student
appellant and the Vice President of Student Services in writing at the time, date, and place of the hearing as determined by the President.

(c) The President will designate one of the members of the Board of Review to serve as Chairman.

(d) Appellate hearings will follow the procedures prescribed in 3b of this code.

(e) The Board of Review will hear oral argument and receive written briefs from the student appellant and Vice President of Student Services or their representatives.

(f) The Board of Review, after considering the appeal, may affirm the Student Discipline Committee’s decision, reduce the penalty determined or otherwise modify the decision of the Student Discipline Committee, or dismiss the complaint.

(g) The Board of Review shall modify or set aside the finding of violation, penalty or both, if the substantive rights of the student were prejudiced because the Student Discipline Committee’s finding of facts, conclusions or decisions were:

(i) In violation of a Federal or State law, Board policy, college regulation, administrative rule, or authorized procedure;

(ii) Clearly erroneous in view of the reliable and substantial evidence on the complete hearing;

(iii) Capricious, or characterized by abuse of discretion or clearly unwarranted exercise of discretion.

(h) The Board of Review may not increase a penalty assessed by the Student Discipline Committee.

(4) Petition for Administrative Review

(a) A student is entitled to appeal in writing to the Board of Trustees through the President, the Chancellor, and the Chairman of the Board. The President shall automatically review every penalty of expulsion.

(b) A petition for review is informal but shall contain, in addition to the information required by 3c(1)(a), notice of appeal, the date of the Board of Review’s action on the student’s appeal and his reasons for disagreeing with the Board’s action. A student shall file his petition with the President on or before the third class day after the day the Board of Review announces its action on the appeal.

(c) If the President rejects the petition, and the student appellant wishes to petition the Chancellor, he shall file the petition with the Chancellor on or before the third class day after the day the President rejects the petition in writing. If the Chancellor rejects the petition, and the student appellant wishes to petition the Board of Trustees, he shall file the petition with the Chairman of said Board on or before the third class day after the day the Chancellor rejects the petition in writing.

(d) The President, the Chancellor, and the Board of Trustees in their review may take any action that the Student Discipline Committee is authorized to take. They may receive written briefs and hear oral argument during their review.

4. Penalties

a. Authorized Disciplinary Penalties: The Vice President of Student Services, under 3a, or the Student Discipline Committee, under 3b, or the Faculty-Student Board of Review, under 3c, may impose one or more of the following penalties for violation of a Board policy, college regulation, or administrative rule:

(1) Admonition
(2) Warning probation
(3) Disciplinary probation
(4) Withholding of transcript or degree
(5) Bar against readmission
(6) Restitution
(7) Suspension of rights or privileges
(8) Suspension of eligibility for official athletic and non-athletic extracurricular activities
(9) Denial of degree
(10) Suspension from the College
(11) Expulsion from the College

b. Definitions: The following definitions apply to the penalties provided in 4a:

(1) An “Admonition” is a written reprimand from the Vice President of Student Services to the student on whom it is imposed.

(2) “Warning probation” indicates that further violations may result in suspension. Disciplinary probation may be imposed for any length of time up to one calendar year and the student shall be automatically removed from probation when the imposed period expires.

(3) “Disciplinary probation” indicates that further violations may result in suspension. Disciplinary probation may be imposed for any length of time up to one calendar year and the student shall be automatically removed from probation when the imposed period expires. Students will be placed on disciplinary probation for engaging in activities such as the following: being intoxicated, misuse of I.D. card, creating a disturbance in or on campus facilities, and gambling.

(4) “Withholding of transcript or degree” is imposed upon a student who fails to pay a debt owed the College or who has a disciplinary case pending final disposition. The penalty terminates on payment of the debt or final disposition of the case.

(5) “Bar against readmission” is imposed on a student who has left the College on forced withdrawal for disciplinary reasons.

(6) “Restitution” is reimbursement for damages to or misappropriation of property. Reimbursement may take the form of appropriate service to repair or otherwise compensate for damages.

(7) “Disciplinary suspension” may be either of the following:

(a) “Suspension of rights and privileges” is an elastic penalty which may impose limitations or restrictions to fit the particular case.

(b) “Suspension of eligibility for official athletic and non-athletic extracurricular activities” prohibits, during the period of suspension, the student on whom it is imposed from joining a registered student organization; taking part in a registered student organization’s activities; or attending its meetings or functions; and from participating in an official athletic or non-athletic extracurricular activity. Such suspension may be imposed for any length of time up to one calendar year. Students will be placed on disciplinary suspension for engaging in activities such as the following: having intoxicating beverages in any college facility; destroying State property or student’s personal property; giving false information in response to requests from the College; instigating a disturbance or riot; stealing; possession, use, sale or purchase of illegal drugs or off campus; any attempt at bodily harm, which includes taking any overdose of pills or any other act where emergency medical attention is required, and conviction of any act which is classified as a misdemeanor or felony under State or Federal law.

(8) “Denial of degree” may be imposed on a student found guilty of scholastic dishonesty and may be imposed for any length of time up to and including permanent denial.

(9) “Suspension from the College” prohibits, during the period of suspension, the student on whom it is imposed from being initiated into an honorary or service organization; from entering the college campus except in response to an official summons; and from registering, either for credit or non-credit, for scholastic work at or through the College.

(10) “Expulsion” is permanent severance from the College. This policy shall apply uniformly to all of the colleges of the Dallas County Community College District. In the event any portion of this policy conflicts with the State law of Texas, the State law shall be followed.
General
Education
Courses

For the Seven
Member Colleges
of the Dallas County
Community College District
DEFINITION OF TERMS

The following terms are used throughout the catalog and particularly in this section of Course Descriptions. A brief explanation follows each term.

1. Concurrent Enrollment
   (a) Enrollment by the same student in two different colleges of the District at the same time, or (b) enrollment by a high school senior in a high school and one of the District colleges at the same time, or (c) enrollment by a student in two related courses in the same semester.

2. Contact Hours - The number of clock hours a student spends in a given course during the semester.

3. Credit Hours (Cr.) - College work is measured in units called credit hours. A credit hour value is assigned to each course and is normally equal to the number of hours the course meets each week. Credit hours are sometimes referred to as semester hours.

4. Elective - A course chosen by the student that is not required for a certificate or degree.

5. Flexible Entry Course - A course that permits beginning or ending dates other than the beginning or ending of the semester. Consult the class schedule for further information.

6. Laboratory Hours (Lab.) - The number of clock hours in the fall or spring semester the student spends each week in the laboratory or other learning environment.

7. Lecture Hours (Lec.) - The number of clock hours in the fall or spring semester the student spends each week in the classroom.

8. Major - The student's main emphasis of study (for example, Automotive Technology, Psychology, etc.)

9. Performance Grades - Grades assigned point values, including A, B, C, D, and F.

10. Prerequisite - A course that must be successfully completed or a requirement such as related life experiences that must be met before enrolling in another course.

In the following course descriptions, the number of credit hours for each course is indicated in parenthesis opposite the course number and title. Courses numbered 100 (except Music 199, Art 199 and Theater 199) or above may be applied to requirements for associate degrees. Courses numbered below 100 are developmental in nature and may not be applied to degree requirements. Students are urged to consult their counselors or specific college catalogs for information about transferability of courses to four-year institutions. Course prerequisites may only be waived by the appropriate division chairperson. All courses listed in this catalog may not be offered during the 1980-1981 year.

ANTHROPOLOGY (ANT) 100 (3)
INTRODUCTION TO ANTHROPOLOGY (3 LEC.)
This course surveys the origin of mankind involving the processes of physical and cultural evolution, ancient man, and preliterate man. Attention is centered on fossil evidence, physiology and family/group roles and status.

ANTHROPOLOGY (ANT) 101 (3)
CULTURAL ANTHROPOLOGY (3 LEC.)
Cultures of the world are surveyed and emphasis given to those of North America. Included are the concepts of culture, social and political organization, language, religion and magic, and elementary anthropological theory.
(This course is offered on campus and may be offered via television.)

ANTHROPOLOGY (ANT) 104 (3)
AMERICAN INDIAN CULTURE (3 LEC.)
Native Americans are studied from three perspectives: Native American history and prehistory; traditional Indian cultures; and native Americans today. The latter theme stresses current topics such as discrimination, poverty, employment, reservations, The Bureau of Indian Affairs, self-determination, health care, etc.
ANTHROPOLOGY (ANT) 110 (3)
THE HERITAGE OF MEXICO (3 LEC.)
Students may register for either History 110 or Anthropology 110 but may receive credit for only one of the two. This course (cross-listed as History 110) deals with the archeology of Mexico beginning with the first humans to enter the North American Continent and culminating with the arrival of the Spanish in 1519 A.D. Emphasis is on prehistoric cultures, the Maya, the Toltec, and Aztec empires.

ANTHROPOLOGY (ANT) 208 (3)
MULTICULTURAL STUDIES (3 LEC.)
Prerequisite: Anthropology 101 or consent of instructor. This course is a multicultural approach to the study of modern Texas. Emphasis is on African, Anglo and Hispanic cultures. Field experiences and interviews are interspersed with lecture to provide opportunities for personal contact with various cultural behaviors.

ANTHROPOLOGY (ANT) 210 (3)
LANGUAGE, CULTURE AND PERSONALITY (3 LEC.)
Prerequisite: Anthropology 101 or consent of instructor. Interrelated aspects of language, culture and personality are presented. Special consideration is given to intellectual, social and behavioral problems characteristic of multilingual, multicultural societies.

ANTHROPOLOGY (ANT) 231 (3)
INTRODUCTION TO ARCHEOLOGY (3 LEC.)
This course is an anthropological approach to archeology. Topics include an introduction to the study of humanity's past. How archeologists retrieve, process, analyze and interpret surviving prehistoric materials is covered, as well as a survey of world prehistory through neolithic times.

ART (ART) 103 (1)
INTRODUCTION TO ART (3 LAB.)
Materials and techniques of studio art are introduced for the non-major. Included are basic design concepts and traditional media. Laboratory fee.

ART (ART) 104 (3)
ART APPRECIATION (3 LEC.)
Films, lectures, slides and discussions focus on the theoretical, cultural and historical aspects of the visual arts. Emphasis is on the development of visual and aesthetic awareness.

ART (ART) 105 (3)
SURVEY OF ART HISTORY (3 LEC.)
This course covers the history of art from prehistoric time through the Renaissance. It explores the cultural, geophysical and personal influences on art styles.

ART (ART) 106 (3)
SURVEY OF ART HISTORY (3 LEC.)
This course covers the history of art from the Baroque period through the present. It explores the cultural, geophysical and personal influences on art styles.

ART (ART) 110 (3)
DESIGN I (2 LEC., 4 LAB.)
Basic concepts of design with two-dimensional materials are explored. The use of line, color, illusion of space or mass, texture, value, shape and size in composition is considered.

ART (ART) 111 (3)
DESIGN II (2 LEC., 4 LAB.)
Prerequisite: Art 114. This course is an expansion of Art 114. It stresses the expressive and conceptual aspects of drawing, including advanced compositional arrangements, a range of wet and dry media, and the
development of an individual approach to theme and content.

ART (ART) 116  (3)
INTRODUCTION TO JEWELRY I (2 LEC., 4 LAB.)
Prerequisites: Art 110, Art 111, or the consent of the instructor. The basic techniques of fabrication and casting of metals are presented. Emphasis is on original design. Laboratory fee.

ART (ART) 117  (3)
INTRODUCTION TO JEWELRY II (2 LEC., 4 LAB.)
Prerequisite: Art 116. This course continues Art 116. Advanced fabrication and casting techniques are presented. Emphasis is on original design. Laboratory fee.

ART (ART) 118  (3)
CREATIVE PHOTOGRAPHY FOR THE ARTIST I (2 LEC., 4 LAB.)
Prerequisites: Art 110, Art 114, or the consent of the instructor. Creative use of the camera is studied. Photosensitive materials are examined as a means of making expressive graphic images. Emphasis is on black and white processing and printing techniques. Laboratory fee.

ART (ART) 119  (3)
CREATIVE PHOTOGRAPHY FOR THE ARTIST II (2 LEC., 4 LAB.)
Prerequisite: Art 118 or the consent of the instructor. This course is a continuation of Art 118. Emphasis is on individual expression. Laboratory fee.

ART (ART) 199  (1)
ART SEMINAR (1 LEC.)
Area artist, critics and art educators speak with students about the work exhibited in the gallery and discuss current art styles and movements. They also discuss specific aspects of being artists in contemporary society.

ART (ART) 201  (3)
DRAWING III (2 LEC., 4 LAB.)
Prerequisites: Art 110, Art 111, Art 115, Sophomore standing and/or permission of the division chair. This course covers the analytic and expressive drawing of the human figure. Movement and volume are stressed. Laboratory fee.

ART (ART) 202  (3)
DRAWING IV (2 LEC., 4 LAB.)
Prerequisites: Art 201, Sophomore standing and/or permission of the division chair. This course continues Art 201. Emphasis is on individual expression. Laboratory fee.

ART (ART) 203  (3)
ART HISTORY (3 LEC.)
Prerequisites: Art 105 and Art 106. The development of the art of western culture during the Renaissance Period is presented. Emphasis is on the development of Renaissance art in Northern and Southern Europe.

ART (ART) 204  (3)
ART HISTORY (3 LEC.)
Prerequisites: Art 105 and Art 106. The development of the art of western culture from the late 19th century through today is presented. Emphasis is on the development of modern art in Europe and America.

ART (ART) 205  (3)
PAINTING I (2 LEC., 4 LAB.)
Prerequisites: Art 110, Art 111, Art 115 or the consent of the instructor. This studio course stresses fundamental concepts of painting with acrylics and oils. Emphasis is on painting from still life, models and the imagination.

ART (ART) 206  (3)
PAINTING II (2 LEC., 4 LAB.)
Prerequisite: Art 205. This course continues Art 205. Emphasis is on individual expression.

ART (ART) 208  (3)
SCULPTURE I (2 LEC., 4 LAB.)
Prerequisites: Art 110, Art 111, Art 115 or the consent of the instructor. Various sculptural approaches are explored. Different media and techniques are used. Laboratory fee.

ART (ART) 209  (3)
SCULPTURE II (2 LEC., 4 LAB.)
Prerequisite: Art 208. This course continues Art 208. Emphasis is on individual expression. Laboratory fee.
ART (ART) 210  (3)  
COMMERCIAL ART I (2 LEC., 4 LAB)  
Prerequisites: Art 110, Art 111, Art 115 or the consent of the instructor. The working world of commercial art is introduced. Typical commercial assignments are used to develop professional attitudes and basic studio skills. Laboratory fee.

ART (ART) 211  (3)  
COMMERCIAL ART II (2 LEC., 4 LAB)  
Prerequisite: Art 210. This course continues Art 210. Added emphasis is on layout and design concepts. Work with simple art form reproduction techniques and development of a professional portfolio are also included. Laboratory fee.

ART (ART) 212  (3)  
ADVERTISING ILLUSTRATION (2 LEC., 4 LAB)  
Prerequisite: Art 210. Problems of the illustrator are investigated. Elements used by the illustrator are explored. Problem-solving projects are conducted.

ART (ART) 215  (3)  
CERAMICS I (2 LEC., 4 LAB)  
Prerequisites: Art 110, Art 111, Art 115 or the consent of the instructor. This course focuses on the building of pottery forms by coil, slab and use of the wheel. Glazing and firing are also included. Laboratory fee.

ART (ART) 216  (3)  
CERAMICS II (2 LEC., 4 LAB)  
Prerequisite: Art 215 or the consent of the instructor. Glaze technology is studied. Advanced problems in the creation of artistic and practical ceramic ware. Laboratory fee.

ART (ART) 220  (3)  
PRINTMAKING I (2 LEC., 4 LAB)  
Prerequisites: Art 110, Art 111, Art 115, or the consent of the instructor. Basic printmaking processes are introduced. Included are planographic, intaglio, stencil and relief processes. Laboratory fee.

ART (ART) 228  (3)  
THREE-DIMENSIONAL DESIGN (2 LEC., 4 LAB)  
Prerequisite: Art majors: Art 110, 111, 114. Drafting Technology majors: Drafting 183, Engineering 186. Development of three-dimensional projects in metal, plastic, and wood through the stages of design: idea, sketches, research, working drawing, model and finished product. Emphasis is on function, material and esthetic form. Laboratory fee.

ASTRONOMY (AST) 101  (3)  
DESCRIPTIVE ASTRONOMY (3 LEC)  
This course surveys the fundamentals of astronomy. Emphasis is on the solar system. Included is the study of the celestial sphere, the earth's motions, the moon, planets, asteroids, comets, meteors and meteorites. (This course is offered on campus and may be offered via television.)

ASTRONOMY (AST) 102  (3)  
GENERAL ASTRONOMY (3 LEC)  
Stellar astronomy is emphasized. Topics include a study of the sun, the properties of stars, star clusters, nebulae, interstellar gas and dust, the Milky Way Galaxy and external galaxies.

ASTRONOMY (AST) 103  (1)  
ASTRONOMY LABORATORY I (3 LAB)  
Prerequisite: Credit or concurrent enrollment in Astronomy 101. The student uses simple equipment to make elementary astronomical observations of the motions of celestial objects. Also covered are elementary navigational techniques, graphical techniques of calculating the position of a planet or comet, and construction of simple observing equipment. This course includes night observations. Laboratory fee.

ASTRONOMY (AST) 104  (1)  
ASTRONOMY LABORATORY II (3 LAB)  
Prerequisite: Credit or concurrent enrollment in Astronomy 102. The student makes and uses elementary
astronomical observations. Topics include timekeeping, the various uses of spectra, and the motions of stars and galaxies. This laboratory includes night observations. Laboratory fee.

ASTRONOMY (AST) 111 (4)
FUNDAMENTALS OF ASTRONOMY (3 LEC., 3 LAB)
This course concerns fundamental aspects of the solar system and the historical development of astronomical ideas. Included are studies of the celestial sphere and motions of the earth, the moon, planets, and other minor bodies. The origin and evolution of the solar system are also covered. The laboratory includes outdoor viewing sessions and study of celestial motions, elementary navigation, constellation identification, and telescope construction. Laboratory fee.

ASTRONOMY (AST) 112 (4)
GENERAL INTRODUCTORY ASTRONOMY (3 LEC., 3 LAB.)
This course concerns fundamental properties of stars, stellar systems, star clusters, nebulae, interstellar gas and dust, and galaxies. Included is the study of the sun, Milky Way galaxy, stellar evolution, black holes, and current cosmological ideas. The laboratory includes outdoor viewing sessions and study of time-keeping, use of spectra, and motions of stars and galaxies. Laboratory fee.

BIOLOGY (BIO) 101 (4)
GENERAL BIOLOGY (3 LEC., 3 LAB.)
This course is a prerequisite for all higher level biology courses and should be taken in sequence. Topics include the cell, tissue, and structure and function in plants and animals. Laboratory fee.

BIOLOGY (BIO) 102 (4)
GENERAL BIOLOGY (3 LEC., 3 LAB.)
This course is a continuation of Biology 101. Topics include Mendelian and molecular genetics, evolutionary mechanisms, and plant and animal development. The energetics and regulation of ecological communities are also studied. Laboratory fee.

BIOLOGY (BIO) 110 (4)
INTRODUCTORY BOTANY (3 LEC., 3 LAB.)
This course introduces plant form and function. Topics ranging from the cell through organs are included. Emphasis is on the vascular plants, including the taxonomy and life cycles of major plant divisions. Laboratory fee.

BIOLOGY (BIO) 115 (4)
BIOLOGICAL SCIENCE (3 LEC., 3 LAB.)
Selected topics in biological science are presented for the non-science major. Topics include the cell concept and basic chemistry as it relates to biology. An introduction to genetics, evolution, cellular processes, such as mitosis, meiosis, respiration, and photosynthesis, and plant and animal reproduction is also covered. Laboratory fee. (This course is offered on campus and may be offered via television.)

BIOLOGY (BIO) 116 (4)
BIOLOGICAL SCIENCE (3 LEC., 3 LAB.)
Selected topics in biological science are presented for the non-science major. Topics include the systems of the human body, disease, drug abuse, aging, evolution, ecology, and people in relation to their environment. Laboratory fee.

BIOLOGY (BIO) 120 (4)
INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY (3 LEC., 3 LAB.)
This course is a foundation course for specialization in Associate Degree Nursing and Allied Health disciplines. Other students interested in the study of structure and function of the human body should consult a counselor. No science background is presupposed. Major topics include cell structure and function, organization of the body, tissues, organs, the blood and cardiovascular system, and the respiratory system. Emphasis is on homeostasis. Laboratory fee.

BIOLOGY (BIO) 121 (4)
INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY (3 LEC., 3 LAB.)
Prerequisites: Biology 120. This course is a continuation of Biology 120. Major
topics include the neuro-muscular, digestive, excretory, and endocrine systems. Laboratory fee.

**BIOLOGY (BIO) 203 (4)**
INTERMEDIATE BOTANY (3 LEC., 3 LAB.)
Prerequisites: Biology 101 and 102. The major plant groups are surveyed. Emphasis is on morphology, physiology, classification, and life cycles. Evolutionary relationships of plants to each other and their economic importance to humans are also covered. Laboratory fee.

**BIOLOGY (BIO) 211 (4)**
INVERTEBRATE ZOOLOGY (3 LEC., 3 LAB.)
Prerequisite: 8 hours of biological science. This course surveys the major groups of animals below the level of chordates. Consideration is given to phylogeny, taxonomy, morphology, physiology, and biology of the various groups. Relationships and importance to higher animals and humans are stressed. Laboratory fee.

**BIOLOGY (BIO) 216 (4)**
GENERAL MICROBIOLOGY (3 LEC., 4 LAB.)
Prerequisite: Biology 102 or the consent of the instructor. Microbes are studied. Topics include growth, reproduction, nutrition, genetics, and ecology of micro-organisms. Laboratory activities constitute a major part of the course. Laboratory fee.

**BIOLOGY (BIO) 217 (4)**
FIELD BIOLOGY (3 LEC., 4 LAB.)
Prerequisite: 8 hours of biological science. Plant and animal life are surveyed in relationship to their environment. Aquatic and terrestrial communities are studied with reference to ecological principles and techniques. Emphasis is on the classification, identification, and collection of specimens in the field. Laboratory fee.

**BIOLOGY (BIO) 221 (4)**
ANATOMY AND PHYSIOLOGY I (3 LEC., 3 LAB.)
Prerequisite: Biology 102 or the consent of the instructor. This course examines the skeletal, muscular, and circulatory systems as related to humans. Emphasis is on structure, function, and the interrelationships of the systems. Laboratory fee.

**BIOLOGY (BIO) 222 (4)**
ANATOMY AND PHYSIOLOGY II (3 LEC., 3 LAB.)
Prerequisite: Biology 221 or the consent of the instructor. Second course of a two course sequence. Structure and function as related to the human digestive, nervous, respiratory, reproductive, and endocrine systems. Emphasis placed on the interrelationships of these systems. Laboratory fee.

**BIOLOGY (BIO) 224 (4)**
ENVIRONMENTAL BIOLOGY (3 LEC., 3 LAB.)
Prerequisite: 6 hours of biology. The principles of aquatic and terrestrial communities are presented. Emphasis is on the relationship of these principles to the problems facing people in a modern technological society. Laboratory fee.

**BIOLOGY (BIO) 226 (4)**
GENETICS (3 LEC., 3 LAB.)
This course focuses on genetics. Topics include Mendelian inheritance, recombination genetics, the biochemical theory of genetic material, and mutation theory. Plant and animal materials are used to study population genetics, linkage, gene structure and function, and other concepts of heredity. Laboratory fee.

**BIOLOGY (BIO) 230 (4)**
MAMMALIAN PHYSIOLOGY (3 LEC., 3 LAB.)
Prerequisite: 12 hours of biology, 8 hours of inorganic chemistry, or concurrent registration in organic chemistry, and the consent of the instructor. This course is a study of the function of various mammalian systems. Emphasis is on interrelationships. Instruments are used to measure various physiological features. Laboratory fee.

**BIOLOGY (BIO) 235 (4)**
COMPARATIVE ANATOMY OF THE VERTEBRATES (3 LEC., 4 LAB.)
Prerequisites: Biology 101 and 102. For science majors and pre-medical and pre-dental students. Major groups of vertebrate class is studied. Emphasis is on morphology and evolutionary relationships. Laboratory fee.
BUSINESS (BUS) 105 (3)
INTRODUCTION TO BUSINESS (3 LEC.)
This course provides an overall picture of business operations. Specialized fields within business organizations are analyzed. The role of business in modern society is identified. (This course is offered on campus and may be offered via television.)

BUSINESS (BUS) 143 (3)
PERSONAL FINANCE (3 LEC.)
Personal financial issues are explored. Topics include financial planning, insurance, budgeting, credit use, home ownership, savings, investment, and tax problems.

BUSINESS (BUS) 234 (3)
BUSINESS LAW (3 LEC.)
This course presents the historical and ethical background of the law and current legal principles. Emphasis is on contracts, property, and torts.

BUSINESS (BUS) 237 (3)
ORGANIZATIONAL BEHAVIOR (3 LEC.)
The persisting human problems of administration in modern organizations are covered. The theory and methods of behavioral science as they relate to organizations are included.

CHEMISTRY (CHM) 101 (4)
GENERAL CHEMISTRY (3 LEC., 3 LAB.)
Prerequisite: Developmental Mathematics 093 or the equivalent. This course is for science and science-related majors. It covers the laws and theories of matter. The laws and theories are used to understand the properties of matter, chemical bonding, chemical reactions, the physical states of matter, and changes of state. The fundamental principles are applied to the solution of quantitative problems relating to chemistry. Laboratory fee.

CHEMISTRY (CHM) 102 (4)
GENERAL CHEMISTRY (3 LEC., 3 LAB.)
Prerequisite: Chemistry 101. This course is for science and science-related majors. It is a continuation of Chemistry 101. Previously learned and new concepts are applied. Topics include solutions and colloids, chemical kinetics and equilibrium, electrochemistry, and nuclear chemistry. Qualitative inorganic analysis is also included. Laboratory fee.

CHEMISTRY (CHM) 115 (4)
GENERAL CHEMISTRY (3 LEC., 3 LAB.)
Prerequisite: Developmental Mathematics 091 or the equivalent. This course is for non-science majors. It traces the development of theoretical concepts. These concepts are used to explain various observations and laws relating to chemical bonding reactions, states of matter, solutions, electrochemistry, and nuclear chemistry. Also included is the descriptive chemistry of some common elements and inorganic compounds. Laboratory fee.

CHEMISTRY (CHM) 116 (4)
GENERAL CHEMISTRY (3 LEC., 3 LAB.)
Prerequisite: Chemistry 115. This course is for non-science majors. It covers organic chemistry and biochemistry. The important classes of organic compounds are surveyed. The concept of structure is the central theme. Biochemistry topics include carbohydrates, proteins, lipids, chemistry of heredity, disease and therapy, and plant biochemistry. Laboratory fee.

CHEMISTRY (CHM) 201 (4)
ORGANIC CHEMISTRY I (3 LEC., 4 LAB.)
Prerequisite: Chemistry 102. This course is for science and science-related majors. It introduces organic chemistry. The fundamental types of organic compounds are presented. Their nomenclature, classification, reactions, and applications are included. The reactions of aliphatic and aromatic compounds are discussed in terms of modern electronic theory. Emphasis is on reaction mechanisms, stereochemistry, transition state theory, and organic synthesis. Laboratory fee.

CHEMISTRY (CHM) 202 (4)
ORGANIC CHEMISTRY II (3 LEC., 4 LAB.)
Prerequisite: Chemistry 201. This course is for science and science-
related majors. It is a continuation of Chemistry 201. Topics include aliphatic and aromatic systems, polyfunctional compounds, amino acids, proteins, carbohydrates, sugars, and heterocyclic and related compounds. Instrumental techniques are used to identify compounds. Laboratory fee.

CHEMISTRY (CHM) 203 (4)
QUANTITATIVE ANALYSIS (2 LEC., 6 LAB.)
Prerequisite: Chemistry 102, Mathematics 101 or Mathematics 104 or the equivalent. Principles for quantitative determinations are presented. Topics include gravimetry, oxidation-reduction, indicators, and acid-base theory. Gravimetric and volumetric analysis is emphasized. Colorimetry is introduced. Laboratory fee.

CHEMISTRY (CHM) 205 (2)
CHEMICAL CALCULATIONS (2 LEC.)
Prerequisite: Chemistry 102. Chemical calculations are reviewed. Emphasis is on stoichiometry and chemical equilibrium.

CHEMISTRY (CHM) 234 (4)
INSTRUMENTAL ANALYSIS (2 LEC., 6 LAB.)
Prerequisite: Chemistry 203 or the consent of the instructor. The role of modern electronic instrumentation in analysis is explored. Topics include infrared and ultraviolet spectroscopy, gas chromatography, potentiometric titration, electrochemistry, continuous flow analysis, scintillation counting, electrophoresis, flame photometry, and atomic absorption spectrophotometry as analytical tools. Laboratory fee.

COLLEGE LEARNING SKILLS (CLS) 100 (1)
COLLEGE LEARNING SKILLS (1 LEC.)
This course is for students who wish to extend their learning skills for academic or career programs. Individualized study and practice are provided in reading, study skills and composition. This course may be repeated for a maximum of three credits.

COMMUNICATIONS (COM) 131 (3)
APPLIED COMPOSITION AND SPEECH (3 LEC.)
Communication skills are studied as a means of preparing for one's vocation. Practice in writing letters, applications, resumes, and short reports is included.

COMMUNICATIONS (COM) 132 (3)
APPLIED COMPOSITION AND SPEECH (3 LEC.)
Prerequisite: Communications 131 or consent of instructor. The study of communication processes is continued. Emphasis is on written persuasion directly related to work. Expository techniques in business letters and documented reports are covered. Practice in oral communication is provided.

DANCE (DAN) 150 (3)
BEGINNING BALLET I (1 LEC., 3 LAB.)
This course explores basic ballet techniques. Included are posture, balance, coordination, rhythm, and flow of physical energy through the art form. Theory, terminology, ballet history, and current attitudes and events in ballet are also studied. Barre exercises and center floor combinations are given. Laboratory fee.

DANCE (DAN) 151 (3)
BEGINNING BALLET II (1 LEC., 3 LAB.)
Prerequisite: Dance 150. This course is a continuation of Dance 150. Emphasis is on expansion of combinations at the barre. Connecting steps learned at center are added. Jumps and pirouettes are introduced. Laboratory fee.

DANCE (DAN) 155 (1)
JAZZ I (3 LAB.)
The basic skills of jazz dance are introduced. Emphasis is on technique and development, rhythm awareness, jazz styles, and rhythmic combinations of movement. Laboratory fee.

DANCE (DAN) 156 (1)
JAZZ II (3 LAB.)
Prerequisite: Dance 155 or the consent of the instructor. Work on skills and style in jazz dance is continued. Technical skills, combinations of steps and skills into dance patterns, and exploration of composition in jazz form are emphasized. Laboratory fee.
DANCE (DAN) 160 (3)  
INTRODUCTION TO DANCE HISTORY (3 LEC.)

A history of dance forms is presented. Primitive, classical, and contemporary forms are included.

DANCE (DAN) 250 (3)  
INTERMEDIATE BALLET I (1 LEC., 3 LAB.)

Prerequisite: Dance 151. The development of ballet technique is continued. More complicated exercises at the barre and centre floor are included. Emphasis is on long series of movements, adagio and jumps. Precision of movement is stressed. Laboratory fee.

DANCE (DAN) 251 (3)  
INTERMEDIATE BALLET II (1 LEC., 3 LAB.)

Prerequisite: Dance 250. This course begins pointe work for women. Specialized beats and tours are begun for men. Individual proficiency and technical virtuosity are developed. Laboratory fee.

DANCE (DAN) 252 (1)  
COACHING AND REPERTOIRE (2 LAB.)

Prerequisite: Dance 251 and the consent of the instructor. Variations (male and female) and pas de deux from standard ballet repertoire are studied and notated. The dancer is given individual coaching, with special attention given to the correction of problems. This course may be repeated for credit. Laboratory fee.

DEVELOPMENTAL COMMUNICATIONS (DC) 085 (3)  
COMMUNICATION SKILLS (3 LEC.)

This course focuses on strengthening language communications. Topics include grammar, paragraph structure, reading skills, and oral communication. Emphasis is on individual testing and needs.

DEVELOPMENTAL COMMUNICATIONS (DC) 120 (3)  
COMMUNICATION SKILLS (2 LEC., 2 LAB.)

This course is for students with significant communication problems. It is organized around skill development, and students may enroll at any time (not just at the beginning of a semester) upon the referral of an instructor. Emphasis is on individual needs and personalized programs. Special attention is given to oral language. Contacts are made with other departments to provide other ways of learning for the students.

DEVELOPMENTAL LEARNING (DL) 094 (1)  
LEARNING SKILLS IMPROVEMENT (2 LAB.)

Learning skills are strengthened. Emphasis is on individual needs and personalized programs. This course may be repeated for a maximum of three credits.

DEVELOPMENTAL MATHEMATICS


DEVELOPMENTAL MATHEMATICS (DM) 060 (1)  
BASIC MATHEMATICS I (1 LEC.)

This course is designed to give an understanding of fundamental operations. Selected topics include whole numbers, decimals, and ratio and proportions.

DEVELOPMENTAL MATHEMATICS (DM) 061 (1)  
BASIC MATHEMATICS II (1 LEC.)

This course is designed to give an understanding of fractions. Selected topics include primes, factors, least common multiples, percent, and basic operations with fractions.

DEVELOPMENTAL MATHEMATICS (DM) 062 (1)  
PRE BUSINESS (1 LEC.)

This course is designed to introduce students to business mathematics. Selected topics include discounts and commissions, interest, metric and English measuring systems, area and volume.
DEVELOPMENTAL MATHEMATICS (DM) 063 (1)
PRE ALGEBRA (1 LEC.)
This course is designed to introduce students to the language of algebra with such topics as integers, metrics, equations, and properties of counting numbers.

DEVELOPMENTAL MATHEMATICS (DM) 064 (1)
NURSING (1 LEC.)
This course is designed to develop an understanding of the measurements and terminology in medicine and calculations used in problems dealing with solutions and dosages. It is designed primarily for students in the nursing program.

DEVELOPMENTAL MATHEMATICS (DM) 070 (1)
ELEMENTARY ALGEBRA I (1 LEC.)
Prerequisites: Developmental Mathematics 090, 063 or equivalent. This course is an introduction to algebra and includes selected topics such as basic principles and operations of sets, counting numbers and integers.

DEVELOPMENTAL MATHEMATICS (DM) 071 (1)
ELEMENTARY ALGEBRA II (1 LEC.)
Prerequisite: Developmental Mathematics 070 or equivalent. This course includes selected topics such as rational numbers, algebraic polynomials, factoring, and algebraic fractions.

DEVELOPMENTAL MATHEMATICS (DM) 072 (1)
ELEMENTARY ALGEBRA III (1 LEC.)
Prerequisite: Developmental Mathematics 071 or equivalent. This course includes selected topics such as rational numbers, algebraic polynomials, factoring, and algebraic fractions.

DEVELOPMENTAL MATHEMATICS (DM) 073 (1)
INTRODUCTION TO GEOMETRY (1 LEC.)
This course introduces principles of geometry. Axioms, theorems, axiom systems, models of such systems, and methods of proof are stressed.

DEVELOPMENTAL MATHEMATICS (DM) 080 (1)
INTERMEDIATE ALGEBRA I (1 LEC.)
Prerequisites: Developmental Mathematics 072, 091 or equivalent. This course includes selected topics such as systems of rational numbers, real numbers, and complex numbers.

DEVELOPMENTAL MATHEMATICS (DM) 081 (1)
INTERMEDIATE ALGEBRA II (1 LEC.)
Prerequisite: Developmental Mathematics 080 or equivalent. This course includes selected topics such as sets, relations, functions, inequalities, and absolute values.

DEVELOPMENTAL MATHEMATICS (DM) 082 (1)
INTERMEDIATE ALGEBRA III (1 LEC.)
Prerequisite: Developmental Mathematics 081 or equivalent. This course includes selected topics such as graphing, exponents, and factoring.

DEVELOPMENTAL MATHEMATICS (DM) 090 (3)
PRE ALGEBRA MATHEMATICS (3 LEC.)
This course is designed to develop an understanding of addition, subtraction, multiplication, and division of whole numbers, fractions, decimals and percentages and to strengthen basic skills in mathematics. It is the most basic mathematics course and includes an introduction to algebra.

DEVELOPMENTAL MATHEMATICS (DM) 091 (3)
ELEMENTARY ALGEBRA (3 LEC.)
Prerequisite: Developmental Mathematics 090. This course is comparable to the first-year algebra course in high school. It includes special products and factoring, fractions, equations, graphs, functions, and an introduction to geometry.

DEVELOPMENTAL MATHEMATICS (DM) 093 (3)
INTERMEDIATE ALGEBRA (3 LEC.)
Prerequisite: One year of high school algebra or Developmental Mathematics 091. This course is comparable to the second-year algebra course in high school. It includes terminology of
sets, properties of real numbers, fundamental operations of polynomials and fractions, products, factoring, radicals, and rational exponents. Also covered are solutions of linear, fractional, quadratic and systems of linear equations, and graphing.

DEVELOPMENTAL READING
Students can improve their performance in English courses by enrolling in Developmental Reading Courses. Developmental Reading 090 and 091 are valuable skill development courses for English 101. Reading 101 is especially helpful in English 102 and the sophomore-level literature courses. See the catalog descriptions in reading for full course content.

DEVELOPMENTAL READING (DR) 090 (3)
TECHNIQUES OF READING/LEARNING (3 LEC.)
Comprehension, vocabulary development, and study skills are the focus of this course. Emphasis is on learning how to learn. Included are reading and learning experiences to strengthen the total educational background of each student. Meeting individual needs is stressed.

DEVELOPMENTAL READING (DR) 091 (3)
TECHNIQUES OF READING AND LEARNING (3 LEC.)
This course is a continuation of developmental reading 090. Meeting individual needs is stressed.

DEVELOPMENTAL WRITING (DW) 090 (3)
WRITING (3 LEC.)
Basic writing skills are developed. Topics include spelling, grammar, and vocabulary improvement. Principles of sentence and paragraph structure are also included. Organization and composition are covered. Emphasis is on individual needs and strengthening the student's skills.

DEVELOPMENTAL WRITING (DW) 091 (3)
WRITING (3 LEC.)
This course is a sequel to Writing 090. It focuses on composition. Included are skills of organization, transition, and revision. Emphasis is on individual needs and personalized assignments. Brief, simple forms as well as more complex critical and research writing may be included.

DEVELOPMENTAL WRITING (DW) 092 (1)
WRITING LAB (3 LAB.)
This course is a writing workshop. Students are given instruction and supervision in written assignments. The research paper and editing are both included.

EARTH SCIENCE (ES) 117 (4)
EARTH SCIENCE (3 LEC., 3 LAB.)
This course is for the non-science major. It covers the interaction of the earth sciences and the physical world. Geology, astronomy, meteorology, and space science are included. Selected principles and concepts of the applied sciences are explored. Laboratory fee. (This course is offered on campus and may be offered via television.)

ECOLOGY (ECY) 291 (3)
PEOPLE AND THEIR ENVIRONMENT II (3 LEC.)
Environmental awareness and knowledge are emphasized. Topics include pollution, erosion, land use, energy resource depletion, overpopulation, and the effects of unguided technological development. Proper planning of societal and individual action in order to protect the natural environment is stressed. (This course may be offered via television.)

ECONOMICS (ECO) 201 (3)
PRINCIPLES OF ECONOMICS I (3 LEC.)
Sophomore standing is recommended. The principles of macroeconomics are presented. Topics include economic
organization, national income determination, money and banking, monetary and fiscal policy, economic fluctuations, and growth. (This course is offered on campus and may be offered via television.)

ECONOMICS (ECO) 202 (3)
PRINCIPLES OF ECONOMICS II (3 LEC.)
Prerequisite: Economics 201 or the consent of the instructor. The principles of microeconomics are presented. Topics include the theory of demand, supply, and price of factors. Income distribution and theory of the firm are also included. Emphasis is on international economics and contemporary economic problems.

ENGINEERING (EGR) 101 (2)
ENGINEERING ANALYSIS (2 LEC.)
Prerequisite: Two years of high school algebra or Developmental Mathematics 093 or the consent of the instructor. This course surveys the field of engineering. Topics include the role of the engineer in society and branches and specialties in engineering. Engineering analysis and computer programming are introduced. Practice is provided in analyzing and solving engineering problems. Computational methods and devices with an introduction to computer programming are also covered.

ENGINEERING (EGR) 105 (3)
ENGINEERING DESIGN GRAPHICS (2 LEC., 4 LAB.)
Graphic fundamentals are presented for engineering communications and engineering design. Topics include standard engineering graphical techniques, auxiliaries, sections, graphical analysis, and pictorial and working drawings. Laboratory fee.

ENGINEERING (EGR) 106 (3)
DESCRIPTIVE GEOMETRY (2 LEC., 4 LAB.)
Prerequisite: Drafting 183 or Engineering 105. This course provides training in the visualization of three-dimensional structures. Emphasis is on accurately representing these structures in drawings by analyzing the true relationship between points, lines, and planes. Included are the generation and classification of lines, surfaces, intersections, developments, auxiliaries, and revolutions. Laboratory fee.

ENGINEERING (EGR) 107 (3)
ENGINEERING MECHANICS I (3 LEC.)
Prerequisite: Credit or concurrent enrollment in Mathematics 126. This course is a study of the statics of particles and rigid bodies with vector mathematics in three-dimensional space. Topics include the equilibrium of forces and force systems, resultants, free body diagrams, friction, centroids and moments of inertia, virtual work, and potential energy. Distributed forces, centers of gravity, and analysis of structures, beams, and cables are also presented.

ENGINEERING (EGR) 108 (3)
COMPUTER METHODS IN ENGINEERING (3 LEC.)
Prerequisite: Credit or concurrent enrollment in Mathematics 126. Fundamental methods of numerical analysis with applications by computer programming are presented. Topics include computer programming, recursion formulas, successive approximations, error analysis, non-linear equations, and systems of linear equations and matrix methods. Probabilistic models, interpolation, determination of parameters, numerical integration, and solution of ordinary differential equations are also covered.

ENGINEERING (EGR) 201 (3)
ENGINEERING MECHANICS II (3 LEC.)
Prerequisites: Engineering 107 and credit or concurrent enrollment in Mathematics 227. This is a study of dynamics. Particles and rigid bodies are examined as they interact with applied forces. Both constrained and general motions are included. Space, time, mass, velocity, acceleration, work and energy, impulse, and momentum are covered.

ENGINEERING (EGR) 202 (3)
ENGINEERING MECHANICS OF MATERIALS (3 LEC.)
Prerequisites: Engineering 107 and
credit or concurrent enrollment in Mathematics 227. Simple structural elements are studied. Emphasis is on forces, deformation, and material properties. The concepts of stress, strain, and elastic properties are presented. Analysis of thin walled vessels, members loaded in tension, torsion, bending and shear, combined loadings, and stability conditions are included. Behavioral phenomena such as fracture, fatigue, and creep are introduced.

ENGINEERING (EGR) 203 (3)
ENGINEERING PRODUCTION (1 LEC., 5 LAB.)
Prerequisite: Engineering 105 or the consent of the instructor. The standard machining of metals is covered. Layout, turning, boring, shaping, drilling, threading, milling, and grinding are all included. The manufacturing of interchangeable parts, fixtures, and jigs with applications is studied. Laboratory fee.

ENGINEERING (EGR) 204 (3)
ELECTRICAL SYSTEMS ANALYSIS (3 LEC.)
Prerequisite: Credit of concurrent enrollment in Mathematics 227. Electrical science is introduced. Included are fundamental electrical systems and signals. Basic concepts of electricity and magnetism with mathematical representation and computation are also covered.

ENGINEERING (EGR) 205 (3)
PLANE SURVEYING (2 LEC., 4 LAB.)
Prerequisites: Mathematics 102 or 196 and Engineering 105 or Drafting 183. This course focuses on plane surveying. Topics include surveying instruments, basic measuring procedures, vertical and horizontal control, error analysis, and computations. Traverse, triangulation, route alignments, centerlines, profiles, mapping, route surveying, and land surveying are also included. Laboratory fee.

ENGINEERING (EGR) 206 (1)
ELECTRICAL ENGINEERING LABORATORY (3 LAB.)
Prerequisite: Credit or concurrent enrollment in Engineering 204. Various instruments are studied and used. These include the cathode ray oscilloscope, ammeters, voltmeters, ohmmeters, power supplies, signal generators, and bridges. Basic network laws, steady state and transient responses, and diode characteristics and applications are demonstrated. Computer simulation is introduced. Laboratory fee.

ENGLISH
(Also see Developmental Reading and Developmental Writing.) Additional instruction in writing and reading is available through the Learning Skills Center.

ENGLISH IN THE SOPHOMORE YEAR
English 201, 202, 203, 204, 205, 206, 215 and 216 are independent units of three credit hours each, from which any combination of two will be selected to satisfy degree requirements in sophomore English. Student should consult catalog of the senior college he expects to attend for requirements in his major before choosing English courses.

ENGLISH (ENG) 101 (3)
COMPOSITION AND EXPOSITORY READING (3 LEC.)
The development of skills is the focus of this course. Skills in writing and in the critical analysis of prose are included. (This course is offered on campus and may be offered via television.)

ENGLISH (ENG) 102 (3)
COMPOSITION AND LITERATURE (3 LEC.)
Prerequisite: English 101. This course continues the development of skills in writing. Emphasis is on analysis of literary readings, expository writing, and investigative methods of research. (This course is offered on campus and may be offered via television.)

ENGLISH (ENG) 201 (3)
BRITISH LITERATURE (3 LEC.)
Prerequisite: English 102. Significant works of British literature are studied. The Old English Period through the 18th century is covered.
ENGLISH (ENG) 202 (3)
BRITISH LITERATURE (3 LEC.)
Prerequisite: English 102. Significant works of British literature are studied. The Romantic Period to the present is covered.

ENGLISH (ENG) 203 (3)
WORLD LITERATURE (3 LEC.)
Prerequisite: English 102. Significant works of continental Europe are studied. The Greek Classical Period through the Renaissance is covered.

ENGLISH (ENG) 204 (3)
WORLD LITERATURE (3 LEC.)
Prerequisite: English 102. Significant works of continental Europe, England, and America are studied. The time period since the Renaissance is covered.

ENGLISH (ENG) 205 (3)
AMERICAN LITERATURE (3 LEC.)
Prerequisite: English 102. Significant works of American writers before Walt Whitman are studied. Emphasis is on the context of the writers' times.

ENGLISH (ENG) 206 (3)
AMERICAN LITERATURE (3 LEC.)
Prerequisite: English 102. Significant works of American writers from Walt Whitman to the present are studied.

ENGLISH (ENG) 209 (3)
CREATIVE WRITING (3 LEC.)
Prerequisite: English 102. The writing of fiction is the focus of this course. Included are the short story, poetry, and short drama.

ENGLISH (ENG) 210 (3)
TECHNICAL WRITING (3 LEC.)
Prerequisite: English 101 and 102 or Communications 131 and 132. The technical style of writing is introduced. Emphasis is on the writing of technical papers, reports, proposals, progress reports, and descriptions.

ENGLISH (ENG) 215 (3)
STUDIES IN LITERATURE (3 LEC.)
Prerequisite: English 102. Selections in literature are read, analyzed, and discussed. Selections are organized by genre, period, or geographical region. Course titles and descriptions are available each semester prior to registration. This course may be repeated for credit.

ENGLISH (ENG) 216 (3)
STUDIES IN LITERATURE (3 LEC.)
Prerequisite: English 102. Selections in literature are read, analyzed, and discussed. Selections are organized by theme, interdisciplinary content or major author. Course titles and descriptions are available each semester prior to registration. This course may be repeated for credit.

FRENCH (FR) 101 (4)
BEGINNING FRENCH (3 LEC., 2 LAB.)
The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee.

FRENCH (FR) 102 (4)
BEGINNING FRENCH (3 LEC., 2 LAB.)
Prerequisite: French 101 or the equivalent. This course is a continuation of French 101. Emphasis is on idiomatic language and complicated syntax. Laboratory fee.

FRENCH (FR) 201 (3)
INTERMEDIATE FRENCH (3 LEC.)
Prerequisite: French 102 or the equivalent. Reading, composition, and intense oral practice are covered in this course. Grammar is reviewed.

FRENCH (FR) 202 (3)
INTERMEDIATE FRENCH (3 LEC.)
Prerequisite: French 201 or the equivalent. This course is a continuation of French 201. Contemporary literature and composition are studied.

FRENCH (FR) 203 (3)
INTRODUCTION TO FRENCH LITERATURE (3 LEC.)
Prerequisite: French 202 or the consent of the instructor. This course is an introduction to French literature. It includes readings in French literature, history, culture, art, and civilization.
FRENCH (FR) 204  (3)
INTRODUCTION TO FRENCH LITERATURE (3 LEC.)
Prerequisite: French 202 or the consent of the instructor. This course is a continuation of French 203. It includes readings in French literature, history, culture, art, and civilization.

GEOGRAPHY (GPY) 101  (3)
PHYSICAL GEOGRAPHY (3 LEC.)
The physical composition of the earth is surveyed. Topics include weather, climate, topography, plant and animal life, land, and the sea. Emphasis is on the earth in space, use of maps and charts, and place geography.

GEOGRAPHY (GPY) 102  (3)
ECONOMIC GEOGRAPHY (3 LEC.)
The relation of humans to their environment is studied. Included is the use of natural resources. Problems of production, manufacturing, and distributing goods are explored. Primitive subsistence and commercialism are considered.

GEOGRAPHY (GPY) 103  (3)
CULTURAL GEOGRAPHY (3 LEC.)
This course focuses on the development of regional variations of culture. Topics include the distribution of races, religions, and languages. Aspects of material culture are also included. Emphasis is on origins and diffusion.

GEOLOGY (GEO) 101  (4)
PHYSICAL GEOLOGY (3 LEC., 3 LAB.)
This course is for science and non-science majors. It is a study of earth materials and processes. Included is an introduction to geochemistry, geophysics, the earth's interior, and magnetism. The earth's setting in space, minerals, rocks, structures, and geologic processes are also included. Laboratory fee.

GEOLOGY (GEO) 102  (4)
HISTORICAL GEOLOGY (3 LEC., 3 LAB.)
This course is for science and non-science majors. It is a study of earth materials and processes within a developmental time perspective. Fossils, geologic maps, and field studies are used to interpret geologic history. Laboratory fee.

GEOLOGY (GEO) 202  (3)
INTRODUCTION TO ROCK AND MINERAL IDENTIFICATION (1 LEC., 3 LAB.)
Prerequisites: Geology 101 and Geology 102. This course introduces crystallography, geochemistry, descriptive mineralogy, petrology, and phase equilibria. Crystal models and hand specimens are studied as an aid to rock and mineral identification. Laboratory fee.

GEOLOGY (GEO) 205  (4)
FIELD GEOLOGY (3 LEC., 3 LAB.)
Geological features, landforms, rocks, minerals, and fossils are surveyed. Map reading and interpretation are also included. Emphasis is on the identification, classification, and collection of specimens in the field. Laboratory fee.

GERMAN (GER) 101  (4)
BEGINNING GERMAN (3 LEC., 2 LAB.)
The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee.

GERMAN (GER) 102  (4)
BEGINNING GERMAN (3 LEC., 2 LAB.)
Prerequisite: German 101 or the equivalent. This course is a continuation of German 101. Emphasis is on idiomatic language and complicated syntax. Laboratory fee.

GERMAN (GER) 201  (3)
INTERMEDIATE GERMAN (3 LEC.)
Prerequisite: German 102 or the equivalent or the consent of the instructor. Reading, composition, and intense oral practice are covered. Grammar is reviewed.

GERMAN (GER) 202  (3)
INTERMEDIATE GERMAN (3 LEC.)
Prerequisite: German 201 or the equivalent. This course is a continuation of German 201. Contemporary literature and composition are studied.
GOVERNMENT (GVT) 201 (3)
AMERICAN GOVERNMENT (3 LEC.)
Prerequisite: Sophomore standing recommended. This course is an introduction to the study of political science. Topics include the origin and development of constitutional democracy (United States and Texas), federalism and intergovernmental relations, local government, parties, politics, and political behavior. The course satisfies requirements for Texas State Teacher's Certification. (This course is offered on campus and may be offered via television.)

GOVERNMENT (GVT) 202 (3)
AMERICAN GOVERNMENT (3 LEC.)
Prerequisite: Sophomore standing recommended. The three branches of the United States and Texas government are studied. Topics include the legislative process, the executive and bureaucratic structure, the judicial process, civil rights and liberties, and domestic policies. Other topics include foreign relations and national defense. This course satisfies requirements for Texas State Teacher's Certification. (This course is offered on campus and may be offered via television.)

GOVERNMENT (GVT) 205 (3)
STUDIES IN GOVERNMENT (3 LEC.)
Prerequisite: Sophomore standing and 6 hours of history or government. Selected topics in government are presented. The course may be repeated once for credit when different topics are presented.

GOVERNMENT (GVT) 231 (3)
MUNICIPAL AND COUNTY GOVERNMENT (3 LEC.)
The structure of municipal and county government is examined. Topics include organs of government, administration, court systems, taxation, utilities and public works, education, welfare, and other public services. Presentations are given by local officials. Surveys of area problems are stressed.

HISTORY (HST) 101 (3)
HISTORY OF THE UNITED STATES (3 LEC.)
The history of the United States is presented, beginning with the European background and first discoveries. The pattern of exploration, settlement, and development of institutions is followed throughout the colonial period and the early national experience to 1877. (This course is offered on campus and may be offered via television.)

HISTORY (HST) 102 (3)
HISTORY OF THE UNITED STATES (3 LEC.)
Prerequisite: History 101 recommended. This course is a continuation of History 101. The history of the United States is surveyed from the reconstruction era to the present day. The study includes social, economic, and political aspects of American life. The development of the United States as a world power is followed. (This course is offered on campus and may be offered via television.)

HISTORY (HST) 105 (3)
WESTERN CIVILIZATION (3 LEC.)
The civilization in the West from ancient time through the Enlightenment is surveyed. Topics include the Mediterranean world, including Greece and Rome, the Middle Ages, and the beginnings of modern history. Particular emphasis is on the Renaissance, Reformation, the rise of the national state, the development of parliamentary government, and the influences of European colonization.

HISTORY (HST) 106 (3)
WESTERN CIVILIZATION (3 LEC.)
This course is a continuation of History 105. It follows the development of civilization from the Enlightenment to current times. Topics include the Age of Revolution, the beginning of industrialism, the 19th century, the the social, economic, and political factors of recent world history.

HISTORY (HST) 110 (3)
THE HERITAGE OF MEXICO (3 LEC.)
Students may register for either History 110 or Anthropology 110 but
may receive credit for only one of the two. This course (cross-listed as Anthropology 110) deals with the archaeology of Mexico beginning with the first humans to enter the North American Continent and culminating with the arrival of the Spanish in 1519 A.D. Emphasis is on archaic cultures, the Maya, Toltec, and Aztec empires.

HISTORY (HST) 112 (3) 
LATIN AMERICAN HISTORY (3 LEC.)
This course presents developments and personalities which have influenced Latin American history. Topics include Indian cultures, the Conquistadors, Spanish administration, the wars of independence, and relations with the United States. A brief survey of contemporary problems concludes the course.

HISTORY (HST) 120 (3) 
AFRO-AMERICAN HISTORY (3 LEC.)
The role of the Black in American history is studied. The slave trade and slavery in the United States are reviewed. Contributions of black Americans in the U.S. are described. Emphasis is on the political, economic, and sociological factors of the 20th century.

HISTORY (HST) 204 (3) 
AMERICAN MINORITIES (3 LEC.)
Prerequisites: Sociology 101 or 6 hours of U.S. history recommended. Students may register for either History 204 or Sociology 204 but may receive credit for only one of the two. The principal minority groups in American society are the focus of this course. The sociological significance and historic contributions of the groups are presented. Emphasis is on current problems of intergroup relations, social movements, and related social changes.

HISTORY (HST) 205 (3) 
STUDIES IN U.S. HISTORY (3 LEC.)
Prerequisite: Sophomore standing and 6 hours of American history. Selected topics in the history of the United States are presented. The course may be repeated once for credit when different topics are presented.

HUMAN DEVELOPMENT (HD) 100 (1) 
EDUCATIONAL ALTERNATIVES (1 LEC.)
The learning environment is introduced. Career, personal study skills, educational planning, and skills for living are all included. Emphasis is on exploring career and educational alternatives and learning a systematic approach to decision-making. A wide range of learning alternatives is covered, and opportunity is provided to participate in personal skills seminars.

HUMAN DEVELOPMENT (HD) 102 (1) 
ORIENTATION (1 LEC.)
This course helps the student be successful in college. The student makes an individual contract with the instructor. Student experiences include appropriate subject packages such as "improving your vocabulary", "how to take notes", "study skills", and "listening skills." An evaluation session with a counselor is also included. A package may be composed of programmed materials, filmstrips, tapes, slides, seminars, learning activities, or other appropriate materials.

HUMAN DEVELOPMENT (HD) 104 (3) 
EDUCATIONAL AND CAREER PLANNING (3 LEC.)
This course is designed to teach students the on-going process of decision making as it relates to career/life and educational planning. Students identify the unique aspects of themselves (interests, skills, values). They investigate possible work environments and develop a plan for personal satisfaction. Job search and survival skills are also considered.

HUMAN DEVELOPMENT (HD) 105 (3) 
BASIC PROCESSES OF INTERPERSONAL RELATIONSHIPS (3 LEC.)
Interpersonal relations are explored through an applied study of theory and concepts of small group processes. Students are given an opportunity to participate in experiences to increase
one's sensitivity to self and to others. A variety of activities is planned, partly by each class, to meet specific needs of the students in the class.

**HUMAN DEVELOPMENT (HD) 106 (3)**
PERSONAL AND SOCIAL GROWTH (3 LEC.)
The interaction between a person and society is explored. Topics include understanding of self, influences of society contributing to the development of self, and success of the individual within a society. Adjustment to family, school, and society is developed.

**HUMAN DEVELOPMENT (HD) 107 (3)**
DEVELOPING LEADERSHIP BEHAVIOR (3 LEC.)
The basic purpose of this course is to help the student develop leadership and human relation skills. Topics include individual and group productivity, value systems, appropriate communications skills, and positive attitudes in a group environment. The concepts of leadership are explored through both theory and practice. These leadership activities can be applied to the student's personal, business, and professional interactions.

**HUMANITIES (HUM) 101 (3)**
INTRODUCTION TO THE HUMANITIES (3 LEC.)
Related examples of humans’ creative achievements are examined. Emphasis is on understanding the nature of humans and the values of human life. (This course is offered on campus and may be offered via television. Laboratory fee required for television course.)

**HUMANITIES (HUM) 102 (3)**
ADVANCED HUMANITIES (3 LEC.)
Prerequisite: Humanities 101 and/or the consent of the instructor. Human value choices are presented through the context of the humanities. Universal concerns are explored, such as a person's relationship to self and to others and the search for meaning. The human as a loving, believing and hating being is also studied. Emphasis is on the human as seen by artists, playwrights, filmmakers, musicians, dancers, philosophers, and theologians. The commonality of human experience across cultures and the premises for value choices are also stressed.

**JOURNALISM (IN) 101 (3)**
INTRODUCTION TO MASS COMMUNICATIONS (3 LEC.)
This course surveys the field of mass communications. Emphasis is on the role of mass media in modern society.

**JOURNALISM (IN) 102 (3)**
NEWS GATHERING AND WRITING (2 LEC., 3 LAB.)
Prerequisite: Typing ability. Beginning reporting is presented. Topics include types of news, leads, body treatment of a story, feature in the lead, facts, and background. A practice in writing straight news stories is provided.

**JOURNALISM (IN) 103 (3)**
NEWS GATHERING AND WRITING (2 LEC., 3 LAB.)
Prerequisite: Journalism 102. This course is a continuation of Journalism 102. Complex news stories are written. Specialized writing is covered for sports, police news, markets, finance, society, amusements, government, and women’s stories. Laboratory work on the student newspaper is required.

**JOURNALISM (IN) 104 (1)**
STUDENT PUBLICATIONS (3 LAB.)
This course may not be taken for credit concurrently with Journalism 102 or 103. Individual staff assignments are made for the student newspaper. Assignments may be made in writing, advertising, photography, cartooning, or editing. Students are required to work at prescribed periods under supervision and must attend staff meetings. This course may be repeated for a total of three credits.

**JOURNALISM (IN) 105 (1)**
STUDENT PUBLICATIONS (3 LAB.)
This course may not be taken for credit concurrently with Journalism 102 or 103. The course is a continuation of Journalism 104.
JOURNALISM (JN) 201  (3)
EDITORIAL AND FEATURE WRITING (3 LEC.)
Prerequisites: 6 hours of journalism or the consent of the instructor. This course covers difficult news stories, editorials, and features. Research, interviewing techniques, and the development of feature stories for use in newspapers and magazines are emphasized.

JOURNALISM (JN) 202  (1)
STUDENT PUBLICATIONS (3 LAB.)
Prerequisite: The consent of the instructor. This course may not be taken for credit concurrently with Journalism 102 or 103. Individual staff assignments are made for the student newspaper. Assignments may be made in writing, advertising, photography, cartooning, or editing. Students are required to work at prescribed periods under supervision and must attend staff meetings.

JOURNALISM (JN) 203  (1)
STUDENT PUBLICATIONS (3 LAB.)
This course may not be taken for credit concurrently with Journalism 102 or 103. The course is a continuation of Journalism 202.

JOURNALISM (JN) 204  (3)
NEWS EDITING AND COPY READING (3 LEC.)
Prerequisite: Journalism 102. This course focuses on editing news for newspaper, radio, and television. Emphasis is on writing headlines and laying out pages.

LIBRARY SKILLS (LS) 101  (3)
INTRODUCTION TO LIBRARY RESEARCH (3 LEC.)
In this course the student explores the various types of print and non-print sources of information and learns to document research. Emphasis is on practical skills with a great deal of hands-on experience. The course skills consist of lectures as well as the following learning experiences: (1) examination of the specific materials covered in the lecture, (2) completion of appropriate exercises designed to build basic skills used in research, and (3) conference with each student to determine rate of progress and to provide guidance on an individual basis.

MATHEMATICS
(See also Developmental Mathematics. Supplementary instruction in mathematics is available through the Learning Resources Center.)

MATHEMATICS (MTH) 101  (3)
COLLEGE ALGEBRA (3 LEC.)
Prerequisite: Two years of high school algebra or Developmental Mathematics 093. This course is a study of functions and relations, absolute values, variation, quadratic equations, complex numbers, functions of two variables, systems of equations and inequalities, elementary aspects of the theory of equations, progressions, the binomial theorem, and algebraic proof.

MATHEMATICS (MTH) 102  (3)
PLANE TRIGONOMETRY (3 LEC.)
Prerequisite: Mathematics 101 or equivalent. This course is a study of angular measure, functions of angles, identities, solution of triangles, equations, inverse trigonometric functions, logarithms, and complex numbers.

MATHEMATICS (MTH) 104  (5)
ELEMENTARY FUNCTIONS AND COORDINATE GEOMETRY I (5 LEC.)
Prerequisites: Two years of high school algebra or Developmental Mathematics 093. This course includes the concept of function, polynomials of one or more variables, arithmetic and geometric sequences, combinations and the binomial theorem, rational functions, exponential functions, logarithmic functions, trigonometric functions, complex numbers, vectors, functions of two variables and analytical geometry which includes conics, transformation of coordinates, polar coordinates, parametric equations and three dimensional space.
MATHEMATICS (MTH) 105 (5)  
ELEMENTARY FUNCTIONS AND  
COORDINATE GEOMETRY II (5 LEC.)
Prerequisite: Mathematics 104. This  
course is a continuing study of the  
topics of Mathematics 104.

MATHEMATICS (MTH) 106 (5)  
ELEMENTARY FUNCTIONS AND  
COORDINATE GEOMETRY III (5 LEC.)
Prerequisites: Two years of high school  
algebra and one semester of trigonometry.  
This course is a study of the  
algebra of functions. It includes  
polynomial, rational, exponential, loga-  
rithmic and trigonometric functions,  
functions of two variables, complex  
numbers, vectors and analytic  
geometry which includes conics, trans-  
formation of coordinates, polar coor-  
dinates, and parametric equations.

MATHEMATICS (MTH) 107 (3)  
FUNDAMENTALS OF COMPUTING (3 LEC.)
Prerequisite: Two years of high school  
algebra or Developmental Mathematics  
093. This course is an introductory  
course designed primarily for  
students desiring credit toward a minor  
or major in computer science. It  
includes a study of algorithms and an  
introduction to a procedure-oriented  
language with general applications.

MATHEMATICS (MTH) 111 (3)  
MATHEMATICS FOR BUSINESS  
AND ECONOMICS I (3 LEC.)
Prerequisite: Two years of high school  
algebra and one year of high school  
geometry or two years of high school  
algebra or Developmental Mathematics  
093. Designed for liberal arts  
students, this course includes the  
study of algebra, linear programming,  
permutations, combinations,  
probability and geometry. Historical  
aspects of selected topics are  
emphasized.

MATHEMATICS (MTH) 112 (3)  
MATHEMATICS FOR BUSINESS  
AND ECONOMICS II (3 LEC.)
Prerequisite: Mathematics 111. This  
course includes sequences and limits,  
differential calculus, integral calculus,  
and appropriate applications.

MATHEMATICS (MTH) 115 (3)  
COLLEGE MATHEMATICS I (3 LEC.)
Prerequisites: One year of high school  
algebra and one year of high school  
geometry or two years of high school  
algebra or Developmental Mathematics  
093. Designed for liberal arts  
students, this course includes the  
study of logic, mathematical patterns,  
mathematical recreations, systems of  
umeration, mathematical systems,  
sets and statements and sets of  
numbers. Historical aspects of  
selected topics are emphasized.

MATHEMATICS (MTH) 116 (3)  
COLLEGE MATHEMATICS II (3 LEC.)
Prerequisite: One year of high school  
algebra and one year of high school  
geometry or two years of high school  
algebra or Developmental Mathematics  
093. Designed for liberal arts  
students, this course includes the  
study of algebra, linear programming,  
permutations, combinations,  
probability and geometry. Historical  
aspects of selected topics are  
emphasized.

MATHEMATICS 121 (3)  
ANALYTIC GEOMETRY (3 LEC.)
Prerequisite: Mathematics 102 or  
equivalent. This course is a study of  
the real numbers, distance, the  
straight line, conics, transformation of  
coordinates, polar coordinates, para-  
metric equations, and three-dimen-  
sional space.

MATHEMATICS (MTH) 126 (5)  
INTRODUCTORY CALCULUS (5 LEC.)
Prerequisite: Mathematics 105 or 106  
or 121 or equivalent. This course is a  
study of limits, continuity, derivatives,  
slopes, tangents, chain rule, implicit  
differentiation, higher derivatives,  
differentials, integrations, applications  
of differential and integral calculus and  
trigonometric and inverse trigono-  
matic functions.
MATHEMATICS (MTH) 130  (3)
BUSINESS MATHEMATICS (3 LEC.)
Prerequisite: One year of high school algebra or Developmental Mathematics 091 or the equivalent. This course is intended primarily for students in specialized occupational programs. It is a study of simple and compound interest, bank discount, payrolls, taxes, insurance, mark up and mark down, corporate securities, depreciation, and purchase discounts.

MATHEMATICS (MTH) 139  (3)
APPLIED MATHEMATICS (3 LEC.)
Prerequisite: One year of high school algebra or Developmental Mathematics 091 or equivalent. An effort will be made to tailor this course to fit the needs of the students enrolled in each semester. The course is a study of commercial, technical, and other applied uses of mathematics.

MATHEMATICS (MTH) 202  (3)
INTRODUCTORY STATISTICS (3 LEC.)
Prerequisite: Two years of high school algebra or consent of instructor. This course is a study of collection and tabulation of data, bar charts, graphs, sampling, measures of central tendency and variability, correlation, index numbers, statistical distributions, probability, and application to various fields.

MATHEMATICS (MTH) 207  (3)
FORTRAN PROGRAMMING WITH APPLICATIONS (3 LEC.)
Prerequisites: Mathematics 107 or equivalent and Mathematics 101 or Mathematics 111 or Mathematics 104 or its equivalent. This course is a study of Fortran with emphasis on applications and programming of algorithmic language to solve numerical problems. Writing, testing, and executing typical Fortran programs are stressed. Emphasis is on applications for majors and minors in engineering, the sciences, mathematics, or business.

MATHEMATICS (MTH) 209  (3)
INTRODUCTORY APL PROGRAMMING (3 LEC.)
Prerequisites: Mathematics 101 or Mathematics 104 or Mathematics 111 and Mathematics 107 or consent of instructor. This course is a study of APL with emphasis on applications. It is designed for partial fulfillment of degree requirements in computer science.

MATHEMATICS (MTH) 221  (3)
LINEAR ALGEBRA (3 LEC.)
Prerequisite: Mathematics 126 or equivalent. This course is a study of matrices, linear equations, dot products, cross products, geometrical vectors, determinants, n-dimensional space, and linear transformation.

MATHEMATICS (MTH) 222  (3)
CALCULUS I (3 LEC.)
Prerequisite: Mathematics 121. This course includes limits, continuity, differentiation of algebraic and transcendental functions, and applications, maxima and minima, antiderivatives and indeterminate forms.

MATHEMATICS (MTH) 223  (3)
CALCULUS II (3 LEC.)
Prerequisite: Mathematics 222. This course includes the indefinite integral, definite integral, and applications, techniques of integration, improper integrals, and infinite series.

MATHEMATICS (MTH) 224  (3)
ADVANCED CALCULUS (3 LEC.)
Prerequisite: Mathematics 223. This course includes multiple integrals, partial differentiation, vector analysis, series and hyperbolic functions.

MATHEMATICS (MTH) 227  (4)
MATHEMATICAL ANALYSIS I (4 LEC.)
Prerequisite: Mathematics 126 or equivalent. This course is a continued study of techniques of differentiation and integration. This will include logarithmic and exponential functions, parametric equations, polar coordinates, hyperbolic functions and vectors.

MATHEMATICS (MTH) 228  (3)
MATHEMATICAL ANALYSIS II (3 LEC.)
Prerequisite: Mathematics 227 or equivalent. This course is a continued study of vectors, functions of several variables, partial derivatives, multiple
integrals, indeterminate forms, infinite series, and an introduction to differential equations.

**MATHEMATICS (MTH) 230 (3)**  
**DIFFERENTIAL EQUATIONS (3 LEC.)**  
Prerequisite: Mathematics 227 or consent of instructor. This course is a study of ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, boundary value problems, and applications.

**MUSIC (MUS) 101 (4)**  
**FRESHMAN THEORY (3 LEC., 3 LAB.)**  
Musicianship skills are developed. Emphasis is on tonal and rhythmic perception and articulation. The essential elements of music are presented, and sight-singing, keyboard, and notation are introduced.

**MUSIC (MUS) 102 (4)**  
**FRESHMAN THEORY (3 LEC., 3 LAB.)**  
Prerequisite: Music 101 or the consent of the instructor. This course introduces part-writing and harmonization with triads and their inversions. Also included are the classification of chords, seventh chords, sight-singing, dictation, and keyboard harmony.

**MUSIC (MUS) 103 (1)**  
**GUITAR ENSEMBLE (3 LAB.)**  
Music composed and arranged for a guitar ensemble is performed. Works for a guitar and a different instrument or for guitar and a voice are also included. This course may be repeated for credit.

**MUSIC (MUS) 104 (3)**  
**MUSIC APPRECIATION (3 LEC.)**  
The basic elements of music are surveyed and examined in the music literature of western civilization, particularly from the Baroque Period to the present. Cultural influences on the music of each era are observed.

**MUSIC (MUS) 105 (1)**  
**ITALIAN DICTION (2 LAB.)**  
The phonetic sounds of the Italian language are studied. Included is selected vocabulary. This course is primarily for voice majors.

**MUSIC (MUS) 106 (1)**  
**FRENCH DICTION (2 LAB.)**  
The phonetic sounds of the French language are studied. Included is selected vocabulary. This course is primarily for voice majors.

**MUSIC (MUS) 107 (1)**  
**GERMAN DICTION (2 LAB.)**  
The phonetic sounds of the German language are studied. Included is selected vocabulary. This course is primarily for voice majors.

**MUSIC (MUS) 110 (3)**  
**MUSIC LITERATURE (3 LEC.)**  
The music of recognized composers in the major periods of music history is examined. Topics include the characteristics of sound, elements of music, performance media, and musical texture. Emphasis is on the music of the late Gothic, Renaissance and Baroque eras.

**MUSIC (MUS) 111 (3)**  
**MUSIC LITERATURE (3 LEC.)**  
Prerequisite: Music 110. This course is a continuation of Music 110. The compositional procedures and forms used by composers are studied. Emphasis is on the Classical, Romantic, and Modern periods.

**MUSIC (MUS) 112 (3)**  
**GUITAR LITERATURE AND MATERIALS (3 LEC.)**  
The body of music for the guitar is surveyed. Emphasis is on the repertoire of instruments in the guitar family, such as the lute. Transcription and arranging are studied as well as the selection of a program for public performance.

**MUSIC (MUS) 113 (3)**  
**FOUNDATIONS OF MUSIC I (3 LEC.)**  
This course focuses on participation and skills for satisfactory performance in singing, playing an instrument, listening, and creating rhythmic responses. The ability to manage notation (music reading) is developed.
MUSIC (MUS) 114 (3)
FOUNDATIONS IN MUSIC II (3 LEC.)
Prerequisite: Music 113. This course prepares students with limited music training for Music 101 and increases their general music understanding. Emphasis is on rhythmic and melodic training, chord functions, melody, textures, and basic analysis of music.

MUSIC (MUS) 115 (2)
JAZZ IMPROVISATION (1 LEC., 2 LAB.)
The art of improvisation is introduced. Basic materials, aural training, analysis, and common styles are presented. This course may be repeated for credit.

MUSIC (MUS) 117 (1)
Piano Class I (2 LAB.)
This course is primarily for students with no knowledge of piano skills. It develops basic musicianship and piano skills. This course may be repeated for credit.

MUSIC (MUS) 118 (1)
Piano Class II (2 LAB.)
The study of piano is continued. Included are techniques, skills, harmonization, transposition, improvisation, accompanying, sight-reading, and performing various styles of repertoire. This course may be repeated for credit.

MUSIC (MUS) 119 (1)
Guitar Class I (2 LAB.)
This course is primarily for students with limited knowledge in reading music or playing the guitar. It develops basic guitar skills. This course may be repeated for credit.

MUSIC (MUS) 120 (1)
Guitar Class II (2 LAB.)
Prerequisite Music 119 or the equivalent. This course is a continuation of Music 119. Emphasis is on classical guitar techniques and music reading skills. This course may be repeated for credit.

MUSIC (MUS) 121-143 (1)
APPLIED MUSIC-MINOR (1 LEC.)
This course is open to students enrolled in music theory, ensembles, and other music major and minor courses. It provides private instruction in the student's secondary area, and consists of a one half-hour lesson a week. Fee required. Private music may be repeated for credit.

MUSIC (MUS) 150 (1)
Chorus (3 LAB.)
Prerequisite: Consent of instructor. A wide variety of music representing the literature of the great eras of music history is studied and performed. This course may be repeated for credit.

MUSIC (MUS) 151 (1)
Voice Class I (2 LAB.)
This course is for non-voice majors. It presents the principles of breathing, voice production, tone control, enunciation, and phrasing in two group lessons a week. This course may be repeated for credit.

MUSIC (MUS) 152 (1)
Voice Class II (2 LAB.)
This course is a continuation of Music 151. It is open to all non-voice majors. Emphasis is on solo singing, appearance in studio recital, stage deportment, and personality development. Two group lessons are given a week. This course may be repeated for credit.

MUSIC (MUS) 155 (1)
Vocal Ensemble (3 LAB.)
A group of mixed voices concentrates on excellence of performance. Membership is open to any student by audition. The director selects those who possess special interest and skill in the performance of advanced choral literature. This course may be repeated for credit.

MUSIC (MUS) 156 (1)
Madrigal Singers (3 LAB.)
A group of vocalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

MUSIC (MUS) 160 (1)
Band (3 LAB.)
Prerequisite: The consent of the
instructor is required for non-wind instrument majors. The band studies and performs a wide variety of music in all areas of band literature. This course may be repeated for credit.

**MUSIC (MUS) 170 (1)**
**ORCHESTRA (3 LAB.)**
Experience is provided in performing and reading orchestral literature and in participating in the college orchestra. This course may be repeated for credit.

**MUSIC (MUS) 171 (1)**
**WOODWIND ENSEMBLE (3 LAB.)**
A group of woodwind instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

**MUSIC (MUS) 172 (1)**
**BRASS ENSEMBLE (3 LAB.)**
A group of brass instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

**MUSIC (MUS) 173 (1)**
**PERCUSSION ENSEMBLE (3 LAB.)**
A group of percussion instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

**MUSIC (MUS) 174 (1)**
**KEYBOARD ENSEMBLE (3 LAB.)**
A group of keyboard instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

**MUSIC (MUS) 175 (1)**
**STRING ENSEMBLE (3 LAB.)**
A group of string instrumentalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

**MUSIC (MUS) 176 (1)**
**SYMPHONIC WIND ENSEMBLE (3 LAB.)**
In the symphonic wind ensemble students study and perform stylistic literature of all periods. This course may be repeated for credit.

**MUSIC (MUS) 177 (1)**
**CHAMBER ENSEMBLE (3 LAB.)**
A group of chamber instrumentalists or vocalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit.

**MUSIC (MUS) 181 (1)**
**LAB BAND (3 LAB.)**
Prerequisite: The consent of the instructor. In the Lab Band students study and perform all forms of commercial music, such as jazz, pop, avant-garde, and soul. Student arranging, composing, and conducting is encouraged. This course may be repeated for credit.

**MUSIC (MUS) 185 (1)**
**STAGE BAND (3 LAB.)**
Prerequisite: The consent of the instructor. In the Stage Band students study and perform a wide variety of music. Emphasis is on the jazz-oriented, big-band styles of the 1960's. This may be repeated for credit.

**MUSIC (MUS) 199 (1)**
**RECITAL (2 LAB.)**
Students of private lessons perform before an audience one period each week. Credit for this course does not apply to the Associate Degree. This course may be repeated for credit.

**MUSIC (MUS) 201 (4)**
**SOPHOMORE THEORY (3 LEC., 3 LAB.)**
Prerequisite: Music 101 and 102 or the consent of the instructor. This course is a continuation of the study of theory. Topics include larger forms, thematic development, chromatic chords such as the Neapolitan sixth and augmented sixth chords, and diatonic seventh chords. Advanced sight-singing, keyboard harmony, and ear training are also included.

**MUSIC (MUS) 202 (4)**
**SOPHOMORE THEORY (3 LEC., 3 LAB.)**
Prerequisite: Music 201 or the
equivalent or the consent of the instructor. This course is a continuation of Music 201. Topics include the sonata-allegro form and the ninth, eleventh, and thirteenth chords. New key schemes, impressionism, melody, harmony, tonality and formal processes of 20th century music are also included. Sight-singing, keyboard harmony, and ear training are developed further.

**MUSIC (MUS) 203 (3)**
**COMPOSITION (3 LEC.)**
Prerequisite: Music 101 and 102 or the consent of the instructor. This course covers composing in small forms for simple media in both traditional styles and styles of the student's choice. The course may be repeated for credit.

**MUSIC (MUS) 204 (2)**
**GUITAR PEDAGOGY (2 LEC.)**
Guitar method books are surveyed. Emphasis is on the strengths and weaknesses of each method. Structuring lessons and optimizing each individual teacher-student relationship are also discussed.

**MUSIC (MUS) 221-243 (2)**
**APPLIED MUSIC CONCENTRATION (1 LEC.)**
This course is open to students enrolled in music theory, ensembles, and other music major and minor courses. It provides private instruction in the area of the student's concentration, and consists of two half-hour lessons a week. Fee required. Private music may be repeated for credit.

**MUSIC (MUS) 251-270 (3)**
**APPLIED MUSIC-MAJOR (1 LEC.)**
This course is primarily for music performance majors and is open to students enrolled in music theory, ensembles, and other music major and minor courses. It provides private instruction in the area of the student's major instrument, and consists of two half-hour lessons a week. Fee required.

**APPLIED MUSIC**
Subject to enrollment, students may receive private instruction in the following courses: piano, organ, voice, violin, viola, cello, double bass, flute, oboe, clarinet, bassoon, saxophone, trumpet, French horn, trombone, baritone, tuba, percussion, guitar, electric bass, and drum set. Private music may be repeated for credit.

**PHILOSOPHY (PHI) 102 (3)**
**INTRODUCTION TO PHILOSOPHY (3 LEC.)**
The fundamental problems in philosophy are surveyed. Methods to deal with the problems are discussed. Ancient and modern views are examined as possible solutions.

**PHILOSOPHY (PHI) 105 (3)**
**LOGIC (3 LEC.)**
The principles of logical thinking are analyzed. The methods and tools of logic are applied to real-life situations. Fallacies, definitions, analogies, syllogisms, Venn diagrams, and other topics are discussed.

**PHILOSOPHY (PHI) 202 (3)**
**INTRODUCTION TO SOCIAL AND POLITICAL PHILOSOPHY (3 LEC.)**
The relationships of philosophical ideas to the community are presented. Emphasis is on concepts of natural rights, justice, education, freedom, and responsibility.

**PHILOSOPHY (PHI) 203 (3)**
**ETHICS (3 LEC.)**
The classical and modern theories of the moral nature of the human are surveyed. Alternative views of responsibilities to self and society are posed. Ethical issues and their metaphysical and epistemological bases are vivified. Emphasis is on applying ethical principles in life.

**PHILOSOPHY (PHI) 207 (3)**
**HISTORY OF ANCIENT PHILOSOPHY (3 LEC.)**
The history of philosophy from pre-Socratic times to the Renaissance is examined. Connections are made between the pre-Socratics, Plato, and Aristotle. Stoicism, Epicureanism, and Scholasticism are considered.
PHILOSOPHY (PHI) 208 (3)
HISTORY OF MODERN PHILOSOPHY (3 LEC.)
The history of philosophy from the Renaissance through the 19th century is examined. Emphasis is on continental rationalism, British empiricism, Kantian metaphysics and epistemology, and the Hegelian system as it relates to 20th century philosophies. The historical relationship between these schools of thought is explored.

PHILOSOPHY (PHI) 210 (3)
STUDIES IN PHILOSOPHY (3 LEC.)
Prerequisite: 3 hours of philosophy and the consent of the instructor. A philosophical problem, movement, or special topic is studied. The course topic changes each semester. This course may be repeated for credit.

PHOTOGRAPHY (PHO) 110 (3)
INTRODUCTION TO PHOTOGRAPHY AND PHOTO·JOURNALISM (2 LEC., 4 LAB.)
Photography and photo-journalism are introduced. Topics include the general mechanics of camera lenses and shutters and the general characteristics of photographic films, papers, and chemicals. Darkroom procedures are presented, including enlarging, processing, contact printing, and exposing films and papers. Artificial lighting is studied. Laboratory fee.

PHOTOGRAPHY (PHO) 111 (3)
ADVANCED PHOTOGRAPHY AND PHOTO·JOURNALISM (2 LEC., 4 LAB.)
Techniques learned in Photography 110 are refined. Emphasis is on photographic communication. Laboratory fee.

PHOTOGRAPHY (PHO) 120 (4)
COMMERCIAL PHOTOGRAPHY I (3 LEC., 3 LAB.)
Commercial or contract photography is studied. Field, studio, and darkroom experience for various kinds of photography is discussed. Included are social photography, portrait and studio photography, fashion and theatrical portfolio, publicity photography, and convention photography. The use of natural, stationary, flash, and strobe artificial lights is covered. Laboratory fee.

PHOTOGRAPHY (PHO) 121 (4)
COMMERCIAL PHOTOGRAPHY II (3 LEC., 3 LAB.)
This course is a continuation of Photography 120. Publicity photography, architectural photography, interior photography, and advertising photography are included. The latest equipment, papers, films, and techniques are explored. Exchanges are made with sample clients, employers, studios, and agencies. Laboratory fee.

PHYSICAL EDUCATION
ACTIVITY COURSES
The Physical Education Division provides opportunity for each student to become skilled in at least one physical activity for personal enjoyment of leisure time. Activity courses are open to both men and women. A laboratory fee is required. Students are urged to take advantage of the program by registering for a physical education activity course each semester.

PHYSICAL EDUCATION
NON·ACTIVITY COURSES
PEH 101, 108, 109, 110, 144

PHYSICAL EDUCATION (PEH) 100 (1)
LIFETIME SPORTS ACTIVITIES (3 LAB.)
Various lifetime sports are offered. Courses offered may include archery, badminton, bowling, golf, handball, racquetball, softball, swimming, tennis, and other sports. Activities may be offered singularly or in combinations. Instruction is presented at the beginner and advanced-beginner levels. Both men and women participate. This course may be repeated for credit when students select different activities. Laboratory fee.

PHYSICAL EDUCATION (PEH) 101 (3)
FUNDAMENTALS OF HEALTH (3 LEC.)
This course is for students majoring or
minoring in physical education or having other specific interest. Personal health and community health are studied. Emphasis is on the causes of mental and physical health and disease transmission and prevention.

**Physical Education (PEH) 104 (1)**
TOUCH FOOTBALL/SOCCER (2 LAB.)
Touch football and soccer are taught and played. Emphasis is on skill development. A uniform is required. Laboratory fee.

**Physical Education (PEH) 108 (3)**
SOCIAL RECREATION (3 LEC.)
The methods and materials for social activities for different age groups are introduced. Planning, organizing, and conducting the activities are included.

**Physical Education (PEH) 109 (3)**
OUTDOOR RECREATION (3 LEC.)
Outdoor recreation and organized camping are studied. Both the development of these activities and present trends are covered.

**Physical Education (PEH) 110 (3)**
COMMUNITY RECREATION (3 LEC.)
This course is primarily for students majoring or minoring in health, physical education, or recreation. The principles, organization, and function of recreation in American society are covered.

**Physical Education (PEH) 111 (1)**
BEGINNING WRESTLING (2 LAB.)
The fundamentals, techniques, rules, and strategy of wrestling are presented. Emphasis is also on spectator appreciation. A uniform is required. Laboratory fee.

**Physical Education (PEH) 112 (1)**
SOFTBALL AND SOCCER (2 LAB.)
Softball and soccer are taught and played. A uniform is required. Laboratory fee.

**Physical Education (PEH) 113 (1)**
HANDBALL AND RACQUETBALL (2 LAB.)
Handball and racquetball are taught and played. Emphasis is on the development of skills. A uniform is required. Laboratory fee.

**Physical Education (PEH) 114 (1)**
BEGINNING BADMINTON (2 LAB.)
The history, rules, and skills of badminton are taught. A uniform is required. Laboratory fee.

**Physical Education (PEH) 115 (1)**
PHYSICAL FITNESS (3 LAB.)
The student’s physical condition is assessed. A program of exercise for life is prescribed. Much of the course work is carried on in the Physical Performance Laboratory. A uniform is required. This course may be repeated for credit. Laboratory fee.

**Physical Education (PEH) 116 (1)**
INTRAMURAL ATHLETICS (2 LAB.)
Intramural competition in a variety of activities is offered for men and women. A uniform is required. This course may be repeated for credit. Laboratory fee.

**Physical Education (PEH) 117 (1)**
BEGINNING ARCHERY (2 LAB.)
Beginning archery is taught and played. Equipment is furnished. Laboratory fee.

**Physical Education (PEH) 118 (1)**
BEGINNING GOLF (2 LAB.)
Beginning golf is taught and played. Equipment is furnished. Laboratory fee.

**Physical Education (PEH) 119 (1)**
BEGINNING TENNIS (2 LAB.)
This course is designed for the beginner. Tennis fundamentals are taught and played. A uniform is required. Laboratory fee.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(PEH) 120</td>
<td>BEGINNING BOWLING (2 LAB.)</td>
<td>1</td>
<td>Beginning bowling is taught and played. Equipment is furnished. Laboratory fee.</td>
</tr>
<tr>
<td>(PEH) 121</td>
<td>FOLK DANCE (2 LAB.)</td>
<td>1</td>
<td>Participation is provided in a variety of folk dances from other lands. The study of cultural backgrounds and costumes is included. Laboratory fee.</td>
</tr>
<tr>
<td>(PEH) 122</td>
<td>BEGINNING GYMNASTICS (2 LAB.)</td>
<td>1</td>
<td>Beginning gymnastics is offered. Emphasis is on basic skills in tumbling and in the various apparatus events. A uniform is required. Laboratory fee.</td>
</tr>
<tr>
<td>(PEH) 123</td>
<td>BEGINNING SWIMMING (2 LAB.)</td>
<td>1</td>
<td>This course teaches a non-swimmer to survive in the water. A uniform is required. Laboratory fee.</td>
</tr>
<tr>
<td>(PEH) 124</td>
<td>SOCIAL DANCE (2 LAB.)</td>
<td>1</td>
<td>This course is for students who have limited experience in dance. Ballroom and social dancing are offered. Included are fundamental steps and rhythms of the fox-trot, waltz, tango, and recent dances. “Country” dancing includes the reel, square dance, and other dances. Laboratory fee.</td>
</tr>
<tr>
<td>(PEH) 125</td>
<td>CONDITIONING EXERCISE (3 LAB.)</td>
<td>1</td>
<td>This course focuses on understanding exercise and its effect on the body. Physical fitness is improved through a variety of conditioning activities. A uniform is required. Laboratory fee.</td>
</tr>
<tr>
<td>(PEH) 127</td>
<td>BASKETBALL AND VOLLEYBALL (2 LAB.)</td>
<td>1</td>
<td>The techniques, rules, and strategy of basketball and volleyball are covered. Emphasis is on playing the games. A uniform is required. Laboratory fee.</td>
</tr>
<tr>
<td>(PEH) 128</td>
<td>SOCIAL AND FOLK DANCE (2 LAB.)</td>
<td>1</td>
<td>Social and folk dance is introduced. Laboratory fee.</td>
</tr>
<tr>
<td>(PEH) 129</td>
<td>MODERN DANCE (2 LAB.)</td>
<td>1</td>
<td>This beginning course is designed to emphasis basic dance techniques, including body alignment and placement, floor work, locomotor patterns, and creative movements. A uniform is required.</td>
</tr>
<tr>
<td>(PEH) 131</td>
<td>WEIGHT TRAINING AND CONDITIONING (3 LAB.)</td>
<td>1</td>
<td>Instruction and training in weight training and conditioning techniques are offered. A uniform is required. This course may be repeated for credit. Laboratory fee.</td>
</tr>
<tr>
<td>(PEH) 132</td>
<td>SELF-DEFENSE (3 LAB.)</td>
<td>1</td>
<td>Various forms of self-defense are introduced. The history and philosophy of the martial arts are explored. The student should progress from no previous experience in self-defense to an adequate skill level covering basic self-defense situations. Both mental and physical aspects of the arts are stressed.</td>
</tr>
<tr>
<td>(PEH) 134</td>
<td>OUTDOOR EDUCATION (3 LAB.)</td>
<td>1</td>
<td>Knowledge and skills in outdoor education and camping are presented. Planned and incidental experiences take place, including a week-end camp-out. Laboratory fee.</td>
</tr>
<tr>
<td>(PEH) 144</td>
<td>INTRODUCTION TO PHYSICAL EDUCATION (3 LEC.)</td>
<td>3</td>
<td>This course is for students majoring in physical education and is designed for professional orientation in physical education, health, and recreation. The history, philosophy, and modern trends of physical education are surveyed.</td>
</tr>
</tbody>
</table>
Topics include teacher qualifications, vocational opportunities, expected competencies, and skill testing.

PHYSICAL EDUCATION
(PEH) 147  (3)
SPORTS OFFICIATING I (2 LEC., 2 LAB.)
This course is for students who choose officiating for an avocation and who want to increase their knowledge and appreciation of sports. Sports covered in this course are football, basketball, and other sports as appropriate. Students are expected to officiate intramural games.

PHYSICAL EDUCATION
(PEH) 148  (3)
SPORTS OFFICIATING II (2 LEC., 2 LAB.)
This course is for students who choose officiating for an avocation and who want to increase their knowledge and appreciation of sports. Sports covered in this course are softball, track and field, baseball, and other sports as appropriate. Students are expected to officiate intramural games.

PHYSICAL EDUCATION
(PEH) 200  (1)
LIFETIME SPORTS ACTIVITIES II (3 LAB.)
This course is a continuation of Physical Education 100. Students participate in selected activities. Instruction is at the intermediate and intermediate/advanced levels. This course may be repeated for credit. Laboratory fee.

PHYSICAL EDUCATION
(PEH) 210  (3)
SPORTS APPRECIATION FOR THE SPECTATOR (3 LEC.)
This course is for students who desire a broader knowledge of major and minor sports. The rules, terminology, and philosophies of many sports are studied. Special emphasis is on football and basketball.

PHYSICAL EDUCATION
(PEH) 217  (1)
INTERMEDIATE ARCHERY (2 LAB.)
This course is for the student who has previous experience in archery. Target shooting and field archery are emphasized. The student must furnish equipment. Laboratory fee.

PHYSICAL EDUCATION
(PEH) 218  (1)
INTERMEDIATE GOLF (2 LAB.)
Prerequisite: The consent of the instructor. Skills and techniques in golf are developed beyond the "beginner" stage. Laboratory fee.

PHYSICAL EDUCATION
(PEH) 219  (1)
INTERMEDIATE TENNIS (2 LAB.)
Prerequisite: The consent of the instructor. Skills and techniques in tennis are developed beyond the "beginner" stage. A uniform is required. Laboratory fee.

PHYSICAL EDUCATION
(PEH) 222  (1)
INTERMEDIATE GYMNASTICS (2 LAB.)
Prerequisite: Physical Education 122. Skills and techniques in gymnastics are developed beyond the "beginner" stage. A uniform is required. Laboratory fee.

PHYSICAL EDUCATION
(PEH) 223  (1)
INTERMEDIATE SWIMMING (2 LAB.)
Prerequisite: Beginning swim certificate or deep water swimmer. This course advances the swimmer's skills. Stroke analysis, refinement, and endurance are emphasized. A uniform is required. Laboratory fee.

PHYSICAL EDUCATION
(PEH) 225  (2)
SKIN AND SCUBA DIVING (1 LEC., 2 LAB.)
Prerequisite: Physical Education 223 or the consent of the instructor. This course includes the use of equipment, safety, physiology, and open water diving. All equipment is supplied except mask, fins, and snorkel. The student may rent needed equipment at the time of registration. Students completing course requirements receive certification as basic scuba divers from the Professional Association of Diving Instructors (PADI) or the National Association of Underwater Instructors (NAUI). Laboratory fee.
PHYSICAL EDUCATION
(PEH) 226 (1)
ADVANCED LIFE SAVING (2 LAB.)
Prerequisite: Physical Education 223 or deep water swim ability. This course qualifies students for the Red Cross Advanced Lifesaving Certificate. A uniform is required. Laboratory fee.

PHYSICAL EDUCATION
(PEH) 224 (2)
WATER SAFETY INSTRUCTOR (1 LEC., 2 LAB.)
Prerequisite: Current Advanced Life Saving card. The principles and techniques for instructors in water safety and life saving classes are covered. Completion of the course qualifies the student to test for certification by the Red Cross as a water safety instructor. A uniform is required. Laboratory fee.

PHYSICAL EDUCATION
(PEH) 236 (3)
THE COACHING OF FOOTBALL AND BASKETBALL (2 LEC., 2 LAB.)
The skills and techniques of coaching football and basketball are presented. Included are the history, theories, philosophies, rules, terminology, and finer points of the sports. Emphasis is on coaching techniques.

PHYSICAL EDUCATION
(PEH) 238 (2)
AQUATICS (1 LEC., 2 LAB.)
The techniques and procedures of selected water-related activities are studied. The use of the activities in recreation programs is included. Pool management, staff training, safety, and supervision of aquatics are also included.

PHYSICAL EDUCATION
(PEH) 257 (3)
ADVANCED FIRST AID AND EMERGENCY CARE (3 LEC.)
The Advanced First Aid and Emergency Care course of the American Red Cross is taught, presenting both theory and practice. Various aspects of safety education also are included.

PHYSICAL SCIENCE
(PSC) 118 (4)
CONCEPTS IN PHYSICS (3 LEC., 3 LAB.)
This course is primarily for non-science majors. It is a study of the basic principles and concepts of physics, chemistry, and nuclear science. The three basic sciences are related to the physical world at an introductory level. Laboratory fee.
duces principles of physics and does not require a mathematical background. Emphasis is on modern developments in physics. Topics include acoustics, electricity and magnetism, light and the electromagnetic spectrum, atomic physics, and relativity. Laboratory fee.

PHYSICS (PHY) 131 (4)  
APPLIED PHYSICS (3 LEC., 3 LAB.)  
Prerequisite: Mathematics 195 or concurrent enrollment in Mathematics 195. This course is primarily for students in technical programs. The properties of matter, mechanics, and heat are introduced. Emphasis is on uses and problem-solving. Laboratory fee.

PHYSICS (PHY) 132 (4)  
APPLIED PHYSICS (3 LEC., 3 LAB.)  
Prerequisite: Physics 131. This course is a continuation of Physics 131. Concepts of sound, light, electricity, magnetism, and atomic theory are explained. Laboratory fee.

PHYSICS (PHY) 201 (4)  
GENERAL PHYSICS (3 LEC., 3 LAB.)  
Prerequisite: Credit or concurrent enrollment in Mathematics 126 or 222. This course is designed primarily for physics, chemistry, mathematics, and engineering majors. The principles and applications of mechanics, wave motion, and sound are studied. Emphasis is on fundamental concepts, problem-solving, notation, and units. The laboratory includes a one-hour problem session. Laboratory fee.

PHYSICS (PHY) 202 (4)  
GENERAL PHYSICS (3 LEC., 3 LAB.)  
Prerequisite: Physics 201 and credit or concurrent enrollment in Mathematics 223 or 227. This course presents the principles and applications of heat, electricity, magnetism, and optics. Emphasis is on fundamental concepts, problem solving, notation, and units. The laboratory includes a one-hour problem session. Laboratory fee.

PHYSICS (PHY) 203 (4)  
INTRODUCTION TO MODERN PHYSICS (3 LEC., 3 LAB.)  
Prerequisite: Physics 202. The principles of relativity, atomic physics, and nuclear physics are covered. Emphasis is on basic concepts, problem-solving, notation, and units. Laboratory fee.

PSYCHOLOGY (PSY) 103 (3)  
SEX ROLES IN AMERICAN SOCIETY (3 LEC.)  
Students may register for either Psychology 103 or Sociology 103 but receive credit for only one of the two. Human sexuality is studied. The physiological, psychological, and sociological aspects are included.

PSYCHOLOGY (PSY) 105 (3)  
INTRODUCTION TO PSYCHOLOGY (3 LEC.)  
Principles of human behavior and problems of human experience are presented. Topics include heredity and environment, the nervous system, motivation, learning, emotions, thinking, and intelligence. (This course is offered on campus and may be offered via television.)

PSYCHOLOGY (PSY) 131 (3)  
HUMAN RELATIONS (3 LEC.)  
Psychological principles are applied to human relations problems in business and industry. Topics include group dynamics and adjustment factors for employment and advancement.

PSYCHOLOGY (PSY) 201 (3)  
DEVELOPMENTAL PSYCHOLOGY (3 LEC.)  
Prerequisite: Psychology 105. This course is a study of human growth, development, and behavior. Emphasis is on psychological changes during life. Processes of life from prenatal beginnings through adulthood and aging are included. (This course is offered on campus and may be offered via television.)

PSYCHOLOGY (PSY) 202 (3)  
APPLIED PSYCHOLOGY (3 LEC.)  
Prerequisite: Psychology 105. Psychological facts and principles are applied to problems and activities of life. Emphasis is on observing, recording, and modifying human behavior. Some off-campus work may be required.
PSYCHOLOGY (PSY) 205  (3)
PSYCHOLOGY OF PERSONALITY (3 LEC.)
Prerequisite: Psychology 105.
Important factors of successful human adjustment such as child parent relationships, adolescence, anxiety states, defense mechanisms, and psychotherapeutic concepts are considered. Methods of personality measurement are also included.

PSYCHOLOGY (PSY) 207  (3)
SOCIAL PSYCHOLOGY (3 LEC.)
Prerequisite: Psychology 105 or Sociology 101. Students may register for either Psychology 207 or Sociology 207 but may receive credit for only one. Theories of individual behavior in the social environment are surveyed. Topics include the socio-psychological process, attitude formation and change, interpersonal relations, and group processes.

PSYCHOLOGY (PSY) 210  (3)
SELECTED TOPICS IN PSYCHOLOGY (3 LEC.)
Prerequisite: Psychology 105. An elective course designed to deal with specific topics in psychology. Examples of topics might include "adult development," "adolescent psychology," and "behavioral research." Course may be repeated once for credit.

READING (RD) 101  (3)
EFFECTIVE COLLEGE READING (3 LEC.)
Comprehension techniques for reading fiction and non-fiction are presented. Critical reading skills are addressed. Analysis, critique, and evaluation of written material are included. Reading comprehension and flexibility of reading rate are stressed. Advanced learning techniques are developed in listening, note-taking, underlining, concentrating, and reading in specialized academic areas.

READING (RD) 102  (3)
SPEED READING AND LEARNING (3 LEC.)
Reading and learning skills are addressed. Speed reading techniques and comprehension are emphasized. Learning and memory skills are also covered.

RELIGION (REL) 101  (3)
RELIGION IN AMERICAN CULTURE (3 LEC.)
This course examines the nature of religion in America. It covers important influences from the past and characteristics of current religious groups and movements. Emphasis is on understanding the role of religion in American life.

RELIGION (REL) 102  (3)
CONTEMPORARY RELIGIOUS PROBLEMS (3 LEC.)
Both classic and recent issues are explored. Such topics as the nature of religion, the existance of God, world religions, mysticism, sexuality and religion, and the interpretation of death are included. This course may be offered with emphasis on a specific topic, such as death and dying.

RELIGION (REL) 201  (3)
MAJOR WORLD RELIGIONS (3 LEC.)
This course surveys the major world religions. Hinduism, Buddhism, Judaism, Islam, and Christianity are included. The history of religions is covered, but the major emphasis is on current beliefs. Other topics may also be included, such as the nature of religion, tribal religion, and alternatives to religion.

SOCIAL SCIENCE (SS) 131  (3)
AMERICAN CIVILIZATION (3 LEC.)
Theories and institutions of modern society are introduced. Psychological, historical, sociocultural, political, and economic factors are considered. The nature of the human being and the relationships of the individual are examined. Emphasis is on the national, state, and local experiences which affect daily life.

SOCIAL SCIENCES (SS) 132  (3)
AMERICAN CIVILIZATION (3 LEC.)
Prerequisite: Social Science 131. Topical studies are made of the theories and institutions of modern society. Psychological, historical, sociocultural, political, and economic
factors are all considered. Emphasis is on analyzing and applying theory to life experiences.

**SOCILOGY (SOC) 101 (3)**
INTRODUCTION TO SOCIOLOGY (3 LEC.)
This course is a study of the nature of society and the foundations of group life. Topics include institutions, social change, processes, and problems.

**SOCILOGY (SOC) 102 (3)**
SOCIAL PROBLEMS (3 LEC.)
Prerequisite: Sociology 101 or the consent of the instructor. Current group relationships in society are studied. The background, emergence, and scope of relationships are included. Emphasis is on the total community environment.

**SOCIOMETRY (SOC) 103 (3)**
SEX ROLES IN AMERICAN SOCIETY (3 LEC.)
Students may register for either Sociology 103 or Psychology 103 but may receive credit for only one. Human sexuality is presented. Topics include physiological, psychological, and sociological aspects.

**SOCIOMETRY (SOC) 203 (3)**
MARRIAGE AND FAMILY (3 LEC.)
Prerequisite: Sociology 101 recommended. Courtship patterns and marriage are analyzed. Family forms, relationships, and functions are included. Sociocultural differences in family behavior are also included.

**SOCIOMETRY (SOC) 204 (3)**
AMERICAN MINORITIES (3 LEC.)
Prerequisite: Sociology 101 or 6 hours of U.S. history recommended. Students may register for either History 204 or Sociology 204 but may receive credit for only one. The principal minority groups in American society are the focus of this course. The sociological significance and historic contributions of the groups are presented. Emphasis is on current problems of intergroup relations, social movements, and related social changes.

**SOCIOMETRY (SOC) 205 (3)**
INTRODUCTION TO SOCIAL RESEARCH (3 LEC.)
Prerequisite: Sociology 101, Developmental Mathematics 091, or the equivalent. Principles and procedures in social research are presented. Topics include sources of data, techniques of collection, analysis, and statistical description.

**SOCIOMETRY (SOC) 206 (3)**
INTRODUCTION TO SOCIAL WORK (3 LEC.)
The development of the field of social work is studied. Topics include the techniques of social work and the requirements for training in social work.

**SOCIOMETRY (SOC) 207 (3)**
SOCIAL PSYCHOLOGY (3 LEC.)
Students may register for either Psychology 207 or Sociology 207 but may receive credit for one. Theories of individual behavior in the social environment are surveyed. Topics include the socio-psychological process, attitude formation and change, interpersonal relations, and group processes.

**SOCIOMETRY (SOC) 210 (3)**
FIELD STUDIES IN AMERICAN MINORITIES (3 LEC.)
Prerequisite: Sociology 101 or Sociology 204. Experience is provided in Indian, Black, and Mexican-American community centers. Work is under professional supervision in a task-oriented setting.

**SOCIOMETRY (SOC) 231 (3)**
URBAN SOCIAL PROBLEMS (3 LEC.)
The sociology of social institutions is studied. Topics include urbanization, theories of formation, and the impact of urbanization on the individual.

**SPANISH (SPA) 101 (4)**
BEGINNING SPANISH (3 LEC., 2 LAB.)
The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee.
SPANISH (SPA) 102 (4)  
BEGINNING SPANISH (3 LEC., 2 LAB.)  
Prerequisite: Spanish 101 or the equivalent. This course is a continuation of Spanish 101. Emphasis is on idiomatic language and complicated syntax. Laboratory fee.

SPANISH (SPA) 201 (3)  
INTERMEDIATE SPANISH (3 LEC.)  
Prerequisite: Spanish 102 or the equivalent or the consent of the instructor. Reading, composition, and intense oral practice are covered. Grammar is reviewed.

SPANISH (SPA) 202 (3)  
INTERMEDIATE SPANISH (3 LEC.)  
Prerequisite: Spanish 201 or the equivalent. This course is a continuation of Spanish 201. Contemporary literature and composition are studied.

SPANISH (SPA) 203 (3)  
INTRODUCTION TO SPANISH LITERATURE (3 LEC.)  
Prerequisite: Spanish 202 or the equivalent or the consent of the instructor. This course is an introduction to Spanish literature. It includes readings in Spanish literature, history, culture, art, and civilization.

SPANISH (SPA) 204 (3)  
INTRODUCTION TO SPANISH LITERATURE (3 LEC.)  
Prerequisite: Spanish 202 or the equivalent or the consent of the instructor. This course is a continuation of Spanish 203. It includes readings in Spanish literature, history, culture, art, and civilization.

SPEECH (SPE) 100 (1)  
SPEECH LABORATORY (3 LAB.)  
This course focuses on preparing speeches, reading dialogue from literature, and debating propositions. Presentations are made throughout the community. This course may be repeated for credit each semester.

SPEECH (SPE) 105 (3)  
FUNDAMENTALS OF PUBLIC SPEAKING (3 LEC.)  
Public speaking is introduced. Topics include the principles of reasoning, audience analysis, collection of materials, and outlining. Emphasis is on giving well prepared speeches.

SPEECH (SPE) 109 (3)  
VOICE AND ARTICULATION (3 LEC.)  
Students may register for either Speech 109 or Theatre 109 but may receive credit for only one of the two. The mechanics of speech are studied. Emphasis is on improving voice and pronunciation.

SPEECH (SPE) 110 (1)  
FORENSIC WORKSHOP (2 LAB.)  
This course focuses on preparing speeches, readings, and debate propositions. Presentations are made in competition and before select audiences. This course may be repeated for credit.

SPEECH (SPE) 201 (1)  
FORENSIC WORKSHOP (2 LAB.)  
This course focuses on preparing speeches, readings, and debate propositions. Presentations are made in competition and before select audiences. This course may be repeated for credit.

SPEECH (SPE) 205 (3)  
DISCUSSION AND DEBATE (3 LEC.)  
Public discussion and argumentation are studied. Both theories and techniques are covered. Emphasis is on evaluation, analysis, and logical thinking.

SPEECH (SPE) 206 (3)  
ORAL INTERPRETATION (3 LEC.)  
Techniques of analyzing various types of literature are examined. Practice is provided in preparing and presenting selections orally. Emphasis is on individual improvement.
SPEECH (SPE) 208 (3)  
GROUP INTERPRETATION (3 LEC.)
Prerequisite: Speech 105 and 206. Various types of literature are studied for group presentation. Emphasis is on selecting, cutting and arranging prose and poetry, and applying reader's theatre techniques to the group performance of the literature. Although not an acting class, practical experience in sharing selections from fiction and non-fiction with audiences will be offered.

THEATRE (THE) 100 (1)  
REHEARSAL AND PERFORMANCE (4 LAB.)
Prerequisite: To enroll in this course, a student must be accepted as a member of the cast or crew of a major production. Participation in the class will include the rehearsal and performance of the current theatrical presentation of the division. This course may be repeated for credit.

THEATRE (THE) 101 (3)  
INTRODUCTION TO THE THEATRE (3 LEC.)
The various aspects of theatre are surveyed. Topics include plays, playwrights, directing, acting, theatres, artists, and technicians.

THEATRE (THE) 102 (3)  
COMtemporary THEATRE (3 LEC.)
This course is a study of the modern theatre and cinema as art forms. The historical background and traditions of each form are included. Emphasis is on understanding the social, cultural, and aesthetic significance of each form. A number of modern plays are read, and selected films are viewed.

THEATRE (THE) 103 (3)  
STAGECRAFT I (2 LEC., 3 LAB.)
The technical aspects of play production are studied. Topics include set design and construction, stage lighting, make-up, costuming, and related areas.

THEATRE (THE) 104 (3)  
STAGECRAFT II (2 LEC., 3 LAB.)
Prerequisite: Theatre 103 or the consent of the instructor. This course is a continuation of theatre 103. Emphasis is on individual projects in set and lighting design and construction. The technical aspects of play production are explored further.

THEATRE (THE) 105 (3)  
MAKE-UP FOR THE STAGE (3 LEC.)
The craft of make-up is explored. Both theory and practice are included. Laboratory fee.

THEATRE (THE) 106 (3)  
ACTING I (2 LEC., 3 LAB.)
The theory of acting and various exercises are presented. Body control, voice, pantomime, interpretation, characterization, and stage movement are included. Both individual and group activities are used. Specific roles are analyzed and studied for stage presentation.

THEATRE (THE) 107 (3)  
ACTING II (2 LEC., 3 LAB.)
Prerequisite: Theatre 106 or the consent of the instructor. This course is a continuation of Theatre 106. Emphasis is on complex characterization, ensemble acting, stylized acting, and acting in period plays.

THEATRE (THE) 108 (3)  
MOVEMENT FOR THE STAGE (2 LEC., 3 LAB.)
Movement is studied as both a pure form and as a part of the theatre arts. It is also presented as a technique to control balance, rhythm, strength, and flexibility. Movement in all the theatrical forms and in the development of characterization is explored. This course may be repeated for credit.

THEATRE (THE) 109 (3)  
VOICE AND ARTICULATION (3 LEC.)
Students may register for either Speech 109 or Theatre 109 but may receive credit for only one of the two. Emphasis is on improving voice and pronunciation.
THEATRE (THE) 110 (3)
HISTORY OF THEATRE I (3 LEC.)
Theatre is surveyed from its beginning through the 16th century. The theatre is studied in each period as a part of the total culture of the period.

THEATRE (THE) 111 (3)
HISTORY OF THEATRE II (3 LEC.)
Theatre is surveyed from the 17th century through the 20th century. The theatre is studied in each as a part of the total culture of the period.

THEATRE (THE) 112 (3)
BEGINNING DANCE TECHNIQUE
IN THEATRE (2 LEC., 3 LAB.)
Basic movements of the dance are explored. Emphasis is on swing movements, circular motion, fall and recovery, contraction and release, and contrast of literal and abstract movements. Body balance, manipulation of trunk and limbs, and the rhythmic flow of physical energy are developed.

THEATRE (THE) 113 (3)
INTERMEDIATE DANCE (2 LEC., 3 LAB.)
Prerequisite: Theatre 112 or the consent of the instructor. Various aspects of dance are surveyed. Topics include the role of dance in total theatre, the evolution of dance styles, and the jazz style. Emphasis is on the flow of movement, body placement, dynamic intensity, level, focus, and direction.

THEATRE (THE) 115 (2)
MIME (1 LEC., 2 LAB.)
Prerequisite: Theatre 108. Mime is studied. Both the expressive significance and techniques of mime are included.

THEATRE (THE) 199 (1)
DEMONSTRATION LAB (1 LAB.)
This course provides practice before a live audience of theory learned in theatre class. Scenes studied in various drama classes are used to show contrast and different perspectives.

THEATRE (THE) 201 (3)
TELEVISION PRODUCTION I (2 LEC., 3 LAB.)
Station organization, studio operation, and the use of studio equipment are introduced. Topics include continuity, camera, sound, lights, and video-tape recording.

THEATRE (THE) 202 (3)
TELEVISION PRODUCTION II (2 LEC., 3 LAB.)
Prerequisite: Theatre 201. This course is a continuation of Theatre 201. Emphasis is on the concept and technique of production in practical situations.

THEATRE (THE) 203 (3)
BROADCASTING COMMUNICATIONS I (3 LEC., 2 LAB.)
The nature and practice of broadcasting are covered. Basic techniques of radio and television studio operations are introduced.

THEATRE (THE) 204 (3)
BROADCASTING COMMUNICATIONS II (3 LEC., 2 LAB.)
This course is a continuation of Theatre 203. Emphasis is on radio and television as mass media and practical applications in both radio and television.

THEATRE (THE) 205 (3)
SCENE STUDY I (2 LEC., 3 LAB.)
Prerequisite: Theatre 106 and 107. This course is a continuation of Theatre 107. Emphasis is on developing dramatic action through detailed study of the script. Students deal with stylistic problems presented by the staging of period plays and the development of realism. Rehearsals are used to prepare for scene work.

THEATRE (THE) 207 (3)
SCENE STUDY II (2 LEC., 3 LAB.)
Prerequisite: Theatre 205. This course is a continuation of Theatre 205. Emphasis is on individual needs of the performer. Rehearsals are used to prepare for scene work.
THEATRE (THE) 208 (3)
INTRODUCTION TO TECHNICAL DRAWING (2 LEC., 3 LAB.)
Basic techniques of drafting are studied. Isometrics, orthographic projections, and other standard procedures are included. The emphasis is on theatrical drafting, including groundplans, vertical sections, construction elevations, and spider perspective.

THEATRE (THE) 209 (3)
LIGHTING DESIGN (2 LEC., 3 LAB.)
Prerequisite: Theatre 103 and 104. The design and techniques of lighting are covered. Practical experience in departmental productions is required for one semester.

THEATRE (THE) 235 (3)
COSTUME HISTORY (3 LEC.)
Fashion costume and social customs are examined. The Egyptian, Greek, Roman, Gothic, Elizabethan, Victorian, and Modern periods are included.
Technical/Occupational Programs and Course Descriptions
<table>
<thead>
<tr>
<th>Occupational Education Programs 80-81</th>
<th>BHC</th>
<th>CVC</th>
<th>EFC</th>
<th>ECC</th>
<th>MVC</th>
<th>NLC</th>
<th>RLC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting Associate</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounting Technician</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertising Art</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Air Conditioning &amp; Refrigeration</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal Medical Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apparel Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architecture Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto Body</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto Body Repair &amp; Painting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automotive Technology Apprenticeship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automotive Machinist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automotive Mechanics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automotive Parts Counter Assistant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automotive Parts Sales &amp; Service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automotive Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aviation Maintenance Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airframe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powerplant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aviation Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aircraft Dispatcher</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airline Marketing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career Pilot</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Base Operations/Airport Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avionics Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banking &amp; Finance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banking Option</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit and Financial Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit Union Option</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Savings and Loan Option</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Trade Options</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cathepdry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Development Administrative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Development Assistant</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Development Associate</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Development, Infant and Toddler</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial Music</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arranger/Composer/Copyist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music Retailing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performing Musician</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Management and Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Processing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Processing Operator</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Processing Programmer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key Entry/Data Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Computer Systems Information Specialist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diesel Mechanics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digital Electronics Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distribution Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drafting and Design Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational Paraprofessional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electronics Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio/TV Repair</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric Power</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electro-Mechanical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational Education Programs 80-81</td>
<td>BHC</td>
<td>CVC</td>
<td>EFC</td>
<td>ECC</td>
<td>MVC</td>
<td>NLC</td>
<td>RLC</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Fluid Power</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Quality Control</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Protection Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Dietetic Assistant</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Service Operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Food Service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphic Arts</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphic Communications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Horology</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hotel/Motel Operations</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Services Associate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Mental Health Assistant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Social Work Assistant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Interior Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Legal Assistant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Machine Shop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Major Appliance Repair</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Medical: Associate Degree Nursing</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dental Assistant Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Medical Assistant Technology</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Lab Technician</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Transcriptionist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Radiography Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Respiratory Therapy Assistant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Respiratory Therapy Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Surgical Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Vocational Nursing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Mid Management</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Small Business Management</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Motorcycle Mechanics</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office Careers: General Office Occupations</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Insurance Office Careers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Office Skills and Systems</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Optical Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Ornamental Horticulture Technology: Florist</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greenhouse Florist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Landscape Gardener</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Landscape Nursery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Outboard Marine Engine Mechanics</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pattern Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Police Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Postal Service Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Real Estate</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail Distribution and Marketing and Technology</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial Design &amp; Advertising</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Fashion Merchandising</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail Management</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secretarial Careers</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Administrative Secretary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Educational Secretary</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Secretary</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Legal Secretary</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Professional Secretary</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Small Engine Mechanics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Social Work Associate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Solar Energy Technology</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training Paraprofessionals for the Deaf</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Welding Technology</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

BHC Brookhaven College  CVC Cedar Valley College  EFC Eastfield College  ECC El Centro College  
MVC Mountain View College  NLC North Lake College  RLC Richland College
**DCCCD PROGRAMS**
The following programs offered by Dallas County Community College District may be taken by Tarrant County residents at in-county tuition rates:

<table>
<thead>
<tr>
<th>Program</th>
<th>Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising Art</td>
<td>BHC</td>
</tr>
<tr>
<td>Animal Medical Technology</td>
<td>CVC</td>
</tr>
<tr>
<td>Apparel Design</td>
<td>ECC</td>
</tr>
<tr>
<td>Audio-Video Technician</td>
<td>MVC</td>
</tr>
<tr>
<td>Aviation Technology</td>
<td>MVC</td>
</tr>
<tr>
<td>Air Cargo</td>
<td>MVC</td>
</tr>
<tr>
<td>Aircraft Dispatcher</td>
<td>MVC</td>
</tr>
<tr>
<td>Airline Marketing</td>
<td>MVC</td>
</tr>
<tr>
<td>Career Pilot</td>
<td>MVC</td>
</tr>
<tr>
<td>Fixed Base Operations</td>
<td>MVC</td>
</tr>
<tr>
<td>Avionics</td>
<td>MVC</td>
</tr>
<tr>
<td>Automotive Parts</td>
<td>BHC</td>
</tr>
<tr>
<td>Automotive Machinist</td>
<td>BHC</td>
</tr>
<tr>
<td>Building Trades</td>
<td>NLC</td>
</tr>
<tr>
<td>Carpentry</td>
<td>NLC</td>
</tr>
<tr>
<td>Electrical</td>
<td>NLC</td>
</tr>
<tr>
<td>Chemical Quality Control</td>
<td>MVC</td>
</tr>
<tr>
<td>Paint and Coatings Control</td>
<td>MVC</td>
</tr>
<tr>
<td>Technician</td>
<td>MVC</td>
</tr>
<tr>
<td>Water Quality Control Tech.</td>
<td>MVC</td>
</tr>
<tr>
<td>Commercial Music</td>
<td>CVC</td>
</tr>
<tr>
<td>Construction Management</td>
<td>RLC</td>
</tr>
<tr>
<td>Diesel Mechanics</td>
<td>NLC</td>
</tr>
<tr>
<td>Distribution Technology</td>
<td>NLC</td>
</tr>
<tr>
<td>Engineering Technology</td>
<td>RLC</td>
</tr>
<tr>
<td>Electro Mechanical</td>
<td>RLC</td>
</tr>
<tr>
<td>Fluid Power</td>
<td>RLC</td>
</tr>
<tr>
<td>Quality Control</td>
<td>RLC</td>
</tr>
<tr>
<td>Food Service Operations</td>
<td>ECC</td>
</tr>
<tr>
<td>Graphic Communications</td>
<td>EFC</td>
</tr>
<tr>
<td>Horology</td>
<td>MVC</td>
</tr>
<tr>
<td>Hotel/Motel Operations</td>
<td>ECC</td>
</tr>
<tr>
<td>Human Services</td>
<td>EFC, RLC</td>
</tr>
<tr>
<td>Interior Design</td>
<td>ECC</td>
</tr>
<tr>
<td>Legal Assistant</td>
<td>ECC</td>
</tr>
<tr>
<td>Motorcycle &amp; Marine, Small</td>
<td>CVC</td>
</tr>
<tr>
<td>Engine Mechanics</td>
<td>CVC</td>
</tr>
<tr>
<td>Pattern Design</td>
<td>ECC</td>
</tr>
<tr>
<td>Optical Technology</td>
<td>NLC</td>
</tr>
<tr>
<td>Retail Distribution Mktg.</td>
<td>CVC</td>
</tr>
<tr>
<td>Commercial Design and Advertising</td>
<td>CVC</td>
</tr>
<tr>
<td>Retail Management</td>
<td>BHC, CVC</td>
</tr>
<tr>
<td>Solar Energy Technology</td>
<td>NLC</td>
</tr>
<tr>
<td>Vocational Nursing</td>
<td>ECC</td>
</tr>
</tbody>
</table>

**TCJC PROGRAMS**
The following programs offered by Tarrant County Junior College may be taken by Dallas County residents at in-county tuition rates:

<table>
<thead>
<tr>
<th>Program</th>
<th>Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agribusiness</td>
<td>NW</td>
</tr>
<tr>
<td>Civil/Construction Technology</td>
<td>NE</td>
</tr>
<tr>
<td>Dental Hygiene</td>
<td>NE</td>
</tr>
<tr>
<td>Emergency Medical Technology</td>
<td>NE</td>
</tr>
<tr>
<td>Food Store Marketing</td>
<td>NE</td>
</tr>
<tr>
<td>Industrial Supervision</td>
<td>S</td>
</tr>
<tr>
<td>Labor Studies</td>
<td>NE</td>
</tr>
<tr>
<td>Mechanical Technology</td>
<td>S</td>
</tr>
<tr>
<td>Cast Metals Technology</td>
<td>S</td>
</tr>
<tr>
<td>Nondestructive Evaluation</td>
<td>S</td>
</tr>
<tr>
<td>Power Transmission</td>
<td>S</td>
</tr>
<tr>
<td>Media Technology</td>
<td>NE</td>
</tr>
<tr>
<td>Medical Records Technology</td>
<td>NE</td>
</tr>
<tr>
<td>Physical Therapist Assistant</td>
<td>NE</td>
</tr>
</tbody>
</table>

*NE* - Northeast Campus, NW - Northwest Campus, S - South Campus.

**STUDENTS CONSIDERING TRANSFER TO A FOUR-YEAR INSTITUTION**

The following programs have been designated to provide marketable skills in varied occupations. All courses in these technical/occupational programs are credit courses leading to an associate degree. Some courses are transferable to four-year institutions. Students who plan to transfer are advised to consult with a counselor to develop a technical/occupational course plan which best meets the degree requirements of the chosen four-year college or university.
ACCOUNTING ASSISTANT
(Certificate Program)

The objective of the program is to provide the student with a working knowledge of accounting procedures currently in use in business; to introduce the student to accounting principles supporting bookkeeping procedures; and to give the student practical accounting experience by the use of problem solving.

<table>
<thead>
<tr>
<th>Course</th>
<th>LEC HRS</th>
<th>LAB HRS</th>
<th>CR HRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL SEMESTER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 105 — Introduction to Business</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ACC 201 — Principles of Accounting I</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>COM 131 — Applied Composition and Speech</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MTH 130 — Business Mathematics</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>
*Elective                                  |         |         | 2-3    |
|                                           |         |         | 14-15  |
| SPRING SEMESTER                           |         |         |        |
| ACC 202 — Principles of Accounting II     | 3       | 0       | 3      |
| OFC 160 — Office Machines                 | 3       | 0       | 3      |
| CS 175 — Introduction to Computer Sciences| 3       | 0       | 3      |
| COM 132 — Applied Composition and Speech  | 3       | 0       | 3      |
*Elective                                  | 3       | 0       | 3      |
|                                           |         |         | 15     |

*Suggested Electives: OFC 162, OFC 172, OFC 174, OFC 231, BUS 234, ACC 702, ACC 713, PSY 105, PSY 131.
ACCOUNTING ASSOCIATE

This two-year program is designed for persons interested in pursuing careers as junior accountants in business, industry and government. Emphasis will be placed on internal accounting procedures and generally accepted accounting principles as they relate to external reporting with selected electives in cost accounting and tax accounting. Successful completion of the program leads to the Associate in Applied Arts and Sciences Degree.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>LEC HRS</th>
<th>LAB HRS</th>
<th>CR HRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL SEMESTER I</td>
<td>ACC 201 — Principles of Accounting I</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BUS 105 — Introduction to Business</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>OFC 160 — Office Machines</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>COM 131 — Applied Composition and Speech or</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG 101 — Composition and Expository Reading</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MTH 130 — Business Mathematics or</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MTH 111 — Mathematics for Business and Economics I</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>SPRING SEMESTER I</td>
<td>ACC 202 — Principles of Accounting II</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MGT 136 — Principles of Management</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CS 175 — Introduction to Computer Sciences</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>COM 132 — Applied Composition and Speech or</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG 102 — Composition and Literature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>†OFC 172 — Beginning Typing or</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACC 713 — Work Experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>14</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>FALL SEMESTER II</td>
<td>ACC 203 — Intermediate Accounting I</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACC 238 — Cost Accounting or</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACC 239 — Income Tax Accounting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GVT 201 — American Government</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECO 201 — Principles of Economics I</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>†Elective or</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACC 803 — Work Experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>SPRING SEMESTER II</td>
<td>ACC 204 — Managerial Accounting</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BUS 234 — Business law</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>OFC 231 — Business Communications</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECO 202 — Principles of Economics II</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>†Elective or</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACC 813 — Work Experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
<td>0</td>
<td>15</td>
</tr>
</tbody>
</table>

* Suggested Electives: BUS 143, ACC 205, MGT 206, ACC 238, ACC 239, PSY 105, PSY 131
† Must have typing skills of 30 words per minute to be waived.
AIR CONDITIONING AND REFRIGERATION
(Certificate Program)

This program will qualify the student to install, repair, and maintain equipment in the fields of domestic refrigeration, commercial refrigeration, and air conditioning, cooling or heating systems.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>LEC HRS</th>
<th>LAB HRS</th>
<th>CR HRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL SEMESTER I</td>
<td>*ACR 101 — Principles of Refrigeration</td>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>*ACR 103 — Fundamentals of Electricity</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*ACR 105 — Unit Air Conditioning Systems</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*ACR 107 — Domestic Refrigeration</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>MTH 195 — Technical Mathematics</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>SPRING SEMESTER</td>
<td>ACR 102 — Properties of Air</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>ACR 104 — Heat Load Analysis</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*ACR 106 — Summer Air Conditioning Systems</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*ACR 108 — Winter Air Conditioning Systems</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>FALL SEMESTER II</td>
<td>ACR 201 — Refrigeration Loads</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACR 203 — Medium Temperature Refrigeration Systems</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACR 205 — Low Temperature Refrigeration Systems</td>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>ACR 207 — Refrigeration Equipment Selection</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>†Technical Elective</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td>12</td>
<td>14</td>
</tr>
</tbody>
</table>

* These six courses must be taken as three concurrent pairs of courses.
† Technical electives may be selected from applied science or engineering technologies. Student may enroll in Co-operative Work Experience courses as technical electives on approval by the air conditioning and refrigeration instructor.
AIR CONDITIONING AND REFRIGERATION TECHNOLOGY
(2-Year Program)
This program furnishes both the theory and practice required to qualify a person for employment in the various areas of the air conditioning and refrigeration industry. Successful completion of this program leads to the Associate in Applied Arts and Sciences Degree.

<table>
<thead>
<tr>
<th>SEMESTER</th>
<th>COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL I</td>
<td>ACR 101 — Principles of Refrigeration 1 4 2</td>
</tr>
<tr>
<td></td>
<td>ACR 103 — Fundamentals of Electricity 2 4 3</td>
</tr>
<tr>
<td></td>
<td>ACR 105 — Unit Air Conditioning Systems 2 4 3</td>
</tr>
<tr>
<td></td>
<td>ACR 107 — Domestic Refrigeration 1 2 2</td>
</tr>
<tr>
<td></td>
<td>COM 131 — Applied Composition and Speech or 3 0 3</td>
</tr>
<tr>
<td></td>
<td>ENG 101 — Composition and Expository Reading</td>
</tr>
<tr>
<td></td>
<td>DFT 182 — Technician Drafting 1 3 3</td>
</tr>
<tr>
<td></td>
<td>MTH 195 — Technical Mathematics 3 0 3</td>
</tr>
<tr>
<td></td>
<td>13 17 19</td>
</tr>
<tr>
<td>SPRING I</td>
<td>ACR 102 — Properties of Air 1 2 2</td>
</tr>
<tr>
<td></td>
<td>ACR 104 — Heat Load Analysis 2 2 3</td>
</tr>
<tr>
<td></td>
<td>ACR 106 — Summer Air Conditioning Systems 2 4 3</td>
</tr>
<tr>
<td></td>
<td>ACR 108 — Winter Air Conditioning Systems 2 4 3</td>
</tr>
<tr>
<td></td>
<td>EGR 186 — Manufacturing Processes 1 2 2</td>
</tr>
<tr>
<td></td>
<td>SS 131 — American Civilization or 3 0 3</td>
</tr>
<tr>
<td></td>
<td>HST 101 — History of the United States</td>
</tr>
<tr>
<td></td>
<td>11 14 16</td>
</tr>
<tr>
<td>FALL II</td>
<td>ACR 201 — Refrigeration Loads 2 2 3</td>
</tr>
<tr>
<td></td>
<td>ACR 203 — Medium Temperature Refrigeration Systems 2 4 3</td>
</tr>
<tr>
<td></td>
<td>ACR 205 — Low Temperature Refrigeration Systems 1 4 2</td>
</tr>
<tr>
<td></td>
<td>ACR 207 — Refrigeration Equipment Selection 2 2 3</td>
</tr>
<tr>
<td></td>
<td>COM 132 — Applied Composition and Speech or 3 0 3</td>
</tr>
<tr>
<td></td>
<td>ENG 102 — Composition and Literature</td>
</tr>
<tr>
<td></td>
<td>BUS 131 — Bookkeeping I 3 0 3</td>
</tr>
<tr>
<td></td>
<td>13 12 17</td>
</tr>
<tr>
<td>SPRING II</td>
<td>ACR 202 — Advanced Systems 2 4 3</td>
</tr>
<tr>
<td></td>
<td>ACR 204 — System Testing and Balancing 1 2 2</td>
</tr>
<tr>
<td></td>
<td>ACR 206 — Air Conditioning System Equipment Selection 2 4 3</td>
</tr>
<tr>
<td></td>
<td>ACR 208 — Energy Conservation 2 2 3</td>
</tr>
<tr>
<td></td>
<td>PSY 131 — Human Relations 3 0 3</td>
</tr>
<tr>
<td></td>
<td>†Technical Elective 3 0 3</td>
</tr>
<tr>
<td></td>
<td>13 12 17</td>
</tr>
</tbody>
</table>

* These six courses must be taken as three concurrent pairs of courses.
† Technical electives may be selected from applied sciences or engineering technologies.
Student may enroll in Co-operative Work Experience courses as technical electives on approval by the air conditioning and refrigeration instructor.
AUTO BODY TECHNOLOGY
This program introduces the student to all facets of auto body repair and painting. Emphasis is placed upon the development of the necessary skills and knowledge required to function successfully in this industry. The program of study includes technical aspects of metal behavior combined with correct repair and refinishing procedures.

<table>
<thead>
<tr>
<th>SEMESTER</th>
<th>COURSE DESCRIPTION</th>
<th>LEC. HRS.</th>
<th>LAB. HRS.</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL SEMESTER I</td>
<td>AB 101 — Basic Metal Principles</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>AB 102 — Basic Paint Principles</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>AB 103 — Practical Application of Basic Metal and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Paint Principles</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>WE 101 — Basic Welding and Cutting Practices</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>COM 131 — Applied Composition and Speech or</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG 101 — Composition and Expository Reading</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>SPRING SEMESTER I</td>
<td>AB 104 — Minor Metal Repair</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>AB 105 — Minor Paint Repair</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>AB 106 — Practical Application of Minor Metal and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Paint Repair</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MTH 195 — Technical Mathematics</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PSY 131 — Human Relations</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>FALL SEMESTER II</td>
<td>AB 241 — Major Paint Repair</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>AB 242 — Major Panel Replacement</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>AB 243 — Advanced Application of Auto Body Repair</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Methods</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>SS 131 — American Civilization or</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HST 101 — History of the United States</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHY 131 — Applied Physics</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>SPRING SEMESTER II</td>
<td>AB 244 — Major Collision and Frame Repair</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>AB 235 — Estimating</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>AB 139 — Automobile Service Business Operations</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>AB 813 — Cooperative Work Experience or</td>
<td>1</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*Approved Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>19</td>
<td>12</td>
</tr>
</tbody>
</table>

* Suggested electives: MTH 115, ACC 131, ACC 132, GVT 201, GVT 202, HST 102, ENG 102, SPE 105.

The student will be required to purchase a basic set of tools which will be used in class and later on the job. Tool lists will be given out by the instructor during the first week of classes.
AUTO BODY TECHNOLOGY
(Certificate Program)

This program is designed to train a student in all facets of auto body and repair and painting. Emphasis is placed upon those skills needed to train the student to become a successful auto body repairman. This program offers the student a certificate in Auto Body Technology upon successful completion of the program.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>LEC HRS</th>
<th>LAB HRS</th>
<th>CR HRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB 101</td>
<td>Basic Metal Principles</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AB 102</td>
<td>Basic Paint Principles</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AB 103</td>
<td>Practical Application of Basic Metal and Paint Principles</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>AB 104</td>
<td>Minor Metal Repair</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AB 105</td>
<td>Minor Paint Repair</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AB 106</td>
<td>Practical Application of Minor Metal and Paint Repair</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>AB 241</td>
<td>Major Paint Repair</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AB 242</td>
<td>Major Panel Replacement</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AB 243</td>
<td>Advanced Application of Auto Body Repair Methods</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>AB 244</td>
<td>Major Collision and Frame Repair</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AB 235</td>
<td>Estimating</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>WE 101</td>
<td>Basic Welding and Cutting</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>AB 813</td>
<td>Cooperative Work Experience or *Approved Elective</td>
<td>1</td>
<td>15</td>
<td>3</td>
</tr>
</tbody>
</table>

Suggested electives: MTH 115, ACC 131, ACC 132, GVT 201, GVT 202, HST 103, ENG 102, SPE 105.

The student will be required to purchase a basic set of tools which will be used in class and later on the job. Tool lists will be given out by the instructor during the first week of classes.
AUTOMOTIVE TECHNOLOGY

This curriculum prepares the student for employment in the automotive industry as an automotive technician. The program of study emphasizes both the theory and practical skills of mechanics. The Associate in Applied Arts and Sciences Degree is awarded upon successful completion of the program.

<table>
<thead>
<tr>
<th>FALL SEMESTER I</th>
<th>LEC. HRS.</th>
<th>LAB. HRS.</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 101 — Auto Shop Practice</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AT 102 — Engine and Ignition System Operation</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AT 103 — Fuel and Emission Control Systems</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>COM 131 — Applied Composition and Speech or</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101 — Composition and Expository Reading</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WE 101 — Basic Welding and Cutting Practices</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING SEMESTER I</th>
<th>LEC. HRS.</th>
<th>LAB. HRS.</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 104 — Auto Electrical Systems</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AT 105 — Auto Engines I</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AT 106 — Auto Engines II</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>SS 131 — American Civilization or</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>HST 101 — History of the United States</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTH 195 — Technical Mathematics</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FALL SEMESTER II</th>
<th>LEC. HRS.</th>
<th>LAB. HRS.</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 290 — Auto Power Train</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AT 291 — Automatic Transmissions I</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AT 292 — Automatic Transmissions II</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>PHY 131 — Applied Physics</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>*Approved Elective</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING SEMESTER II</th>
<th>LEC. HRS.</th>
<th>LAB. HRS.</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 293 — Auto Suspension</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AT 294 — Auto Brakes</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>AT 295 — Auto Air Conditioning</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AT 813 — Cooperative Work Experience or</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>*Approved Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Suggested electives: Psy 131, MTH 115, ACC 131, ACC 132, GVT 201, GVT 202, HST 102, ENG 102, SPE 105, AT 803, EGR 186, ET 190, AB 139.*

The student will be required to purchase a basic set of tools which will be used in class and later on the job. Tool lists will be given out by the instructor during the first week of classes.
AUTOMOTIVE TECHNOLOGY
(Certificate Program)

The purpose of this program is to train students for entry-level positions as automotive mechanics. A certificate is issued upon successful completion of the program.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>LEC HRS</th>
<th>LAB HRS</th>
<th>CR HRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 102</td>
<td>Engine and Ignition System Operation</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AT 103</td>
<td>Fuel and Emission Control System</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>AT 290</td>
<td>Auto Power Train</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AT 291</td>
<td>Automatic Transmissions I</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AT 292</td>
<td>Automatic Transmissions II</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>AT 105</td>
<td>Auto Engines I</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AT 106</td>
<td>Auto Engines II</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>AT 293</td>
<td>Auto Suspension</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AT 294</td>
<td>Auto Brakes</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>AT 104</td>
<td>Auto Electrical Systems</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AT 295</td>
<td>Auto Air Conditioning</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AT 101</td>
<td>Auto Shop Practice</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AT 813</td>
<td>Cooperative Work Experience or Approved Elective</td>
<td>1</td>
<td>15</td>
<td>3</td>
</tr>
</tbody>
</table>

The student will be required to purchase a basic set of tools which will be used in class and later on the job. Tool lists will be given out by the instructor during the first week of classes.
CHILD DEVELOPMENT ASSISTANT  
(Certificate Program)

An introduction to the various areas of child care work, including the history, philosophy and practices of specialized care, with emphasis on the educational, recreational and health needs of the child.

<table>
<thead>
<tr>
<th>BASIC OPTION</th>
<th>LEC. HRS.</th>
<th>LAB. HRS.</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FALL SEMESTER</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD 135 — Survey of Child Service Programs</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>CD 140 — Child Growth and Behavior, Prenatal-3</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>COM 131 — Applied Composition and Speech or ENG 101 — Composition and Expository Reading</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>SS 131 — American Civilization or HST 101 — History of the United States</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>*Elective</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>15</td>
<td>2</td>
<td>16</td>
</tr>
</tbody>
</table>

| **SPRING SEMESTER**                        |           |           |          |
| CD 137 — Learning Programs for Young Children | 3         | 2         | 4        |
| CD 141 — Child Growth and Behavior, 4-9     | 3         | 0         | 3        |
| CD 150 — Nutrition, Health and Safety of the Young Child | 2 | 2         | 3        |
| SS 132 — American Civilization or HST 102 — History of the United States | 3 | 0         | 3        |
| HD 107 — Developing Leadership Behavior or *Elective | 3 | 0         | 3        |
| **TOTAL**                                  | 14        | 4         | 16       |

*Electives to be selected from the following: CD 139, CD 201, CD 236, CD 238, CD 250, CD 251, CD 253, TPD 141.

<table>
<thead>
<tr>
<th>CDA TRAINING OPTION</th>
<th>LEC. HRS.</th>
<th>LAB. HRS.</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FALL SEMESTER</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD 135 — Survey of Child Service Programs</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>CD 140 — Child Growth and Behavior, Prenatal-3</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CD 150 — Nutrition, Health and Safety of the Young Child</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>CD 239 — Studies in Child Guidance</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>HD 106 — Personal and Social Growth or HD 107 — Developing Leadership Behavior</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>*Elective</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>16</td>
<td>6</td>
<td>19</td>
</tr>
</tbody>
</table>

| **SPRING SEMESTER**                        |           |           |          |
| CD 137 — Learning Programs for Young Children | 3         | 2         | 4        |
| CD 141 — Child Growth and Behavior, 4-9     | 3         | 0         | 3        |
| CD 240 — Internship or CD 812 — Work Experience | 1 | 10        | 2        |
| COM 131 — Applied Composition and Speech or ENG 101 — Composition and Expository Reading | 3 | 0         | 3        |
| *Electives                                  | 6         | 0         | 6        |
| **TOTAL**                                  | 16        | 12        | 18       |

*Electives to be selected from: CD 139, CD 201, CD 236, CD 238, CD 250, CD 251, CD 253, TPD 141.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>LEC. HRS.</th>
<th>LAB. HRS.</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FALL SEMESTER</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD 140</td>
<td>Child Growth and Behavior, Prenatal-3</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CD 150</td>
<td>Nutrition, Health and Safety of the Young Child</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>CD 236</td>
<td>Childhood Problems</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CD 239</td>
<td>Studies in Child Guidance</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>HD 106</td>
<td>Personal and Social Growth or</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>HD 107</td>
<td>Developing Leadership Behavior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>13</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td><strong>SPRING SEMESTER</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD 141</td>
<td>Child Growth and Behavior, 4-9</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CD 250</td>
<td>Supportive Services for Exceptional Children</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CD 251</td>
<td>Learning Programs for Children with Special Needs</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>CD 240</td>
<td>Internship or</td>
<td>1</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>CD 812</td>
<td>Work Experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM 131</td>
<td>Applied Composition and Speech or</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>Composition and Expository Reading</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Elective</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>15</td>
<td>15</td>
<td>18</td>
</tr>
</tbody>
</table>

*Electives to be selected from: CD 139, CD 201, CD 253, TPD 141.
CHILD DEVELOPMENT ASSOCIATE

The program will provide an opportunity for the student to study in depth the whole development of the child. The certificate program will be extended to a special chosen area of interest. Internship will complete the preparation in child development.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>LEC Hrs</th>
<th>LAB Hrs</th>
<th>CR Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL SEMESTER I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD 135 — Survey of Child Service Programs</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CD 140 — Child Growth and Behavior, Prenatal-3</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COM 131 — Applied Composition and Speech or ENG 101 — Composition and Expository Reading</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SS 131 — American Civilization or HST 101 — History of the United States</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>*Elective</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>2</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>LEC Hrs</th>
<th>LAB Hrs</th>
<th>CR Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPRING SEMESTER I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD 137 — Learning Programs for Young Children</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CD 141 — Child Growth and Behavior, 4-9</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CD 150 — Nutrition, Health and Safety of the Young Child</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SS 132 — American Civilization or HST 102 — History of the United States</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HD 107 — Developing Leadership Behavior or *Elective</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>4</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>LEC Hrs</th>
<th>LAB Hrs</th>
<th>CR Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL SEMESTER II</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD 233 — A Survey of Model Programs</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CD 239 — Studies in Child Guidance</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COM 132 — Applied Composition and Speech or ENG 102 — Composition and Literature</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HD 106 — Personal and Social Growth or PSY 105 — Introduction to Psychology</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SOC 101 — Introduction to Sociology or *Elective</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>7</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>LEC Hrs</th>
<th>LAB Hrs</th>
<th>CR Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPRING SEMESTER II</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD 235 — Application of Learning Theories</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>CD 240 — Internship or CD 812 — Work Experience</td>
<td>1</td>
<td>10</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>SOC 203 — Marriage and the Family</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HUM 101 — Introduction to the Humanities</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>*Elective</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>15</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

*Elective to be selected from the following: CD 139, CD 201, CD 236, CD 238, CD 251, CD 242, CD 250, CD 253, TPD 141. Students interested in credentialing should consult Child Development staff prior to registration.
DIGITAL ELECTRONICS TECHNOLOGY

This curriculum is designed to prepare a graduate to work as a technician on devices that require digital circuits such as computers, test equipment, automatic control units and central distribution systems. The student will learn schematic interpretation, test equipment usage and technical communications. Successful completion of this curriculum leads to the Associate in Applied Arts and Sciences Degree.

<table>
<thead>
<tr>
<th>FALL SEMESTER I</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 131 — Applied Composition and Speech or</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101 — Composition and Expository Reading</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*MTH 195 — Technical Mathematics</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>†DFT 182 — Technician Drafting</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>ET 190 — D.C. Circuits and Electrical Measurements</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>‡Technical Elective</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>16</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING SEMESTER I</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 132 — Applied Composition and Speech or</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ENG 102 — Composition and Literature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*MTH 196 — Technical Mathematics</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ET 191 — A.C. Circuits</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>ET 192 — Digital Computer Principles</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>ET 193 — Active Devices</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FALL SEMESTER II</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 260 — Sinusoidal Circuits</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>ET 261 — Pulse and Switching Circuits</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>ET 263 — Digital Computer Theory</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>‡Technical Elective</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>16</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING SEMESTER II</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 264 — Digital Systems</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>ET 265 — Digital Research</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>ET 266 — Computer Applications</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>ET 267 — Microprocessors</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>15</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* MTH 101 and MTH 104 may be substituted for MTH 195. MTH 102, MTH 105, MTH 121, MTH 126, MTH 227, MTH 228, may be substituted for either MTH 195 or MTH 196.
† DFT 184, DFT 231 or EGR 105 may be substituted.
DRAFTING AND DESIGN TECHNOLOGY

This program prepares the student for employment in a wide range of industries as a draftsman or engineering aide. Information in related fields is provided to enable the student to work effectively with the engineer and professional staff. Successful completion of this program leads to the Associate in Applied Arts and Sciences Degree.

<table>
<thead>
<tr>
<th>SEMESTER</th>
<th>COURSES</th>
<th>LEC. HRS.</th>
<th>LAB. HRS.</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL SEMESTER I</td>
<td>DFT 183 — Basic Drafting</td>
<td>2</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>EGR 186 — Manufacturing Processes</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>COM 131 — Applied Composition and Speech or ENG 101 — Composition and Expository Reading</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MTH 195 — Technical Mathematics or MTH 101 — College Algebra</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SS 131 — American Civilization or HST 101 — History of the United States</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>SPRING SEMESTER I</td>
<td>Drafting Concentration</td>
<td>2</td>
<td>4-6</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>COM 132 — Applied Composition and Speech or ENG 102 — Composition and Literature</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MTH 196 — Technical Mathematics or MTH 102 — Plane Trigonometry</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SS 132 — American Civilization or HST 102 — History of the United States</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHY 131 — Applied Physics</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14</td>
<td>7-9</td>
<td>16-17</td>
</tr>
<tr>
<td>FALL SEMESTER II</td>
<td>DFT 135 — Reproduction Processes</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Drafting Concentration</td>
<td>2</td>
<td>4-6</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>Drafting Concentration</td>
<td>2</td>
<td>4-6</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>EGR 106 — Descriptive Geometry</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Technical Elective</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td>15-19</td>
<td>14-16</td>
</tr>
<tr>
<td>SPRING SEMESTER II</td>
<td>PSY 131 — Human Relations</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Drafting Concentration</td>
<td>2</td>
<td>4-6</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>Technical Elective</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Technical Elective</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>DFT orArt Elective</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14</td>
<td>8-10</td>
<td>16-17</td>
</tr>
</tbody>
</table>

* To be selected from DFT 136, DFT 184, DFT 185, DFT 230, DFT 231, DFT 232, DFT 234, DFT 235, DFT 236.
†Technical electives may be selected from applied science or engineering technologies. Student may elect to enroll in Cooperative Work Experience courses on approval by instructor.
**DRAFTING AND DESIGN TECHNOLOGY**  
*(Co-op Training Program)*

This program prepares the student for employment as a draftsman by supplementing classroom training with on-the-job experience. Students enrolled in this program work as draftsmen a minimum of 20 hours per week while they are enrolled in cooperative work experience. Successful completion of this program leads to the Associate in Applied Arts and Sciences Degree.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>LEC HRS</th>
<th>LAB HRS</th>
<th>CR HRS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FALL SEMESTER I</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EGR 186</td>
<td>Manufacturing Processes</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DFT 183</td>
<td>Basic Drafting</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>EGR 106</td>
<td>Descriptive Geometry</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COM 131</td>
<td>Applied Composition and Speech</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 195</td>
<td>Technical Mathematics</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>11</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td><strong>SPRING SEMESTER I</strong></td>
<td>DFT 704</td>
<td>Work Experience</td>
<td>1</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td><strong>SUMMER SEMESTER I</strong></td>
<td>PHY 131</td>
<td>Applied Physics</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MTH 196</td>
<td>Technical Mathematics</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>6</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td><strong>FALL SEMESTER II</strong></td>
<td><em>Drafting Concentration</em></td>
<td>2</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM 132</td>
<td>Applied Composition and Speech</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SS 131</td>
<td>American Civilization</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>†Technical Elective</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>12</td>
<td>4</td>
<td>13-14</td>
</tr>
<tr>
<td><strong>SPRING SEMESTER II</strong></td>
<td>DFT 804</td>
<td>Work Experience</td>
<td>1</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td><strong>SUMMER SEMESTER II</strong></td>
<td><em>Drafting Concentration</em></td>
<td>2</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SS 132</td>
<td>American Civilization</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>5</td>
<td>4</td>
<td>6-7</td>
</tr>
<tr>
<td><strong>FALL SEMESTER III</strong></td>
<td>DFT 135</td>
<td>Reproduction Processes</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><em>Drafting Concentration</em></td>
<td>2</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>†Elective</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>6</td>
<td>10-12</td>
<td>9-10</td>
</tr>
</tbody>
</table>

* To be selected from DFT 136, DFT 184, DFT 185, DFT 230, DFT 231, DFT 232, DFT 234, DFT 235, DFT 236.
† Technical Electives may be selected from applied science or engineering technologies.
‡ DFT 814 may be taken with the consent of the instructor.
# DRAFTING AND DESIGN TECHNOLOGY

## ELECTRONIC DESIGN OPTION

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>LEC HRS</th>
<th>LAB HRS</th>
<th>CR HRS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FALL SEMESTER I</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DFT 183 — Basic Drafting</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>EGR 186 — Manufacturing Processes</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>COM 131 — Applied Composition and Speech or ENG 101 — Composition and Expository Reading</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 195 — Technical Mathematics or MTH 101 — College Algebra</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ET 190 — D.C. Circuits and Electrical Measurements</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>12</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td><strong>SPRING SEMESTER I</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DFT 231 — Electronic Drafting</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COM 132 — Applied Composition and Speech or ENG 102 — Composition and Literature</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 196 — Technical Mathematics or MTH 102 — Plane Trigonometry</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>DFT 240 — Printed Circuit Design</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHY 131 — Applied Physics</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>13</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td><strong>FALL SEMESTER II</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DFT 135 — Reproduction Processes</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DFT 241 — Integrated Circuit Design</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ET 250 — Principles of Electronic Integrated Circuits</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>EGR 106 — Descriptive Geometry</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SS 131 — American Civilization or HST 101 — History of the United States</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>11</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td><strong>SPRING SEMESTER II</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 131 — Human Relations</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>DFT 242 — Advanced Integrated Circuit Design</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SS 132 — American Civilization or HST 102 — History of the United States</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>DFT 232 — Technical Illustration</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>*Elective</td>
<td>3</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Suggested electives: ET 192, other drafting, engineering or graphic arts courses.
# DRAFTING AND DESIGN TECHNOLOGY
## ELECTRONIC DESIGN OPTION
(-Co-op Training Program)

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Lec. Hrs</th>
<th>Lab. Hrs</th>
<th>Cr. Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FALL SEMESTER I</strong></td>
<td>EGR 186</td>
<td>Manufacturing Processes</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DFT 183</td>
<td>Basic Drafting</td>
<td>2</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>EGR 106</td>
<td>Descriptive Geometry</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>COM 131</td>
<td>Applied Composition and Speech or ENG 101</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MTH 195</td>
<td>Technical Mathematics</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td><strong>SPRING SEMESTER I</strong></td>
<td>DFT 704</td>
<td>Work Experience</td>
<td>1</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>DFT 231</td>
<td>Electronic Drafting</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>24</td>
<td>7</td>
</tr>
<tr>
<td><strong>SUMMER SEMESTER I</strong></td>
<td>PHY 131</td>
<td>Applied Physics</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MTH 196</td>
<td>Technical Mathematics</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td><strong>FALL SEMESTER II</strong></td>
<td>DFT 240</td>
<td>Printed Circuit Design</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>COM 132</td>
<td>Applied Composition and Speech or ENG 102</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SS 131</td>
<td>American Civilization or HST 101</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ET 190</td>
<td>D.C. Circuits and Electrical Measurements</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td><strong>SPRING SEMESTER II</strong></td>
<td>DFT 804</td>
<td>Work Experience</td>
<td>1</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>DFT 241</td>
<td>Integrated Circuit Design</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ET 250</td>
<td>Principles of Electronic Integrated Circuits</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td>26</td>
<td>11</td>
</tr>
<tr>
<td><strong>SUMMER SEMESTER II</strong></td>
<td>DFT 135</td>
<td>Reproduction Processes</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>SS 132</td>
<td>American Civilization or HST 102</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td><strong>FALL SEMESTER III</strong></td>
<td>DFT 242</td>
<td>Advanced Integrated Circuit Design</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*Elective</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Suggested electives: ET 192, other drafting, engineering or graphic arts courses.
GRAPHIC ARTS
(Certificate Program)
A one-year program providing the student with skill development opportunities in
the field of Graphic Arts. Successful completion of this one-year program would
prepare a person for employment in a commercial printing firm or in a printing
division of a large company.

<table>
<thead>
<tr>
<th>Course</th>
<th>LEC HRS</th>
<th>LAB HRS</th>
<th>CR HRS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FALL SEMESTER</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GA 131 — Graphic Processes</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>GA 140 — Offset Printing I</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>COM 131 — Applied Composition and Speech or ENG 101 — Composition and Expository Reading</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MTH 139 — Applied Mathematics</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>OFC 172 — Beginning Typing</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12</td>
<td>11</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>LEC HRS</th>
<th>LAB HRS</th>
<th>CR HRS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SPRING SEMESTER</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GA 134 — Basic Camera Operations</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>GA 136 — Copy Preparation</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>COM 132 — Applied Composition and Speech or SPE 105 — Fundamentals of Public Speaking</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>*PSY 131 — Human Relations</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>*Elective — DFT 232 or PHO 110</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12</td>
<td>12</td>
<td>15</td>
</tr>
</tbody>
</table>

*GA 714 may be taken with the consent of the instructor.
**GRAPHIC COMMUNICATIONS**

This program provides skill development and understanding of graphic processes needed for employment in a commercial printing firm or in a printing division of a large company. It also prepares the student with production and management concepts and techniques useful for professional growth in the business of graphic communications. Successful completion of this curriculum leads to the Associate in Applied Arts and Sciences Degree.

<table>
<thead>
<tr>
<th>LEC. HRS.</th>
<th>LAB. HRS.</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FALL SEMESTER I</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GA 131 — Graphic Processes</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>GA 140 — Offset Printing I</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>COM 131 — Applied Composition and Speech or ENG 101 — Composition and Expository Reading</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>MTH 139 — Applied Mathematics</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>OFC 172 — Beginning Typing</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LEC. HRS.</th>
<th>LAB. HRS.</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SPRING SEMESTER I</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GA 134 — Basic Camera Operations</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>GA 136 — Copy Preparation</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>COM 132 — Applied Composition and Speech or SPE 105 — Fundamentals of Public Speaking</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td><em>PSY 131 — Human Relations</em></td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td><em>Elective — DFT 232 or PHO 110</em></td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LEC. HRS.</th>
<th>LAB. HRS.</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FALL SEMESTER II</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GA 201 — Production Techniques</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>ECO 201 — Principles of Economics I</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>BUS 105 — Introduction to Business</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>MTH 130 — Business Mathematics</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>JN 101 — Introduction to Mass Communications</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LEC. HRS.</th>
<th>LAB. HRS.</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SPRING SEMESTER II</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GA 202 — Production Management</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>GA 240 — Offset Printing II</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>ACC 131 — Bookkeeping I or ACC 201 — Principles of Accounting I</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>CS 175 — Introduction to Computer Sciences</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td><em>Elective</em></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

*GA 714 may be taken with the consent of the instructor.
†Electives may be selected from the areas of Art, Drafting, Business or Communications with consent of instructor. GA 814 may be taken with the consent of the instructor.*
MANAGEMENT CAREERS

This business management program offers several options of study designed to develop the fundamental skills, knowledge, attitudes, and experiences which enable men and women to function in decision-making positions as supervisors or junior executives. Credit can be earned for on-the-job experience in the Mid-Management option. To enter the Mid-Management option, students must make formal application and be interviewed by a member of the Mid-Management faculty before final acceptance will be granted. Successful completion of this program leads to the Associate in Applied Arts and Sciences Degree.

### CORE COURSES (Required for all options)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>LEC HRS.</th>
<th>LAB HRS.</th>
<th>CR HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 105</td>
<td>Introduction to Business</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting I or ACC 131 Bookkeeping I</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ACC 132</td>
<td>Bookkeeping II</td>
<td>(3)</td>
<td>0</td>
<td>(3)</td>
</tr>
<tr>
<td>ECO 201</td>
<td>Principles of Economics I</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ECO 202</td>
<td>Principles of Economics II</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>CS 175</td>
<td>Introduction to Computer Science</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MGT 136</td>
<td>Principles of Management</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>PSY 131</td>
<td>Human Relations</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>HUM 101</td>
<td>Introduction to the Humanities</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total:** 24-27

### SUPPORT COURSES (Required for all options)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>LEC HRS.</th>
<th>LAB HRS.</th>
<th>CR HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 131</td>
<td>Applied Composition and Speech*</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>COM 132</td>
<td>Applied Composition and Speech*</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Social Science elective or Humanities elective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTH 111</td>
<td>Math. for Business &amp; Economics I or MTH 112 Math. for Business &amp; Economics II</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MTH 130</td>
<td>Business Math</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total:** 12

Continued
### ADMINISTRATIVE MANAGEMENT OPTION

<table>
<thead>
<tr>
<th>Course</th>
<th>LEC HRS</th>
<th>LAB HRS</th>
<th>CR HRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 202</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MGT 206</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>BUS 234</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MGT 242</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>BUS 237</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>OFC 231</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>27</td>
</tr>
</tbody>
</table>

### MID-MANAGEMENT OPTION

<table>
<thead>
<tr>
<th>Course</th>
<th>LEC HRS</th>
<th>LAB HRS</th>
<th>CR HRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 150 Management Training</td>
<td>0</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>MGT 154 Management Seminar: Role of Supervision</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>MGT 151 Management Training</td>
<td>0</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>MGT 155 Management Seminar: Personnel Management</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>MGT 250 Management Training</td>
<td>0</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>MGT 254 Management Seminar: Organizational Development</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>MGT 251 Management Training</td>
<td>0</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>MGT 255 Management Seminar: Business Strategy, the Decision Process &amp; Problem Solving</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>27</td>
</tr>
</tbody>
</table>

### SMALL BUSINESS MANAGEMENT OPTION

<table>
<thead>
<tr>
<th>Course</th>
<th>LEC HRS</th>
<th>LAB HRS</th>
<th>CR HRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 206 Principles of Marketing</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MGT 153 Small Business Management</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MGT 157 Small Business Bookkeeping &amp; Accounting Practices</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MGT 210 Small Business Organization, Acquisition &amp; Finance</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MGT 211 Small Business Operations</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MGT 234 Business Law</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>27</td>
</tr>
</tbody>
</table>

*Students may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the Division Chair. Students must take Speech 105 as an elective when substituting ENG 101 and 102.*
SECRETARIAL CAREERS — ADMINISTRATIVE SECRETARY
(Certificate Program)

This program is designed for the person interested in being an assistant to the office administrator. Emphasis will be placed on developing the ability to make decisions and solve complex problems. Students who do not have the necessary skills to enter this program may precede the suggested curriculum by enrolling in OFC 172 (Beginning Typing) or OFC 174 (Intermediate Typing) and OFC 159 (Beginning Shorthand) or OFC 166 (Intermediate Shorthand). These preliminary courses will not count toward the credit hours required for the certificate.

<table>
<thead>
<tr>
<th>LEC. HRS.</th>
<th>LAB. HRS.</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL SEMESTER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFC 273 — Advanced Typing</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>OFC 266 — Advanced Shorthand</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>OFC 162 — Office Procedures</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>ACC 131 — Bookkeeping I or ACC 201 — Principles of Accounting I</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>MGT 136 — Principles of Management</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>4</td>
</tr>
</tbody>
</table>

| SPRING SEMESTER | | |
| OFC 275 — Secretarial Procedures | 3 | 0 | 3 |
| OFC 231 — Business Communications | 3 | 0 | 3 |
| MTH 130 — Business Mathematics | 3 | 0 | 3 |
| OFC 165 — Introduction to Word Processing | 3 | 0 | 3 |
| SPE 105 — Public Speaking | 3 | 0 | 3 |
| *Elective | 3 | 0 | 3 |
| | 18 | 0 | 18 |

SECRETARIAL CAREERS — GENERAL SECRETARY
(Certificate Program)

The purpose of this program is to prepare students with the basic skills necessary to enter the secretarial field. A certificate is issued upon completion of the program.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>LEC. HRS</th>
<th>LAB. HRS</th>
<th>CR. HRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL SEMESTER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 105 — Introduction to Business</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>OFC 160 — Office Machines</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>OFC 172 — Beginning Typing or</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>OFC 174 — Intermediate Typing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFC 159 — Beginning Shorthand or</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>OFC 166 — Intermediate Shorthand</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM 131 — Applied Composition and Speech or</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101 — Composition and Expository Reading</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTH 130 — Business Mathematics</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
<td><strong>5</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COURSE</th>
<th>LEC. HRS</th>
<th>LAB. HRS</th>
<th>CR. HRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPRING SEMESTER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFC 174 — Intermediate Typing or</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>OFC 273 — Advanced Typing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFC 166 — Intermediate Shorthand or</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>OFC 266 — Advanced Shorthand</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFC 162 — Office Procedures</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ACC 131 — Bookkeeping I or</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ACC 201 — Principles of Accounting I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFC 165 — Introduction to Word Processing</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>OFC 231 — Business Communications</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>4</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>
SECRETARIAL CAREERS — OFFICE SKILLS AND SYSTEMS
(Certificate Program)

This program is designed to meet the needs of those students who desire to enter a business career in a minimum of time. Intensive training in the basic office skills and systems is provided — including office machines, communications systems and other related business subjects. A general orientation to business is given.

<table>
<thead>
<tr>
<th>LEC.</th>
<th>LAB.</th>
<th>CR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRS.</td>
<td>HRS.</td>
<td>HRS.</td>
</tr>
</tbody>
</table>

**FALL SEMESTER**
- BUS 105 — Introduction to Business | 3 | 0 | 3
- ACC 131 — Bookkeeping I or ACC 201 — Principles of Accounting I | 3 | 0 | 3
- OFC 172 — Beginning Typing or OFC 174 — Intermediate Typing | 2 | 3 | 3
- COM 131 — Applied Composition and Speech or ENG 101 — Composition and Expository Reading | 3 | 0 | 3
- OFC 160 — Office Machines | 3 | 0 | 3

- **Total**: 14 | 3 | 15

**SPRING SEMESTER**
- OFC 174 — Intermediate Typing or OFC 273 — Advanced Typing | 1 | 2 | 2
- OFC 162 — Office Procedures | 3 | 0 | 3
- OFC 165 — Introduction to Word Processing | 3 | 0 | 3
- COM 132 — Applied Composition and Speech or ENG 102 — Composition and Literature | 3 | 0 | 3
- OFC 231 — Business Communications | 3 | 0 | 3
- MTH 130 — Business Mathematics | 3 | 0 | 3

- **Total**: 16 | 2 | 17

**CREDIT GIVEN FOR CPS RATING**
Credit toward an Associate Degree may be granted upon successful completion of all parts of the Certified Professional Secretary (CPS) Exam. The courses for which credit may be granted are:

- ACC 131 — Bookkeeping I
- OFC 159 — Beginning Shorthand
- OFC 162 — Office Procedures
- OFC 166 — Intermediate Shorthand
- OFC 172 — Beginning Typewriting
- OFC 174 — Intermediate Typewriting
- OFC 231 — Business Communications
- BUS 234 — Business Law
- OFC 275 — Secretarial Procedures
- PSY 131 — Human Relations

- **Total**: 31

In order to receive credit, the applicant must:
1. Request direct notification be given to the Registrar of the College by the Institute for Certifying Secretaries that the applicant has passed all sections of the exam.
2. Earn 12 hours credit for courses at Eastfield before the advanced standing credit is posted on the applicant’s record.
SECRETARIAL CAREERS — PROFESSIONAL SECRETARY

The purpose of this program is to prepare students to become alert and responsive secretaries capable of performing the tasks required of them in the modern business office. Suggested electives are such that students may take courses which will allow specialties in secretarial areas such as law, selling, advertising and accounting.

<table>
<thead>
<tr>
<th>LEC.</th>
<th>LAB.</th>
<th>CR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRS.</td>
<td>HRS.</td>
<td>HRS.</td>
</tr>
</tbody>
</table>

FALL SEMESTER I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>LEC.</th>
<th>LAB.</th>
<th>CR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 105</td>
<td>Introduction to Business</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MTH 130</td>
<td>Business Mathematics</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>OFC 172</td>
<td>Beginning Typing or OFC 174</td>
<td>Intermediate Typing</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>OFC 159</td>
<td>Beginning Shorthand or OFC 166</td>
<td>Intermediate Shorthand</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>COM 131</td>
<td>Applied Composition and Speech or ENG 101</td>
<td>Composition and Expository Reading</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

| Total | 14 | 5 | 16 |

SPRING SEMESTER I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>LEC.</th>
<th>LAB.</th>
<th>CR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFC 174</td>
<td>Intermediate Typing or OFC 273</td>
<td>Advanced Typing</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>OFC 166</td>
<td>Intermediate Shorthand or OFC 266</td>
<td>Advanced Shorthand</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>OFC 162</td>
<td>Office Procedures</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>ACC 131</td>
<td>Bookkeeping I or ACC 201</td>
<td>Principles of Accounting I</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>OFC 160</td>
<td>Office Machines</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total | 13 | 4 | 15 |

FALL SEMESTER II

*OF C 266 | Advanced Shorthand | 3 | 2 | 4 |
*OF C 273 | Advanced Typing | 1 | 2 | 2 |
OF C 165 | Introduction to Word Processing | 3 | 0 | 3 |
CS 175 | Introduction to Computer Sciences | 3 | 0 | 3 |
COM 132 | Applied Composition and Speech or ENG 102 | Composition and Literature | 3 | 0 | 3 |

Humanities: To be selected from ART 104, MUS 104, THE 104, HUM 101

| Total | 16 | 4 | 18 |

SPRING SEMESTER II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>LEC.</th>
<th>LAB.</th>
<th>CR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFC 265</td>
<td>Word Processing Practices &amp; Procedures</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>OFC 275</td>
<td>Secretarial Procedures</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>OFC 231</td>
<td>Business Communications</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>PSY 131</td>
<td>Human Relations</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>
*Elective or Work Experience |

| Total | 15 | 0 | 15 |

*Student must achieve competency as required in Advanced Shorthand and Advance Typing. If student has qualified for advanced placement in shorthand and/or typing the elective hours are available to fulfill degree plan.

†Suggested Electives: MGT 136, BUS 143, BUS 234, OFC 167, OFC 274, OFC 803, OFC 804, OFC 813, OFC 814, PSY 105, SPE 105, BUS 237, DP 129. DP 129 offered at El Centro only, OFC 167 offered at Cedar Valley, El Centro and North Lake Colleges, OFC 274 offered at Cedar Valley and North Lake Colleges.
SOCIAL WORK ASSOCIATE

This program will develop competencies for students to enter employment in paraprofessional positions as social work associates in various social service agencies. The program combines human services courses and other courses with special emphasis given to actual social service agency involvement and work.

<table>
<thead>
<tr>
<th>CERTIFICATE PROGRAM</th>
<th>LEC. HRS.</th>
<th>LAB. HRS.</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL SEMESTER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS 131 — Orientation to Human Services</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>*COM 131 — Applied Composition and Speech</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>†PSY 131 — Human Relations</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101 — Introduction to Sociology</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>HD 107 — Developing Leadership Behavior</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>15</strong></td>
<td><strong>0</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING SEMESTER</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 233 — Counseling for the Paraprofessional</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>HS 235 — Introduction to Mental Health</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>HS 703 — Work Experience</td>
<td>1</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>HS 244 — Social Work Problems and Practices</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>SOC 206 — Introduction to Social Work</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>13</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

* English 101 may be substituted with the approval of the program coordinator.
† Psychology 105 may be substituted with the approval of the program coordinator.

<table>
<thead>
<tr>
<th>TWO-YEAR PROGRAM</th>
<th>LEC. HRS.</th>
<th>LAB. HRS.</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL SEMESTER I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 101 — Composition and Expository Reading</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>PSY 105 — Introduction to Psychology</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101 — Introduction to Sociology</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>HS 131 — Orientation to Human Services</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>*Elective</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>15</strong></td>
<td><strong>0</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING SEMESTER I</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 102 — Composition and Literature</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>PSY 201 — Developmental Psychology</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>SOC 102 — Social Problems</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>SOC 206 — Introduction to Social Work</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>*Elective</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>15</strong></td>
<td><strong>0</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FALL SEMESTER II</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 203 — Marriage and Family</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>PSY 205 — Psychology of Personality</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>HS 233 — Counseling for the Paraprofessional</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>HS 803 — Work Experience</td>
<td>1</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>HS 244 — Social Work Problems and Practices</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>13</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Continued
SPRING SEMESTER II

<table>
<thead>
<tr>
<th>Course</th>
<th>LEC.</th>
<th>LAB.</th>
<th>CR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 204 — American Minorities</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>HS 235 — Introduction to Mental Health</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>HS 813 — Work Experience</td>
<td>1</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>HS 245 — Social Work Problems and Practices</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>*Elective</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

13 15 15

*Suggested Electives: BIO 116, HUM 101, PEH 101, PEH 108, PEH 110, PEH 257, RD 101, SPA 101, PSY 207, SOC 205, SOC 231, CD 140, GVT 201, GVT 202, HST 101, HST 102, ANT 101. HS 703, HS 704, HS 713, HS 714, HS 802, HS 804, HS 812, HS 814 may be taken with consent of instructor.

TRAINING PARAPROFESSIONALS FOR THE DEAF
(Certificate Program)

This one-year program will offer training for working with the deaf in a range of occupational settings, with primary emphasis on those students in vocational training, educational environments and community agencies.

<table>
<thead>
<tr>
<th>Course</th>
<th>LEC.</th>
<th>LAB.</th>
<th>CR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPD 140 — Introduction to Deafness</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>TPD 141 — Beginning Sign Language</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>TPD 142 — Communication Theory</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>TPD 147 — Language Development of the Deaf</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>TPD 148 — Fingerspelling</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>ENG 101 — Composition and Expository Reading</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

14 6 17

SPRING SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>LEC.</th>
<th>LAB.</th>
<th>CR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPD 143 — Intermediate Sign Language</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>TPD 146 — The Deaf Adult</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>TPD 248 — Rehabilitation of the Multiply Handicapped Deaf</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>TPD 247 — Special Problems in Deafness or</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>*Specified Elective</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

14 3 15

*Specified Electives: HD 105, HD 106, PSY 201, PSY 105.

NOTE: Course electives should be carefully chosen with faculty advisement.
TRAINING PARAPROFESSIONALS FOR THE DEAF

This program is designed to train individuals at a paraprofessional level to work with the deaf. The curriculum pattern is planned for a two-year associate degree program. Course work will provide skills to work as an interpreter for the deaf, educational assistant, media specialist, aide with the multiply-handicapped, or house parent in residential schools.

<table>
<thead>
<tr>
<th>LEC. HRS.</th>
<th>LAB. HRS.</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL SEMESTER I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TPD 140 — Introduction to Deafness</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>TPD 141 — Beginning Sign Language</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>TPD 142 — Communication Theory</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>TPD 147 — Language Development of the Deaf</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>TPD 148 — Fingerspelling</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>ENG 101 — Composition and Expository Reading</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>14</td>
<td>6</td>
</tr>
</tbody>
</table>

| SPRING SEMESTER I |
| TPD 143 — Intermediate Sign Language | 3 | 2 | 4 |
| TPD 145 — Classroom Management or *Specified Elective |
| TPD 146 — The Deaf Adult | 2 | 0 | 2 |
| TPD 242 — Media for the Deaf or †TPD 247 — Special Problems in Deafness |
| ENG 102 — Composition and Literature | 3 | 0 | 3 |
| **TOTAL** | 12 | 13 | 4-6 | 15 |

| FALL SEMESTER II |
| TPD 240 — Advanced Sign Language | 3 | 2 | 4 |
| TPD 250 — Reverse Interpreting | 3 | 0 | 3 |
| †TPD 247 — Special Problems in Deafness or *Specified Elective |
| TPD 802 — Cooperative Work Experience | 1 | 10 | 2 |
| *Elective | 3 | 0 | 3 |
| **TOTAL** | 13 | 12 | 15 |

| SPRING SEMESTER II |
| TPD 248 — Rehabilitation of the Multiply Handicapped Deaf | 3 | 1 | 3 |
| TPD 230 — Ethics and Specifics of Interpreting | 3 | 2 | 4 |
| †TPD 247 — Special Problems in Deafness or *Specified Elective |
| TPD 241 — Audiometryd | 3 | 2 | 4 |
| TPD 803 — Cooperative Work Experience | 1 | 15 | 3 |
| **TOTAL** | 13 | 20 | 17 |

* Specified Electives: HD 105, HD 106, PSY 105, PSY 201.
† TPD 247 may be repeated for credit as topics vary.
Note: Course electives should be carefully chosen with faculty advisement each semester.
TRANSPORTATION TECHNOLOGY

The objectives of the Transportation Technology Program are to prepare trained entry-level manpower for the transportation industry of North Texas with the ability to advance into management positions such as traffic managers, terminal managers, safety specialists, ICC practitioners and other related areas.

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Semester I</th>
<th>Spring Semester I</th>
<th>Fall Semester II</th>
<th>Spring Semester II</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 105 — Introduction to Business</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>TRT 144 — Introduction to Transportation</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>TRT 146 — Transportation and Traffic Management</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>COM 131 — Applied Composition and Speech or ENG 101 — Composition and Expository Reading</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>MTH 130 — Business Mathematics or MTH 111 — Mathematics for Business and Economics</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>0</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Semester II</th>
<th>Spring Semester II</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRT 713 — Work Experience</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Semester II</th>
<th>Spring Semester II</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRT 803 — Work Experience</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Semester II</th>
<th>Spring Semester II</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRT 813 — Work Experience</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>0</td>
</tr>
</tbody>
</table>

†Suggested Business Concentration Electives: TRT 250, OFC 160, OFC 172, ACC 205, MGT 206, BUS 234, BUS 237, CS 175, ECO 201, ECO 202. TRT 250 may be repeated with different emphasis for elective credit.

*May be selected from Business Concentration Electives or HST 101, HST 102, HD 107, SPE 105, GVT 201, GVT 202, MTH 112.
WELDING TECHNICIAN
(Certificate Program)

The Welding Technician Program is designed so that the student can develop the necessary manual skills and technical knowledge required to enter the welding profession. Emphasis is placed on oxyfuel and arc welding plus many other specialized welding applications.

<table>
<thead>
<tr>
<th></th>
<th>LEC. HRS.</th>
<th>LAB. HRS.</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL SEMESTER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WE 102 — Oxyfuel Welding and Cutting</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>WE 103 — Introduction to Shielded Metal Arc Welding — Plate</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>WE 104 — Introduction to Shielded Metal Arc Welding — Pipe</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>WE 201 — Gas Metal Arc Welding — Plate and Pipe</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>WE 202 — Gas Tungsten Arc Welding — Plate and Pipe</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>23</td>
<td>15</td>
</tr>
<tr>
<td>SPRING SEMESTER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WE 105 — Advanced Shielded Metal Arc Welding — Plate and Pipe</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>WE 130 — Pattern Layout</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>WE 203 — Advanced Gas Tungsten Arc Welding — Plate and Pipe</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>WE 204 — Advanced Gas Metal Arc Welding — Plate and Pipe</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>WE 150 — Basic Welding Metallurgy</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>WE 703 — Cooperative Work Experience or *Approved Elective</td>
<td>1</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>30</td>
<td>18</td>
</tr>
</tbody>
</table>

* Electives to be chosen from the following courses or other courses approved by the division chairman include: ACC 131, ACC 132, GVT 201, MTH 111, PSC 118, DFT 183.

The student will be required to purchase a basic set of tools which will be used in class and later on the job. Tool lists will be given out by the instructor during the first week of classes.
WELDING TECHNOLOGY
(2-Year Program)

The Welding Technology Program is designed to give the student experience in the skills and technical areas as well as academic background to broaden his employability in the welding field. Emphasis is placed on oxyfuel and arc welding plus many other specialized welding applications.

<table>
<thead>
<tr>
<th>LEC. HRS.</th>
<th>LAB. HRS.</th>
<th>CR. HRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL SEMESTER I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WE 102 — Oxyfuel Welding and Cutting</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>WE 103 — Introduction to Shielded Metal Arc Welding — Plate</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>WE 104 — Introduction to Shielded Metal Arc Welding — Pipe</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>MTH 195 — Technical Mathematics</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>DFT 182 — Technician Drafting</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

| SPRING SEMESTER I |
| WE 105 — Advanced Shielded Metal Arc Welding — Plate and Pipe | 2 | 4 | 3 |
| WE 130 — Pattern Layout | 2 | 3 | 3 |
| COM 131 — Applied Composition and Speech | 3 | 0 | 3 |
| SS 131 — American Civilization or HST 101 — History of the United States | 3 | 0 | 3 |
| WE 703 — Cooperative Work Experience or *Approved Elective | 1 | 15 | 3 |

| FALL SEMESTER II |
| WE 201 — Gas Metal Arc Welding — Plate and Pipe | 2 | 4 | 3 |
| WE 202 — Gas Tungsten Arc Welding — Plate and Pipe | 2 | 4 | 3 |
| PHY 131 — Applied Physics | 3 | 3 | 4 |
| PSY 131 — Human Relations | 3 | 0 | 3 |
| * Elective | 3 |

| SPRING SEMESTER II |
| WE 203 — Advanced Gas Tungsten Arc Welding — Plate and Pipe | 2 | 4 | 3 |
| WE 204 — Advanced Gas Metal Arc Welding — Plate and Pipe | 2 | 4 | 3 |
| WE 150 — Basic Welding Metallurgy | 3 | 0 | 3 |
| EGR 186 — Manufacturing Processes | 1 | 2 | 2 |
| ET 235 — Fundamentals of Electricity | 3 | 3 | 4 |

* Electives to be chosen from the following courses or other courses approved by the division chairman include ACC 131, ACC 132, GVT 201, MTH 111, PSC 118, DFT 183.

The student will be required to purchase a basic set of tools which will be used in class and later on the job. Tool lists will be given out by the instructor during first week of classes.
ACCOUNTING (ACC) 131 (3)
BOOKKEEPING I (3 LEC.)
The fundamental principles of double-entry bookkeeping are presented and applied to practical business situations. Emphasis is on financial statements, trial balances, work sheets, special journals, and adjusting and closing entries. A practice set covering the entire business cycle is completed.

ACCOUNTING (ACC) 132 (3)
BOOKKEEPING II (3 LEC.)
Prerequisite: Accounting 131. This course covers accruals, bad debts, taxes, depreciation, controlling accounts, and business vouchers. Bookkeeping for partnerships and corporations is introduced.

ACCOUNTING (ACC) 201 (3)
PRINCIPLES OF ACCOUNTING I (3 LEC.)
This course covers the theory and practice of measuring and interpreting financial data for business units. Topics include depreciation, inventory valuation, credit losses, the operating cycle, and the preparation of financial statements. (This course is offered on campus and may be offered via television.)

ACCOUNTING (ACC) 202 (3)
PRINCIPLES OF ACCOUNTING II (3 LEC.)
Prerequisite: Accounting 201. Accounting procedures and practices for partnerships and corporations are studied. Topics include cost data and budget controls. Financial reports are analyzed for use by creditors, investors, and management.

ACCOUNTING (ACC) 203 (3)
INTERMEDIATE ACCOUNTING I (3 LEC.)
Prerequisite: Accounting 202. This course is an intensive study of the concepts, principles, and practice of modern financial accounting. Included are the purposes and procedures underlying financial statements.

ACCOUNTING (ACC) 204 (3)
MANAGERIAL ACCOUNTING (3 LEC.)
Prerequisite: Accounting 202. This course is a study of accounting practices and procedures used to provide information for business management. Emphasis is on the preparation and internal use of financial statements and budgets. Systems, information, and procedures used in management planning and control are also covered.

ACCOUNTING (ACC) 205 (3)
BUSINESS FINANCE (3 LEC.)
Prerequisites: Economics 201 or 202 and Accounting 201. This course focuses on the financial structure in the free enterprise system. Topics include interest rates, value analysis, the financing of business firms and government, and security markets. Financial requirements for decision-making and capital formation are analyzed.

ACCOUNTING (ACC) 238 (3)
COST ACCOUNTING (3 LEC.)
Prerequisite: Accounting 202. The theory and practice of accounting for a manufacturing concern are presented. The measurement and control of material, labor, and factory overhead are studied. Budgets, variance analysis, standard costs, and joint and by-products costing are also included.

ACCOUNTING (ACC) 239 (3)
INCOME TAX ACCOUNTING (3 LEC.)
Prerequisite: Accounting 202 or the consent of the instructor. This course examines basic income tax laws which apply to individuals and sole proprietorships. Topics include personal exemptions, gross income, business expenses, non-business deductions, capital gains, and losses. Emphasis is on common problems.

ACCOUNTING (ACC) 702 (2)
(See Cooperative Work Experience)

ACCOUNTING (ACC) 713, 803, 813 (3)
(See Cooperative Work Experience)

AIR CONDITIONING AND REFRIGERATION (ACR) 101 (2)
PRINCIPLES OF REFRIGERATION (1 LEC., 4 LAB.)
This course introduces the principles of refrigeration. Topics include terminology, heat and energy con-
cepts, basic system components and operating characteristics, and installation procedures. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 102 (2)
PROPERTIES OF AIR (1 LEC., 2 LAB.)
Prerequisites: Air Conditioning and Refrigeration 101 and Mathematics 195. The thermodynamic properties of air are studied. Theories are applied to evaporative cooling, ventilation, humidity control, environmental conditions affecting human comfort, health and industrial processes. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 103 (3)
FUNDAMENTALS OF ELECTRICITY (2 LEC., 4 LAB.)
Starting with basic wiring, wiring diagrams and symbols, this course includes electrical concepts of electron flow, resistance, voltage, current, power and the construction and use of meters. The relation of electrical components to diagrams and applications to control circuits is emphasized. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 104 (3)
HEAT LOAD ANALYSIS (2 LEC., 2 LAB.)
Prerequisites: Air Conditioning and Refrigeration 101 and Mathematics 195. This course covers the methods and procedures of heating and cooling surveys for residences and small commercial systems. Included are ways to reduce equipment load for energy conservation and operating cost efficiency. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 105 (3)
UNIT AIR CONDITIONING SYSTEMS (2 LEC., 4 LAB.)
Prerequisites: Completion or enrollment in Air Conditioning and Refrigeration 101 and 103. The servicing of domestic unit air conditioning systems is presented. Refrigerant charging and evacuation procedures, electric motors and controls, and functional operations of major components are studied. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 106 (3)
SUMMER AIR CONDITIONING SYSTEMS (2 LEC., 4 LAB.)
Prerequisites: Credit or enrollment in Air Conditioning and Refrigeration 102, 104, and 105. Central residential and small commercial systems are studied. Topics include equipment, electric power distribution, and controls. Installation, operation, and troubleshooting are emphasized. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 107 (2)
DOMESTIC REFRIGERATION (1 LEC., 2 LAB.)
Prerequisites: Credit or enrollment in Air Conditioning and Refrigeration 101 and 103. This course presents the mechanical and electrical elements of refrigeration. Theories are applied to domestic refrigerators, freezers and automatic ice cube makers. Emphasis is on operation, troubleshooting and repair. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 108 (3)
WINTER AIR CONDITIONING SYSTEMS (2 LEC., 4 LAB.)
Prerequisites: Credit or enrollment in Air Conditioning and Refrigeration 102, 104, and 105. Direct gas fired and electric warm air heating systems are studied. Topics include humidification devices, specific equipment, wiring and controls. Installation and service are emphasized. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 201 (3)
REFRIGERATION LOADS (2 LEC., 2 LAB.)
Prerequisite: Air Conditioning and Refrigeration 106. This course focuses on the analysis and estimation of refrigeration loads for medium and low temperature systems. Product storage data and procedures for calculating loads with a variety of products and refrigeration equipment are included. Laboratory fee.
AIR CONDITIONING AND REFRIGERATION (ACR) 202 (3) ADVANCED SYSTEMS (2 LEC., 4 LAB.)
Prerequisite: Air Conditioning and Refrigeration 106. Large commercial and industrial air conditioning systems are introduced. Basic system designs, equipment and control systems are the main topics. Instruction on air handling units, air volume boxes, centrifugal chillers, absorption systems, cooling towers, water treatment, and chilled water systems is included. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 203 (3) MEDIUM TEMPERATURE REFRIGERATION SYSTEMS (2 LEC., 4 LAB.)
Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 201. Service and installation procedures for medium temperature equipment as found in food stores, warehouses, distribution centers and processing plants are presented. Particular attention is given to electrical and mechanical features and to defrost subsystems. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 204 (2) SYSTEM TESTING AND BALANCING (1 LEC., 2 LAB.)
Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 202. Concepts and procedures for determining the effectiveness and efficiency of an air conditioning system are studied. System balance, capacity, load requirements and energy consumption are considered. Also included are the performance data and the use of test instruments for measurement of air flow, water flow, energy consumption, and recording of temperature. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 205 (2) LOW TEMPERATURE REFRIGERATION SYSTEMS (1 LEC., 4 LAB.)
Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 201. Service and installation procedures for low temperature equipment as found in food stores, warehouses, distribution centers, and industrial plants are presented. Particular attention is given to electrical and mechanical characteristics and to defrost system requirements. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 206 (3) AIR CONDITIONING SYSTEM EQUIPMENT SELECTION (2 LEC., 4 LAB.)
Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 202. Methods of equipment selection are covered for air conditioning load requirements. Consideration is given to system layout, utility service, control schemes, duct sizing and installation practices. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 207 (3) REFRIGERATION EQUIPMENT SELECTION (2 LEC., 2 LAB.)
Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 203 or 205. This course presents a procedure for selecting equipment and estimating the capacity of commercial refrigeration systems. Consideration is given to component compatibility, system continuity, control, balancing and efficiency. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 208 (3) ENERGY CONSERVATION (2 LEC., 2 LAB.)
Prerequisite: Air Conditioning and Refrigeration 106. The flow of energy in an air conditioning or refrigeration system is examined in depth. Emphasis is on cost effectiveness and energy savings. Practical situations are examined where industry offers a range of equipment or construction designs using various sources of energy with different degrees of efficiency. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 802, 812 (2) (See Cooperative Work Experience)

AIR CONDITIONING AND REFRIGERATION (ACR) 803, 813 (3) (See Cooperative Work Experience)

AIR CONDITIONING AND REFRIGERATION (ACR) 804, 814 (4) (See Cooperative Work Experience)
AUTO BODY (AB) 101  (3)
BASIC METAL PRINCIPLES (2 LEC., 4 LAB.)
The use of hand and air tools is covered. Filling of plastic is included. Preparing the metal, sanding, masking, and priming surfaces on minor damages are emphasized. Laboratory fee.

AUTO BODY (AB) 102  (3)
BASIC PAINT PRINCIPLES (2 LEC., 4 LAB.)
This course presents the use of sanders and other equipment. Sanding and applying primer and paint are stressed. The use and operation of the spray gun are covered. Laboratory fee.

AUTO BODY (AB) 103  (4)
PRACTICAL APPLICATION OF BASIC METAL AND PAINT PRINCIPLES (2 LEC., 5 LAB.)
Prerequisites: Credit or concurrent enrollment in Auto Body 101 and 102. Previously learned skills in auto body repair are integrated. Emphasis is on very minor repairs of in-service automobiles. Laboratory fee.

AUTO BODY (AB) 104  (3)
MINOR METAL REPAIR (2 LEC., 4 LAB.)
Body construction and sheet metal alignment are studied. Emphasis is on the various techniques of applying plastic to minor damages. Laboratory fee.

AUTO BODY (AB) 105  (3)
MINOR PAINT REPAIR (2 LEC., 4 LAB.)
The study of paint materials is continued. Application skills are also included. Laboratory fee.

AUTO BODY (AB) 106  (4)
PRACTICAL APPLICATION OF MINOR METAL AND PAINT REPAIR (2 LEC., 5 LAB.)
Prerequisites: Credit or concurrent enrollment in Auto Body 104 and 105. Metal and paint repair are brought together in this course. Emphasis is on minor repairs of in-service automobiles. Laboratory fee.

AUTO BODY (AB) 139  (3)
AUTOMOBILE SERVICE BUSINESS OPERATIONS (3 LEC.)
The basic business principles of managing an automobile service shop are studied. Emphasis is on management functions, financial analysis, and governmental regulations.

AUTO BODY (AB) 235  (3)
ESTIMATING (3 LEC.)
The procedures of estimating damage on automobiles are presented.

AUTO BODY (AB) 236  (4)
AUTO BODY PRACTICUM (2 LEC., 5 LAB.)
Prerequisites: Auto Body 101, 102, 103, 104, 105, 106, 241, 242, and 243. This course provides the opportunity for the student to use and practice previously learned knowledge and skills of auto body work. Laboratory fee.

AUTO BODY (AB) 241  (3)
MAJOR PAINT REPAIR (2 LEC., 4 LAB.)
This course focuses on the development of painting skills. Emphasis is on mixing colors, matching colors, and texture. Laboratory fee.

AUTO BODY (AB) 242  (3)
MAJOR PANEL REPLACEMENT (2 LEC., 4 LAB.)
The use of power tools and cutting tools is presented. Emphasis is on the repair and replacement of panels. Laboratory fee.

AUTO BODY (AB) 243  (4)
ADVANCED APPLICATION OF AUTOBODY REPAIR METHODS (2 LEC., 5 LAB.)
Prerequisites: Credit or concurrent enrollment in Auto Body 241 and 242. Major paint repair and metal replacement are brought together in this course. Emphasis is on repairs of in-service automobiles. Laboratory fee.

AUTO BODY (AB) 244  (3)
MAJOR COLLISION AND FRAME REPAIR (2 LEC., 4 LAB.)
Students learn to use power frame alignment equipment through lecture, demonstration and actual job repairs. Students will also study through experimentation all materials used in the painting field. Development of skills of painting is emphasized. Laboratory fee.

AUTO BODY (AB) 813  (3)
(See Cooperative Work Experience)
AUTOMOTIVE TECHNOLOGY
(AT) 101 (3)
AUTO SHOP PRACTICE (2 LEC., 4 LAB.)
Selected topics on auto shop operations are presented. Included are personnel, pay structures, safety, specifications and manuals, equipment and tools, the metric system, batteries, and welding. Laboratory fee.

AUTOMOTIVE TECHNOLOGY
(AT) 102 (3)
ENGINE AND IGNITION SYSTEM OPERATION (2 LEC., 4 LAB.)
This course covers the theory and operating principles of the four-cycle engine and ignition system. Testing and repair of these systems are emphasized. Related tools and special equipment are covered. Laboratory fee.

AUTOMOTIVE TECHNOLOGY
(AT) 103 (4)
FUEL AND EMISSION CONTROL SYSTEMS (2 LEC., 5 LAB.)
The operation and maintenance of the fuel and emission control systems are presented. Tools and related equipment are also covered. Laboratory fee.

AUTOMOTIVE TECHNOLOGY
(AT) 104 (3)
AUTO ELECTRICAL SYSTEM (2 LEC., 4 LAB.)
This course examines basic electricity, chassis circuits, and wiring. Included are starting systems, lights, alternators, and regulators. Tools and equipment are also covered. Laboratory fee.

AUTOMOTIVE TECHNOLOGY
(AT) 105 (3)
AUTO ENGINES I (2 LEC., 4 LAB.)
The theory and operation of the internal combustion engine are studied. Engine rebuilding is introduced. Emphasis is on the proper use of hand tools and equipment. Laboratory fee.

AUTOMOTIVE TECHNOLOGY
(AT) 106 (4)
AUTO ENGINES II (2 LEC., 5 LAB.)
Prerequisite: Credit or concurrent enrollment in Automotive Technology 105. This course is a continuation of Auto Engines I. Engine rebuilding is continued with emphasis on in-service automobile repair. Laboratory fee.

AUTOMOTIVE TECHNOLOGY
(AT) 290 (3)
AUTO POWER TRAIN (2 LEC., 4 LAB.)
The drive train (excluding the transmission) is studied. Clutches, standard transmissions, drive lines, and differentials are covered. Servicing, overhaul, adjustment, and the use of special tools are also covered. Laboratory fee.

AUTOMOTIVE TECHNOLOGY
(AT) 291 (3)
AUTOMATIC TRANSMISSIONS I (2 LEC., 4 LAB.)
The theory and operation of automatic transmissions are explored. Automatic transmissions are rebuilt using hand and special tools. Laboratory fee.

AUTOMOTIVE TECHNOLOGY
(AT) 292 (4)
AUTOMATIC TRANSMISSIONS II (2 LEC., 5 LAB.)
Prerequisite: Credit or concurrent enrollment in Automotive Technology 291. This course is a continuation of Automatic Transmissions I. Transmission rebuilding continues with emphasis on in-service automobile repair. Laboratory fee.

AUTOMOTIVE TECHNOLOGY
(AT) 293 (3)
AUTO SUSPENSION (2 LEC., 4 LAB.)
Front end alignment, suspension, steering mechanisms, and wheel balancing are presented. The use of hand tools and related special equipment are included. Laboratory fee.

AUTOMOTIVE TECHNOLOGY
(AT) 294 (4)
AUTO BRAKES (2 LEC., 5 LAB.)
The theory and operation of brakes are studied. Included are drum and disc brakes, power boosters, and other related brake components. Service, repair, and the use of tools and special equipment are covered. Laboratory fee.
AUTOMOTIVE TECHNOLOGY (AT) 295 (3)
AUTO AIR CONDITIONING (2 LEC., 4 LAB.)
This course focuses on the principles of operation and servicing of air conditioners. Topics include compressors, condensers, evaporators, and related components. Both installation and maintenance are covered. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 803, 813 (3)
(See Cooperative Work Experience)

CHILD DEVELOPMENT (CD) 135 (4)
SURVEY OF CHILD SERVICE PROGRAMS (3 LEC., 2 LAB.)
The history of the child care movement and the laws of child care facilities are covered. Emphasis is on a good environment for children in group facilities. Agencies and schools for young children in the community are observed.

CHILD DEVELOPMENT (CD) 137 (4)
LEARNING PROGRAMS FOR YOUNG CHILDREN (3 LEC., 2 LAB.)
The methods of working with young children are explored. Emphasis is on materials to provide the greatest experience and learning. Participation in child care facilities in the community is included.

CHILD DEVELOPMENT (CD) 139 (4)
ENVIRONMENTAL SETTINGS FOR INFANT AND TODDLER CARE (120 CONTACT HOURS)
This course is a study of programs designed to promote positive growth in infants and toddlers, ages 0-3 years. Elements in an infant/toddler program concerning space, equipment, personnel and curriculum are included. The laboratory experience includes observation and participation in the parent/child study center and off-campus infant/toddler sites.

CHILD DEVELOPMENT (CD) 140 (3)
CHILD GROWTH AND BEHAVIOR, PRENATAL THROUGH THREE (3 LEC.)
This course focuses on the principles of normal child growth and development from the prenatal period through three years of age. Emphasis is on physical, intellectual, emotional, and social growth.

CHILD DEVELOPMENT (CD) 141 (3)
CHILD GROWTH AND BEHAVIOR, FOUR THROUGH NINE (3 LEC.)
This course focuses on the principles of normal child growth and development from four through nine years of age. Emphasis is on physical, intellectual, emotional, and social growth.

CHILD DEVELOPMENT (CD) 150 (3)
NUTRITION, HEALTH AND SAFETY OF THE YOUNG CHILD (2 LEC., 2 LAB.)
Practical experience and information on the nutritional, health, and safety needs of the young child are provided. A survey of community services for parents and teachers is included. Students earn a first aid certificate during this course.

CHILD DEVELOPMENT (CD) 201 (3)
ADOLESCENT DEVELOPMENT AND SOCIETY (3 LEC.)
Prerequisites: Child Development 140 and Human Development 106 or Psychology 105. This course presents the physical, emotional, and social development of the pre-adolescent and adolescent. The impact of physical and psychological changes on family and social relationships is investigated. Also covered are the long-term effects of adolescent development on the individual's vocational and academic interests, values, and interpersonal relationships.

CHILD DEVELOPMENT (CD) 233 (4)
A SURVEY OF MODEL PROGRAMS (2 LEC., 5 LAB.)
Prerequisites: Child Development 135, 137, 140 and 141. A survey of model programs, the learning theories on which these programs are based, and the practical application of these programs in the various child care settings are studied. The laboratory experience will consist of participating in a designated child care setting for a minimum of five hours per week.
CHILD DEVELOPMENT (CD) 235 (5)
APPLICATION OF LEARNING THEORIES (3 LEC., 5 LAB.)
Prerequisite: Child Development 233. Emphasis will be placed on developing child care programs which meet the mental, social, emotional and physical needs of the individual child. Areas of focus will include viewing the child as a part of a family, cultural and child rearing values and expectations, the sequence of learning experiences for young children, the readiness for learning skills, and experience for young children in social living. The laboratory experience will consist of participating in a designated child care setting for a minimum of five hours per week.

CHILD DEVELOPMENT (CD) 236 (3)
CHILDHOOD PROBLEMS (3 LEC.)
Children with special needs are studied with emphasis on physical, mental, and emotional/behavioral problems. This course provides a broad overview of these problem areas and serves as an introduction to the study of exceptional children.

CHILD DEVELOPMENT (CD) 238 (3)
MANAGEMENT SYSTEMS OF PRESCHOOL CENTERS (3 LEC.)
The management of preschool/day care centers is studied. Topics include budgeting, record-keeping, food, health and referral services, and personnel practices.

CHILD DEVELOPMENT (CD) 239 (3)
STUDIES IN CHILD GUIDANCE (2 LEC., 2 LAB.)
Guidance in early childhood is explored. Both home and group experiences are included. Emphasis is on the interpretation of anecdotal records and case studies of young children.

CHILD DEVELOPMENT (CD) 240 (2)
INTERNSHIP (10 LAB.)
The student works in a child care center. Instructors assist students in setting goals, planning activities, providing appropriate materials, implementing plans, and self-evaluation.

CHILD DEVELOPMENT (CD) 242 (3)
ADVANCED ADMINISTRATIVE PRACTICES FOR CHILD CARE FACILITIES (90 CONTACT HRS.)
Registration for this course must be preceded by an interview with a child development instructor. Administrative procedures for child care facilities are presented. Topics include planning, budgeting, personnel, evaluation, and leadership styles. Participation in a designated child care facility under the guidance of the director.

CHILD DEVELOPMENT (CD) 250 (3)
SUPPORTIVE SERVICES FOR EXCEPTIONAL CHILDREN (2 LEC., 4 LAB.)
The focus of this course is on identifying local, state, and national resources for exceptional children and their families. Referral and resource information for special children is gathered through field studies, community involvement, and independent activities.

CHILD DEVELOPMENT (CD) 251 (4)
LEARNING PROGRAMS FOR CHILDREN WITH SPECIAL NEEDS (2 LEC., 5 LAB.)
This course focuses on successful model programs for encouraging maximum learning from young children with special needs. Materials, activities, and methods of working with children are examined.

CHILD DEVELOPMENT (CD) 253 (3)
ABUSE WITHIN THE FAMILY (2 LEC., 2 LAB.)
The symptoms and causes of abusive behaviors within the family are the focus of this course. Emphasis is on developing skills and competencies in working with these families to help them lessen and alleviate abusive behaviors and experiences.

CHILD DEVELOPMENT (CD) 254 (2)
COMPUTING SCIENCE (CS) 175 (3)
INTRODUCTION TO COMPUTER SCIENCE (3 LEC.)
This course is an introduction to the computer. The history of computers and their cultural impact are explored. Topics include vocabulary, flow charting, data representation, and
procedure-oriented languages with general applications.

**COOPERATIVE WORK EXPERIENCE**

701, 711, 801, 811 (1)
702, 712, 802, 812 (2)
703, 713, 803, 813 (3)
704, 714, 804, 814 (4)

Prerequisite: Completion of two courses in the student's major or instructor or coordinator approval. These courses consist of seminars and on-the-job experience. Theory and instruction received in the courses of the students’ major curricula are applied to the job. Students are placed in work-study positions in their technical occupational fields. Their skills and abilities to function successfully in their respective occupations are tested. These work internship courses are guided by learning objectives composed at the beginning of each semester by the students, their instructors or coordinators, and their supervisors at work. The instructors determine if the learning objectives are valid and give approval for credit.

**DRAFTING (DFT) 135 (2)**
**REPRODUCTION PROCESSES (1 LEC., 3 LAB.)**

Equipment and processes used to reproduce technical art are studied. Included are the graphic arts process camera, lithographic offset printing, diazo reproduction, blueprinting, photodrafting, microfilming, photocopying, silk screen printing, printed circuit board etching, thermography, typographics, xerography, engravings, and others. The rapidly expanding field of computer graphics is also covered. Lab work includes the preparation of flats for offset printing of brochures. Laboratory fee.

**DRAFTING (DFT) 136 (3)**
**GEOLOGICAL AND LAND DRAFTING (2 LEC., 4 LAB.)**

Prerequisites: Drafting 183 or the equivalent and Mathematics 196. Equivalent is based on high school drafting courses or on student’s work experience. Sample of drawings and/or high school transcript must be presented.

This is a specialty course to prepare one to work in civil drafting. Various drawings are completed, such as relief maps, plan and profile drawings, roadways, pipelines, and petroleum and geophysical maps. Calculations are made from surveyor’s notes to plot a traverse and contour lines and to determine area and volumes. A set of drawings is prepared for a residential subdivision, a shopping center, or some other type of land development.

**DRAFTING (DFT) 182 (2)**
**TECHNICIAN DRAFTING (1 LEC., 3 LAB.)**

This course focuses on the reading and interpretation of engineering drawings. Topics include multiview drawings, pictorial drawings, dimensioning, measurement with scales, schematic diagrams, and printed circuit boards. Laboratory fee.

**DRAFTING (DFT) 183 (4)**
**BASIC DRAFTING (2 LEC., 6 LAB.)**

This course is for students who have had little or no previous experience in drafting. Skill in orthographic, axonometric, and oblique sketching and drawing is developed. Topics include lettering, applied geometry, fasteners, sectioning, tolerancing, and auxiliaries. Experience is provided in using handbooks and other resource materials and in developing design skills. U.S.A.S.I., government, and industrial standards are used. Emphasis is on both mechanical skills and graphic theory. Laboratory fee.

**DRAFTING (DFT) 184 (3)**
**INTERMEDIATE DRAFTING (2 LEC., 4 LAB.)**

Prerequisite: Drafting 183 or the equivalent. Equivalent is based on high school drafting courses or on student’s work experience. Sample of drawings and/or high school transcript must be presented. Drafting problems, design function, and specialized drafting areas are examined. Included are the detailing and assembling of machine parts, gears, cams, jigs, fixtures, metals, and metal-forming processes. Drawing room standards and reproducing drawings are studied. Detail
and assembly drawings are made. Laboratory fee.

DRAFTING (DFT) 185 (4)
ARCHITECTURAL DRAFTING (2 LEC., 6 LAB.)
This course begins with architectural lettering, and drafting of construction details. Emphasis is on technique and use of appropriate material symbols and conventions. Working drawings are prepared, including plans, elevations, sections, and details. Drawings for buildings using steel, concrete, and timber structural components are covered. Reference materials are used to provide skills in locating data and in using handbooks.

DRAFTING (DFT) 230 (3)
STRUCTURAL DRAFTING (2 LEC., 4 LAB.)
Prerequisites: Drafting 184 and Mathematics 196. Stresses and thermal and elastic qualities of various materials are studied. Beams, columns, and other materials are included. Structural plans, details, and shop drawings of components are developed for buildings using steel, reinforced concrete, and timber structures. Emphasis is on drafting appropriate drawings for fabrication and erection of structural components.

DRAFTING (DFT) 231 (3)
ELECTRONIC DRAFTING (2 LEC., 4 LAB.)
Prerequisite: Drafting 183. This course focuses on drawings used in the electronics industry. Topics include block and logic diagrams, schematic diagrams, interconnecting wiring diagrams, printed circuit boards, integrated circuits, component packaging, chassis design and current practices.

DRAFTING (DFT) 232 (3)
TECHNICAL ILLUSTRATION (2 LEC., 4 LAB.)
Prerequisite: Drafting 183. The rendering of three-dimensional drawings is covered. Orthographic views and engineer's sketches are developed into isometric, dimetric, perspective, and diagramatic drawings of equipment and their environments. Technical sketching, and hand mechanical lettering, air brush retouching of photographs, handling of commercially prepared pressure sensitive materials, and layout of schematics, charts, and graphs are practiced. Laboratory fee.

DRAFTING (DFT) 234 (4)
ADVANCED TECHNICAL ILLUSTRATION (2 LEC., 6 LAB.)
Prerequisite: Drafting 232. An area of specialization is chosen and pursued in depth. Examples are pictorials for color separation printing, air brush renderings, letterforms for logos and hand lettering, complex exploded views in isometric, perspective renderings, design of commercial displays and art for slide presentations. Laboratory fee.

DRAFTING (DFT) 235 (3)
BUILDING EQUIPMENT (MECHANICAL AND ELECTRICAL) (2 LEC., 4 LAB.)
Prerequisite: Drafting 183 or Drafting 185. Plans and details for mechanical equipment are drawn. Equipment includes air conditioning, plumbing, and electrical systems. Emphasis is on the use of appropriate symbols and conventions. Mechanical and electrical features are coordinated with structural and architectural components. Laboratory fee.

DRAFTING (DFT) 236 (3)
PIPING AND PRESSURE VESSEL DESIGN (2 LEC., 4 LAB.)
Prerequisites: Drafting 183 and Mathematics 195 or the equivalent. This course presents the methods of piping of fluids for refineries, petrochemical plants, and industrial facilities. ASME codes are applied to the design of pressure vessels, pipe fitting, welded and seamless piping, pumps, and heat exchanges. Drawing techniques are emphasized in orthographic and isometric projections. Laboratory fee.

DRAFTING (DFT) 240 (3)
PRINTED CIRCUIT DESIGN (2 LEC., 4 LAB.)
Prerequisite: Drafting and Design Technology 231, concurrent enrollment in Drafting and Design Technology 231 or equivalent. This course develops skills in the design of double sided and
multilayer printed circuit boards. Students design boards from schematics, parts lists, and manufacturing specifications. Some boards are designed for manual parts insertion and taped artworks. Others are designed for automatic parts insertion and digitized inputs for artworks. Laboratory fee.

DRAFTING (DFT) 241 (3)
INTEGRATED CIRCUIT DESIGN (2 LEC., 4 LAB.)
Prerequisite: Drafting and Design Technology 240, Electronics Technology 190, or equivalent. Must be taken concurrently with Electronics Technology 250. This course develops skills in the design of integrated circuits. Electronic theory and laboratory exercises in active devices are combined with drafting lectures and laboratory drafting to enable students to design simple integrated circuits from schematic diagram and given design rules. Laboratory fee.

DRAFTING (DFT) 242 (3)
ADVANCED INTEGRATED CIRCUIT DESIGN (2 LEC., 4 LAB.)
Prerequisite: Drafting and Design Technology 241. This course develops skills in the design of complex integrated circuits. Students work from schematic diagrams and two sets of given rules. Work is done to meet industrial standards of current technologies. Laboratory fee.

DRAFTING AND DESIGN TECHNOLOGY (DFT) 704, (4)
(See Cooperative Work Experience)
Prerequisite: Drafting 183.

DRAFTING AND DESIGN TECHNOLOGY (DFT) 804 (4)
(See Cooperative Work Experience)
Prerequisite: Drafting 704

DRAFTING AND DESIGN TECHNOLOGY (DFT) 814 (4)
(See Cooperative Work Experience)

ELECTRONICS TECHNOLOGY (ET) 190 (4)
DC CIRCUITS AND ELECTRICAL MEASUREMENTS (3 LEC., 3 LAB.)
Prerequisite: Mathematics 195 or the equivalent recommended. The mathematical theory of direct current circuits is presented in combination with laboratory fundamentals. Emphasis is on elementary principles of magnetism, electric concepts and units, diagrams, and resistance. Electromagnetism, series and parallel circuits, simple meter circuits, conductors, and insulators are also stressed. Laboratory fee.

ELECTRONICS TECHNOLOGY (ET) 191 (4)
AC CIRCUITS (3 LEC., 3 LAB.)
Prerequisite: Electronics Technology 190 and credit or concurrent enrollment in Mathematics 195 or the equivalent. This course covers the fundamental theories of alternating current. The theories are applied in various circuits. Included are laboratory experiments on power factor, sine wave analysis, resonant circuits, capacitance, inductance, Q of coils, magnetism, and resistance. Laboratory fee.

ELECTRONICS TECHNOLOGY (ET) 192 (3)
DIGITAL COMPUTER PRINCIPLES (2 LEC., 2 LAB.)
Prerequisite: Electronics Technology 190. This course is a study of number systems and arithmetic in various bases. Included are truth tables, relay and diode logic analysis, logic symbols, and basic functions including NOT, AND, NAND, OR NOR, and EX- OR. Logic manipulations include basic laws, minterm, maxterm, sum of products, and product of sums expression forms. Venn diagrams, Veitch and Karnaugh reduction techniques, and circuit synthesis are also covered using design examples. Laboratory fee.

ELECTRONICS TECHNOLOGY (ET) 193 (4)
ACTIVE DEVICES (3 LEC., 3 LAB.)
Prerequisite: Electronics Technology 190 and credit or concurrent enrollment in Electronics Technology 191. Semiconductors (active devices) are the focus of this course. Topics include composition, parameters,
linear and non-linear characteristics, in circuit action, amplifiers, rectifiers, and switching. Laboratory fee.

**ELECTRONICS TECHNOLOGY (ET) 194 (3)**
**INSTRUMENTATION (2 LEC., 3 LAB.)**
Prerequisites: Electronics Technology 190 and credit or concurrent enrollment in Electronics Technology 191 and 193. Electrical devices for measurement and instrumentation are studied and applied to work situations. Included are basic AC and DC measurement meters, impedance bridges, oscilloscopes, signal generators, signal-tracers, and tube and transistor testers. The course concludes with a study of audio frequency test methods and equipment. Laboratory fee.

**ELECTRONICS TECHNOLOGY (ET) 235 (4)**
**FUNDAMENTALS OF ELECTRICITY (3 LEC., 3 LAB.)**
This course is an introduction to electricity for students in related programs. Topics include basic AC and DC theory, voltage, current, and resistance, and electrical wiring principles and schematics. Transformers, relays, timers, electrical measuring devices, and basic electrical calculations are also included. Laboratory fee.

**ELECTRONICS TECHNOLOGY (ET) 238 (4)**
**LINEAR INTEGRATED CIRCUITS (3 LEC., 3 LAB.)**
Prerequisites: Electronic Technology 190, 191, and 193. Differential amplifiers, operational amplifiers, and integrated circuit timers are investigated. Topics include comparators, detectors, inverting and non-inverting amplifiers, op amp adders, differentiating and integrating amplifiers, and instrumentation amplifiers. Digital to analog converters, analog to digital converters, special op amp applications, and integrated circuits timers are also included. Limitations and specifications of integrated circuits are covered. Laboratory fee.

**ELECTRONICS TECHNOLOGY (ET) 250 (4)**
**PRINCIPLES OF ELECTRONIC INTEGRATED CIRCUITS (3 LEC., 2 LAB.)**
Prerequisites: Electronics Technology 190 and concurrent enrollment in Drafting and Design Technology 241. This is a survey course of solid state devices and their associated circuitry. This course is intended to teach the student fundamentals of common electronic circuits which contain integrated circuits and to teach elements of solid state devices from the principle of the PN junction through the function of integrated circuits. Laboratory fee.

**ELECTRONICS TECHNOLOGY (ET) 260 (4)**
**SINUSOIDAL CIRCUITS (3 LEC., 3 LAB.)**
Prerequisites: Electronics Technology 191 and 193. Power supply circuits are presented. Included are full wave rectification, filtering, and regulation. Amplifier circuits involving large and small signal analysis, coupling, classes of operation and feedback techniques are also covered. Semiconductor devices considered include the Zener diode, SCR, TRIAC, MOSFET, JFET, CMOS, and unijunction. Laboratory fee.

**ELECTRONICS TECHNOLOGY (ET) 261 (4)**
**PULSE AND SWITCHING CIRCUITS (3 LEC., 3 LAB.)**
Prerequisites: Electronics Technology 191 and 193. Thevenin’s theorem and superposition are applied to AC and DC sources. Waveform analysis is studied including pulse characteristics and pulsetrain measurements of harmonic content. Other topics include RC and RL circuit response to step inputs, exponential forms, diode clipper and clamp circuits, and transistor action in digital circuits involving saturation and cutoff. Gate types of RTL, DTL, TTL, ECL, and MOS technologies are also included. The bistable, monostable, and astable types of multivibrator circuits are covered. Laboratory fee.
ELECTRONICS TECHNOLOGY (ET) 263 (4)
DIGITAL COMPUTER THEORY (3 LEC., 3 LAB.)
Prerequisite: Electronics Technology 192. This course focuses on basic computer circuits. Included are flip-flops, shift registers, counters (sequential and nonsequential), operational amplifiers, and A to D converters. Analysis of specific current integrated circuits is also included. Laboratory fee.

ELECTRONICS TECHNOLOGY (ET) 264 (4)
DIGITAL SYSTEMS (3 LEC., 3 LAB.)
Prerequisite: Electronics Technology 192. The three major component systems of a digital computer are studied. The arithmetic-logic section covers arithmetic in binary, hexadecimal, counting, and number representation within a machine. The memory studies center around the operation of core and semiconductor memory assemblies which include addressing and data buffering. The control section deals with state, distributor, and ROM type of control circuits. Laboratory fee.

ELECTRONICS TECHNOLOGY (ET) 265 (3)
DIGITAL RESEARCH (1 LEC., 5 LAB.)
Prerequisites: Electronics Technology 192 and concurrent enrollment in Electronics Technology 263 and 264. The design, layout, construction, and calibrating of a major electronic project are covered. The project uses digital circuits. Students develop independent projects and prepare term papers on functions of components, operating specifications, and schematics.

ELECTRONICS TECHNOLOGY (ET) 266 (4)
COMPUTER APPLICATIONS (3 LEC., 3 LAB.)
Prerequisite: Electronics Technology 192. Machine language and assembly language programming are the focus of this course. Emphasis is on problem solving for in-house computers. Hardware trouble-shooting techniques for both computer mainframe and input and output devices are covered. Laboratory fee.

ELECTRONICS TECHNOLOGY (ET) 267 (4)
MICROPROCESSORS (3 LEC., 3 LAB.)
Prerequisite: Electronics Technology 192. This course is a study of microcomputers. Topics include architecture, software, interfacing, microprocessors, and microcomputer systems. Emphasis is on practical applications using in-house microcomputers. Laboratory fee.

ELECTRONICS TECHNOLOGY (ET) 268 (4)
ADVANCED MICROPROCESSORS (3 LEC., 3 LAB.)
Prerequisite: Electronic Technology 267. The study of microprocessors is continued. Emphasis is on hardware troubleshooting, diagnostic programming, and peripheral interface and control concepts. Laboratory fee.

ELECTRONICS TECHNOLOGY (ET) 802 (2)
(See Cooperative Work Experience)

ELECTRONICS TECHNOLOGY (ET) 713 (3)
(See Cooperative Work Experience)

ELECTRONICS TECHNOLOGY (ET) 704 (4)
(See Cooperative Work Experience)

ENGINEERING (EGR) 186 (2)
MANUFACTURING PROCESSES (1 LEC., 2 LAB.)
This course introduces the student enrolled in technical programs to the many steps involved in manufacturing a product. This is accomplished by involving the class in producing a device with precision. The student gains practical experience with working drawings, a variety of machine tools and the assembly of components. The student is made aware of the factors involved in selecting materials and economical utilization of materials. Laboratory fee.

ENGINEERING (EGR) 188 (3)
STATICS (3 LEC.)
Prerequisite: Credit or concurrent enrollment in Mathematics 196. This course is a study of force and force...
systems, resultants, friction, centroids, conditions of equilibrium, analysis of trusses, and frame structures. Both numerical and graphical methods are used.

ENGINEERING (EGR) 189 (3)
CHARACTERISTICS AND STRENGTHS OF MATERIALS (3 LEC.)
Prerequisite: Engineering 188. The characteristics and strengths of materials are examined. Emphasis is on loads, stresses, and deformations within the elastic range.

ENGINEERING (EGR) 203 (3)
ENGINEERING PRODUCTION TECHNIQUES (1 LEC., 5 LAB.)
Prerequisite: Engineering 105 or the consent of the instructor. The standard machining of metals is covered. Layout, turning, boring, shaping, drilling, threading, milling, and grinding are all included. The manufacturing of interchangeable parts, fixtures, and jigs with applications is studied. Laboratory fee.

GRAPHIC ARTS (GA) 131 (3)
GRAPHIC PROCESSES (2 LEC., 4 LAB.)
This course focuses on industrial requirements of employees in graphic arts. Habits and abilities are included. An overview of equipment is provided and its use demonstrated. Laboratory fee.

GRAPHIC ARTS (GA) 134 (3)
BASIC CAMERA OPERATIONS (2 LEC., 4 LAB.)
Prerequisite: Graphic Arts 131. The operations and mechanics of the photo-lithographic camera are described. Included are fundamentals of halftone photography, lithographic negative stripping, and plate making. Laboratory fee.

GRAPHIC ARTS (GA) 136 (3)
COPY PREPARATION (2 LEC., 4 LAB.)
Prerequisite: Concurrent enrollment in Graphic Arts 131. The basic operations of the variotype and headliner are studied. Letters, memos, manuals, tables, graphs, charts, reports, and booklets are produced. The drafting table and modern drafting tools are used. Steps from setting bold heading to finishing rough copy and preparing for the photographic master are included. Laboratory fee.

GRAPHIC ARTS (GA) 140 (3)
OFFSET PRINTING I (2 LEC., 4 LAB.)
Prerequisite: Credit or concurrent enrollment in Graphic Arts 131. The principles of offset lithography are covered. Included is operation of the small offset lithographic press. Laboratory fee.

GRAPHIC ARTS (GA) 201 (3)
PRODUCTION TECHNIQUES (2 LEC., 4 LAB.)
Prerequisites: Graphic Arts 134, 136, and 140. Students' skills and techniques are advanced in camera operations, printing, and copy preparation. The flow of material from stock to finished product and bindery procedures are also included. Emphasis is on integrating the operational steps of production into an efficient total process with quality control. Laboratory fee.

GRAPHIC ARTS (GA) 202 (3)
PRODUCTION MANAGEMENT (2 LEC., 4 LAB.)
Prerequisite: Graphic Arts 201. The student is offered knowledge skill development needed in the management of a graphic arts production group are presented. Topics include organizational objectives, organizational structure and task planning, personnel requirements, and requirements for equipment, space, and information. Budget, communications, capability, accountability, and personnel morale are also included. Laboratory fee.

GRAPHIC ARTS (GA) 240 (3)
OFFSET PRINTING II (2 LEC., 4 LAB.)
Prerequisite: Graphic Arts 140. Continuing development of the student in offset lithography is offered. Capabilities and limitations of presses are explored. Printed products are planned and produced. Emphasis is on standard production requirements and maintenance of equipment. Laboratory fee.

GRAPHIC ARTS (GA) 714, 814 (4)
(See Cooperative Work Experience)
HUMAN SERVICES (HS) 131 (3)
ORIENTATION TO HUMAN SERVICES (3 LEC.)
This course introduces the field of human services. Students explore their interest and potential for working in a social service agency. Contacts with community social service agencies are made.

HUMAN SERVICES (HS) 230 (3)
NURSING HOME ACTIVITY DIRECTOR TRAINING (2 LEC., 4 LAB.)
The role of the nursing home activity director is the focus of this course. Both the roles of the nursing home and of the activities program are covered. Topics include the nursing home's historical development and relationship to the community, need and resource assessment, specialized knowledge about the aged resident, and interviewing skills. Program planning, working in groups, programming activities, developing an activities department, and therapeutic techniques in the nursing home are also included.

HUMAN SERVICES (HS) 233 (3)
COUNSELING FOR THE PARAPROFESSIONAL (3 LEC.)
Prerequisite: Permission of the coordinator of the Human Services Program. The principles and practices of interviewing and counseling are introduced. The effectiveness of these techniques are explored for counselors, group counselor aides, mental health or social worker associates, and other "new careers" in people-to-people services.

HUMAN SERVICES (HS) 235 (3)
INTRODUCTION TO MENTAL HEALTH (3 LEC.)
Prerequisites: Psychology 105 or consent of the coordinator of the Human Services Program. Field work. This course focuses on the field of mental health. Topics include history, terms concepts, and ethics. Behavior and environmental factors promoting mental health are analyzed. Skills for identifying symptoms of maladjustment are developed. Ways to provide for emotional outlets and emotional control are considered.

HUMAN SERVICES (HS) 244 (3)
SOCIAL WORK PROBLEMS AND PRACTICES (3 LEC.)
Prerequisite: Concurrent enrollment in Human Services 803. Social work experiences are discussed and problems analyzed with other students in the Human Services Program, meeting three hours per week with the program coordinator.

HUMAN SERVICES (HS) 245 (3)
SOCIAL WORK PROBLEMS AND PRACTICES (3 LEC.)
Prerequisite: Concurrent enrollment in Human Services 813. Social work experiences are discussed and problems analyzed with other students in the human services program meeting three hours per week with the program coordinator.

HUMAN SERVICES (HS) 703, 713 (3)
(See Cooperative Work Experience)

HUMAN SERVICES (HS) 704, 714, (3)
(See Cooperative Work Experience)

HUMAN SERVICES (HS) 802, 812, (4)
(See Cooperative Work Experience)

HUMAN SERVICES (HS) 803 (3)
(See Cooperative Work Experience) Prerequisite: Concurrent enrollment in Human Services 244.

HUMAN SERVICES (HS) 813 (3)
(See Cooperative Work Experience) Prerequisite: Concurrent enrollment in Human Services 245.

HUMAN SERVICES (HS) 804, 814, (4)
(See Cooperative Work Experience)

MATHEMATICS (MTH) 195 (3)
TECHNICAL MATHEMATICS (3 LEC.)
Prerequisite: One year of high school algebra or Development Mathematics 091 or the equivalent. This course is designed for technical students. It covers a general review of arithmetic, the basic concepts and fundamental facts of plane and solid geometry, computational techniques and devices, units and dimensions, the terminology and concepts of elementary algebra, functions, coordinate systems, simultaneous equations, and stated problems.
MATHEMATICS (MTH) 196 (3)
TECHNICAL MATHEMATICS (3 LEC.)
Prerequisite: Mathematics 195. This course is designed for technical students. It includes a study of the trigonometric functions of angles, trigonometric identities, inverse trigonometric functions, trigonometric equations, complex numbers, logarithms, vectors, and the solution of triangles.

MID-MANAGEMENT (MGT) 136 (3)
PRINCIPLES OF MANAGEMENT (3 LEC.)
The process of management is studied. The functions of planning, organizing, leading, and controlling are included. Particular emphasis is on policy formulation, decision-making processes, operating problems, communications theory, and motivation techniques.

MID-MANAGEMENT (MGT) 137 (3)
PRINCIPLES OF RETAILING (3 LEC.)
The operation of the retail system of distribution is examined. Topics include consumer demand, requirements, computer use, store location and layout, and credit policies. Interrelationships are emphasized.

MID-MANAGEMENT (MGT) 150 (4)
MANAGEMENT TRAINING (20 LAB.)
Prerequisite: Concurrent enrollment in approved Mid-Management Program. This course provides for supervised employment in the student’s chosen field. It gives practical experience to students preparing for careers in business management.

MID-MANAGEMENT (MGT) 151 (4)
MANAGEMENT TRAINING (20 LAB.)
Prerequisite: Concurrent enrollment in approved Mid-Management Program. This course is a continuation of Mid-Management 150. It provides for supervised employment in the student’s chosen field.

MID-MANAGEMENT (MGT) 153 (3)
SMALL BUSINESS MANAGEMENT (3 LEC.)
The student will be studying the fundamental approaches to planning, establishing and operating a small business. The day-to-day operation of the business and reporting procedures will be studied as well as exploring the concepts of general management.

MID-MANAGEMENT (MGT) 154 (2)
MANAGEMENT SEMINAR: ROLE OF SUPERVISION (2 LEC.)
Prerequisites: Concurrent enrollment in Mid-Management 150 and preliminary interview by Mid-Management faculty. This course is for students majoring in Mid-Management. Emphasis is on the development of management skills, goal-setting, planning, leadership, communication, and motivation as applied to the student’s work experiences.

MID-MANAGEMENT (MGT) 155 (2)
MANAGEMENT SEMINAR: PERSONNEL MANAGEMENT (2 LEC.)
Prerequisites: Mid-Management 150 and 154 and concurrent enrollment in Mid-Management 151. The principles, policies, and practices of the personnel function as applied to the student’s work experiences are studied.

MID-MANAGEMENT (MGT) 157 (3)
SMALL BUSINESS BOOKKEEPING AND ACCOUNTING PRACTICES (3 LEC.)
This course focuses on basic bookkeeping and accounting techniques for the small business. The techniques are applied to the analysis and preparation of basic financial statements.

MID-MANAGEMENT (MGT) 206 (3)
PRINCIPLES OF MARKETING (3 LEC.)
The scope and structure of marketing are examined. Marketing functions, consumer behavior, market research, sales forecasting, and relevant state and federal laws are analyzed.

MID-MANAGEMENT (MGT) 210 (3)
SMALL BUSINESS CAPITALIZATION, ACQUISITION AND FINANCE (3 LEC.)
The student studies alternative strategies of financial planning, capitalization, profits, acquisition, ratio analysis, and other related financial operations required of small business owners. The preparation and presentation of a loan proposal are included.
Problems of daily operations of small business are introduced. Topics include compliance with regulations, personnel administration, accounts receivable management, and business insurance.

Each student will participate in the definition and analysis of current business problems. Special emphasis will be placed upon relevant problems and pragmatic solutions that integrate total knowledge of the business process in American society. This course may be repeated for credit up to a maximum of three hours credit.

The selling of goods and ideas is the focus of this course. Buying motives, sales psychology, customer approach, and sales techniques are studied.

This course introduces the principles, practices, and media of persuasive communication. Topics include buyer behavior, use of advertising media, and methods of stimulating salespeople and retailers. The management of promotion programs is covered, including goals, strategies, evaluation, and control of promotional activities.

This course presents the fundamentals, theories, principles, and practice of people management. Emphasis is on people and their employment. Topics include recruitment, selection, training, job development, interactions with others, labor management relations, and government regulations. The managerial functions of planning, organizing, staffing, directing, and controlling are also covered.

Prerequisites: Mid-Management 150 and Mid-Management 151; concurrent enrollment in Mid-Management 254. This course consists of supervised employment in the student’s chosen field. It is intended to provide increased supervisory responsibility for students preparing for careers in business management.

Prerequisites: Mid-Management 150 and 151; concurrent enrollment in Mid-Management 255. This course continues Mid-Management 250. It is intended to provide supervised employment in the student’s chosen field.

Prerequisites: Mid-Management 151 and Mid-Management 155; concurrent enrollment in Mid-Management 250. Organizational objectives and management of human resources are studied. The various approaches to organizational theory are applied to the student’s work experiences.

Prerequisites: Mid-Management 250 and Mid-Management 254; concurrent enrollment in Mid-Management 251. Business strategy and the decision-making process are applied to the first-line supervisor and middle-management positions. Emphasis is on applying the student’s course knowledge to work experiences.

This course is an overview of the relationship of industrial functions. The philosophy and practices of management are included. Topics cover plant location and layout,
process design, equipment selection, and methods analysis. Work measurement, materials control, production planning and control, quality control, cost control, and industrial relations are also presented.

OFFICE CAREERS (OFC) 159 (4)
BEGINNING SHORTHAND (3 LEC., 2 LAB.)
Prerequisite: Credit or concurrent enrollment in Office Careers 172 or one year of typing in high school. The principles of Gregg shorthand (Diamond Jubilee Series) are introduced. Included is the development of the ability to read, write, and transcribe shorthand outlines. Knowledge of the mechanics of English is also developed.

OFFICE CAREERS (OFC) 160 (3)
OFFICE MACHINES (3 LEC.)
This course focuses on the development of skills in using office machines. Adding machines, printing calculators, electronic display calculators, and electronic printing calculators are included. Emphasis is on developing the touch system for both speed and accuracy.

OFFICE CAREERS (OFC) 162 (3)
OFFICE PROCEDURES (3 LEC.)
Prerequisite: Office Careers 172 or one year of typing in high school. The duties, responsibilities, and personal qualifications of the office worker are emphasized. Topics include filing, reprographics, mail, telephone, financial transactions, and job applications.

OFFICE CAREERS (OFC) 165 (3)
INTRODUCTION TO WORD PROCESSING (3 LEC.)
Prerequisite: Office Careers 174 or concurrent enrollment in Office Careers 174. This course introduces word processing and describes its effect on traditional office operations. Word processing terminology and concepts for organizing word processing centers are studied. Training in the transcription and distribution of business communications is provided. English skills and mechanics are reinforced.

OFFICE CAREERS (OFC) 166 (4)
INTERMEDIATE SHORTHAND (3 LEC., 2 LAB.)
Prerequisites: Office Careers 159 or one year of shorthand in high school, Office Careers 172 or one year of typing in high school. The principles of Gregg shorthand are studied. Emphasis is on increased speed dictation, accuracy in typing from shorthand notes, and beginning techniques of transcription skills. Also included are oral reading of shorthand outlines, speed building dictation, and producing mailable copy. Special attention is given to English fundamentals, such as grammar and punctuation.

OFFICE CAREERS (OFC) 172 (3)
BEGINNING TYPING (2 LEC., 3 LAB.)
This course is for students with no previous training in typewriting. Fundamental techniques in typewriting are developed. The skills of typing manuscripts, business letters, and tabulations are introduced.

OFFICE CAREERS (OFC) 174 (2)
INTERMEDIATE TYPING (1 LEC., 2 LAB.)
Prerequisite: Office Careers 172 or one year of typing in high school. Typing techniques are developed further. Emphasis is on problem solving. Increasing speed and accuracy in typing business forms, correspondence, and manuscripts is also stressed.

OFFICE CAREERS (OFC) 231 (3)
BUSINESS COMMUNICATIONS (3 LEC.)
Prerequisites: Credit in Office Careers 172 or one year of typing in high school; credit in Communications 131 or English 101. This practical course includes a study of letter forms, the mechanics of writing and the composition of various types of communications. A critical analysis of the appearance and content of representative business correspondence is made.
OFFICE CAREERS (OFC) 265 (3)  
WORD PROCESSING PRACTICES 
AND PROCEDURES (3 LEC.)  
Prerequisite: Office Careers 165. This 
course concerns translating ideas into 
words, putting those words on paper, 
and turning that paper into 
communication. Emphasis is on 
training in composing and dictating 
business communications. Teamwork 
skills, priorities, scheduling, and 
procedures are included. Researching, 
storing and retrieving documents, and 
managing word processing systems 
are also covered. Transcribing and 
magnetic keyboarding skills are 
developed. Typing skills and English 
mechanics are reinforced.

OFFICE CAREERS (OFC) 266 (4)  
ADVANCED SHORTHAND (3 LEC., 2 LAB.)  
Prerequisites: Office Careers 166 or 
two years of shorthand in high school, 
Office Careers 174 or two years of 
typing in high school. Emphasis is on 
building dictation speed. Producing 
mailable, typed transcriptions under 
timed conditions is also stressed. 
Vocabulary and extensive production 
work capabilities are developed.

OFFICE CAREERS (OFC) 273 (2)  
ADVANCED TYPING (1 LEC., 2 LAB.)  
Prerequisite: Office Careers 174 or two 
years of typing in high school. 
Decision-making and production of all 
types of business materials under time 
conditions are emphasized. 
Continuation of skill development and a 
review of typing techniques are also 
stressed. Accuracy at advanced 
speeds is demanded.

OFFICE CAREERS (OFC) 275 (3)  
SECRETARIAL PROCEDURES (3 LEC.)  
Prerequisites: Credit or concurrent 
enrollment in Office Careers 174, 
credit or concurrent enrollment in 
either Office Careers 166 or Office 
Careers 265. Emphasis is on initiative, 
creative thinking, and follow-through. 
Topics include in-basket exercises, 
decision-making problems, and use of 
shorthand and transcription skills. 
Public and personal relations, 
supervisory principles, business 
ethics, and the organizing of time and 
work are also covered.

OFFICE CAREERS (OFC) 803, 813 (3)  
(See Cooperative Work Experience)  
OFFICE CAREERS (OFC) 804, 814 (4)  
(See Cooperative Work Experience)

TRAINING PARAPROFESSIONALS 
FOR THE DEAF (TPD) 140 (3)  
INTRODUCTION TO DEAFNESS (2 LEC., 2 LAB.)  
The psychology and history of 
educating the deaf are introduced. 
Emphasis is on the psychological, 
social, emotional, and occupational 
aspects of deafness.

TRAINING PARAPROFESSIONALS 
FOR THE DEAF (TPD) 141 (4)  
BEGINNING SIGN LANGUAGE (3 LEC., 2 LAB.)  
Prerequisite: Majors in Training Para-
professionals for the Deaf should 
enroll concurrently in Training Parapro-
fessionals for the Deaf 142. Sign 
language and fingerspelling are 
introduced. Practice and experience in 
developing expressive and receptive 
skills are provided. Emphasis is on 
mastering expressive skills.

TRAINING PARAPROFESSIONALS 
FOR THE DEAF (TPD) 142 (3)  
COMMUNICATION THEORY (3 LEC.)  
Basic communication methods used 
by the deaf are explored. Emphasis is 
on the interrelationship of all language 
methods and the concept of total 
communication, including theories, 
ideas, methods of language, 
communication, and English. (This 
course is not a sign language course.)

TRAINING PARAPROFESSIONALS 
FOR THE DEAF (TPD) 143 (4)  
INTERMEDIATE SIGN 
LANGUAGE (3 LEC., 2 LAB.)  
Prerequisite: Training Paraprofes-
sionals for the Deaf 141 for Training 
Paraprofessionals for the Deaf majors 
and Training Paraprofessionals for the 
Deaf 142 for all students. Receptive 
and expressive fingerspelling skills are 
increased. Basic vocabulary is 
expanded, and idioms are introduced. 
Emphasis is on mastering receptive 
skills.
TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 145  (3)  CLASSROOM MANAGEMENT (2 LEC., 2 LAB.)
Prerequisite: Training Paraprofessionals for the Deaf 140. Techniques of effective classroom management are studied for nursery, elementary, and secondary school. Emphasis is on interpersonal relationships, team-teaching, and behavior management. The role of the teacher aide and the teacher aide/interpreter in the school setting is defined.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 146  (2)  THE DEAF ADULT (2 LEC.)
Prerequisite: Training Paraprofessionals for the Deaf 140. This course focuses on techniques to develop the social and work behaviors of the deaf. Experiences are provided in working with adult deaf in group interaction and in developing business and social skills.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 147  (3)  LANGUAGE DEVELOPMENT OF THE DEAF (3 LEC.)
The language development of deaf persons is studied. The period from infancy to adulthood is included. The importance of family, community, and school relationships is stressed. Various methods and materials used in developing language are presented. An overview of learning theory and normal language acquisition is also included.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 148  (1)  FINGERSPELLING (2 LAB.)
Prerequisites: Training Paraprofessionals for the Deaf 141, 143 or concurrent enrollment in Training Paraprofessionals for the Deaf 240. This course will increase the student's reading of fingerspelling. Videotapes are used which start with two-letter words and end with words of several syllables. These words are presented individually as well as in sentences. This is a self-paced class.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 230  (4)  ETHICS AND SPECIFICS OF INTERPRETING (3 LEC., 2 LAB.)
Prerequisite: Training Paraprofessionals for the Deaf 140 or the consent of the instructor. This class focuses on interpreter protocol, i.e., manner of dress, code of ethics, language level. The student will learn about the preparation and training to become an interpreter for the deaf in different settings. Examples of these settings are legal, religious, vocational, medical, educational, counseling and rehabilitation.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 240  (4)  ADVANCED SIGN LANGUAGE (3 LEC., 2 LAB.)
Prerequisites: Training Paraprofessionals for the Deaf 141, 142, and 143. This course is a continuation of training in sign language. Practical experiences are included. Increased ability in both receptive and expressive areas is developed. The ability to move from one kind of sign language to another kind is stressed, and emphasis is on mastering Ameslan.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 241  (4)  AUDIOMETRY (3 LEC., 2 LAB.)
Prerequisite: 15 to 20 hours of Training Paraprofessionals for the Deaf courses or the consent of the instructor. A study of the uses of auditory equipment with the deaf in all situations. Includes instruction combined with practicum experiences in utilization of various types of group and individual auditory equipment. Training in techniques of utilization of equipment and materials to enable the deaf to respond meaningfully to their environments via the auditory channel.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 242  (3)  MEDIA FOR THE DEAF (2 LEC., 2 LAB.)
All types of media are surveyed. Emphasis is on specialized uses in a classroom for the deaf and on media
production. Practice is provided in the use and maintenance of all media.

**TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 247 (3)**
SPECIAL PROBLEMS IN DEAFNESS (3 LEC.)

Prerequisite: The consent of the instructor. Various topics are studied as demand warrants. Examples include residential care, introduction to rehabilitation, and the deaf/blind. This course may be repeated for credit when topics vary.

**TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 248 (3)**
REHABILITATION OF THE MULTIPLY HANDICAPPED DEAF (3 LEC., 1 LAB.)

Prerequisite: Training Paraprofessionals for the Deaf 140. An overview of other handicapping conditions accompanying deafness. Emphasis on problems of development and education and on severity of vocational problems when deafness is one of the handicaps. Techniques of management and instruction are included. Instructional personnel will include guest professionals from areas of all handicaps.

**TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 250 (3)**
REVERSE INTERPRETING (3 LEC.)

Prerequisite: Training Paraprofessionals for the Deaf 240. This course is designed for the advanced sign language student. Reverse skills are developed and practiced through the use of video tapes (ranging from manual English to Ameslan), audio tapes and live subjects.

**TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 802 (2)**
(See Cooperative Work Experience)

**TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 803 (3)**
(See Cooperative Work Experience)

**TRANSPORTATION TECHNOLOGY (TRT) 144 (3)**
INTRODUCTION TO TRANSPORTATION (3 LEC.)

This course is an overview of specialized fields within the transportation industry. The role of transportation in modern society is identified. Other topics include community needs, the philosophy of transportation, and the future of transportation.

**TRANSPORTATION TECHNOLOGY (TRT) 145 (3)**
INTRODUCTION TO RATES AND TARIFFS (3 LEC.)

Special emphasis is placed on present-day transportation modes, carrier pricing systems documentation, and federal and state regulation policies.

**TRANSPORTATION TECHNOLOGY (TRT) 146 (3)**
TRANSPORTATION AND TRAFFIC MANAGEMENT (3 LEC.)

This course is for students majoring in transportation technology. It emphasizes current transportation methods. Included are carrier services, carrier pricing systems, documentation, carrier liability, claims, import and export procedures, and governmental regulations. The course is designed to prepare students to take the certification examinations of the American Society of Traffic and Transportation.

**TRANSPORTATION TECHNOLOGY (TRT) 147 (3)**
ECONOMICS OF TRANSPORTATION (3 LEC.)

Prerequisite: Transportation Technology 146. The economic significance of transportation is studied. Topics include the rationale of pricing, the economics of regulation, subsidies and coordination, and interagency control. This course is designed to prepare students to take the certification examinations of the American Society of Traffic and Transportation.

**TRANSPORTATION TECHNOLOGY (TRT) 148 (3)**
GOVERNMENT POLICIES IN TRANSPORTATION (3 LEC.)

Federal, state, and local government roles and policies in transportation are explored. Included are policy making, subsidy, taxation, and controls.
TRANSPORTATION TECHNOLOGY
(TRT) 240  (3)
INTERSTATE COMMERCE LAW I (3 LEC.)
Prerequisite: Transportation Technology 147. Principles of transportation regulation are studied. Topics include the framework of regulation, regulatory acts, and administrative agencies. The regulatory policies of the Interstate Commerce Commission, the Civil Aeronautics Board, and the Federal Maritime Commission are also included. This course is designed to prepare students to take the certifying examinations of the American Society of Traffic and Transportation and the Interstate Commerce Commission.

TRANSPORTATION TECHNOLOGY
(TRT) 241  (3)
INTERSTATE COMMERCE LAW II (3 LEC.)
Prerequisite: Transportation Technology 240. Rules and regulations covering the practice and procedure of federal agencies are studied. The agencies include the Interstate Commerce Commission, the Civil Aeronautics Board, and the Federal Maritime Administration. Pleadings, rules of evidence, rules of ethics, and judicial review are covered. This course is designed to prepare students to take the certifying examinations of the American Society of Traffic and Transportation and the Interstate Commerce Commission.

TRANSPORTATION TECHNOLOGY
(TRT) 249  (3)
APPLIED RATES AND TARIFFS (3 LEC.)
Prerequisite: Transportation Technology 145. This course is an analytical study of transportation pricing structures. Special emphasis is given to the methodology for construction of carrier tariffs, the development of freight rates, and special services provided by carriers. This course is designed to develop skills leading to certification examinations of The American Society of Traffic and Transportation.

TRANSPORTATION TECHNOLOGY
(TRT) 250  (1)
STUDIES IN TRANSPORTATION TECHNOLOGY (1 LEC.)
This course provides the student an opportunity to explore selected topics in the field of transportation. The course may be repeated with a different emphasis for a maximum of nine hours of credit.

TRANSPORTATION TECHNOLOGY
(TRT) 287  (3)
PHYSICAL DISTRIBUTION MANAGEMENT I (3 LEC.)
The management and organization of physical distribution are studied. Emphasis is on decision-making in inventory control, warehousing, packaging, and material handling. The analysis of location and international distribution and transport systems are also covered.

TRANSPORTATION TECHNOLOGY
(TRT) 288  (3)
PHYSICAL DISTRIBUTION MANAGEMENT II (3 LEC.)
Relationships in the management of physical distribution and the market are studied. Topics include market environment, distribution channels and systems, cost planning and analysis, financial control, and system design.

TRANSPORTATION TECHNOLOGY
(TRT) 713, 803, 813  (3)
(See Cooperative Work Experience)

WELDING (WE) 101  (3)
BASIC WELDING AND CUTTING PRACTICES (1 LEC., 5 LAB.)
This course is for students who need welding on the job, such as in auto body, auto mechanics, or air conditioning. Emphasis is on setting up and using oxyfuel equipment. Cutting up to and including \( rac{1}{4} \)" mild steel, welding up to and including \( rac{3}{8} \)" mild steel, and brazing up to and including 16 ga. mild steel are all included. Setting up and using arc welding equipment are also included. Welding \( rac{1}{4} \)" through \( rac{3}{8} \)" mild steel in the flat and vertical position using E60's series electrodes is covered. Laboratory fee.
WELDING (WE) 102  (3)
OXYFUEL WELDING AND CUTTING (1 LEC., 5 LAB.)
The use of oxyfuel welding and cutting equipment is studied and practiced. Emphasis is on welding up to and including \( \frac{3}{8} \)" mild steel sheet in flat and vertical positions, brazing mild steel and cast iron, and using fuel gases for heating and cutting thin and thick metal. Laboratory fee.

WELDING (WE) 103  (3)
INTRODUCTION TO SHIELDED METAL ARC WELDING—PLATE (1 LEC., 5 LAB.)
The use of shielded metal arc welding (stick) of plate is covered. Emphasis is on making prepared and unprepared welds in mild steel plate. Both flat and vertical positions using E60's through E70's series electrodes are included. Laboratory fee.

WELDING (WE) 104  (3)
INTRODUCTION TO SHIELDED METAL ARC WELDING—PIPE (1 LEC., 5 LAB.)
The use of shielded metal arc welding (stick) of pipe is covered. Emphasis is on welding 3" through 10" schedule 40 mild steel pipe. The vertical, horizontal rolled, and horizontal fixed positions using E60's through E70's series electrodes are included. Laboratory fee.

WELDING (WE) 105  (3)
ADVANCED SHIELDED METAL ARC WELDING—PLATE AND PIPE (2 LEC., 4 LAB.)
Prerequisites: Welding 103 and 104 or the equivalent. This course presents the use of shielded metal arc welding on plate and pipe. Emphasis is on passing the guided bend test in plate and pipe in accordance with ASME qualifications for \( \frac{3}{8} \)" through \( \frac{3}{4} \)" thickness range in all positions. Laboratory fee.

WELDING (WE) 130  (3)
PATTERN LAYOUT (2 LEC., 3 LAB.)
Prerequisite: Blueprint Reading 177 or the equivalent or the consent of the instructor. The preparation and development of patterns are covered. The use of templets for general fabrication of sheet metal and structural materials is also covered. Laboratory fee.

WELDING (WE) 150  (3)
BASIC WELDING METALLURGY (3 LEC.)
This is a theory type course designed to assist those students in welding or who are employed in welding and related industries to refresh and extend their knowledge of the behavior of the various fabricating metals during welding. The effects of the joining processes and procedures on the fabrication and service performance of weldments are also considered.

WELDING (WE) 201  (3)
GAS METAL ARC WELDING—PLATE AND PIPE (2 LEC., 4 LAB.)
This is a basic course in the set-up and use of gas metal arc welding (MIG) of plate and pipe. Emphasis will be on setting up and using GMAW welding equipment in welding 16 ga. through \( \frac{1}{2} \)" mild steel, stainless steel and aluminum, plate in the flat and vertical position; and setting up and using GMAW welding equipment to weld 3" through 10" schedule 40 mild steel pipe in the vertical, horizontal rolled and horizontal fixed positions. Laboratory fee.

WELDING (WE) 202  (3)
GAS TUNGSTEN ARC WELDING—PLATE AND PIPE (2 LEC., 4 LAB.)
This is a basic course in the set-up and use of gas tungsten arc welding (TIG) of plate and pipe. Emphasis will be on setting up and using GTAW equipment in welding 18 ga. through \( \frac{3}{8} \)" mild steel, stainless steel, aluminum and other exotic metals in the flat and vertical positions; welding 1" thin wall tubing through 3" schedule 40 mild steel and stainless steel pipe in the vertical, horizontal rolled and horizontal fixed positions. Laboratory fee.

WELDING (WE) 203  (3)
ADVANCED GAS TUNGSTEN ARC WELDING—PLATE AND PIPE (2 LEC., 4 LAB.)
Prerequisite: Welding 202 or equivalent. This is an advanced theory and skill course in the use of gas tungsten arc welding of plate and pipe. Emphasis will be on passing the qualification test in plate and pipe in
any metal and any size and thickness range in all positions. Laboratory fee.

**WELDING (WE) 204 (3)**
ADVANCED GAS METAL ARC WELDING—PLATE AND PIPE (2 LEC., 4 LAB.)

Prerequisite: Welding 201 or equivalent. This is an advanced theory and skill course in the use of gas metal arc welding of plate and pipe. Emphasis will be on passing the qualification test in plate and pipe in any metal, size and thickness range in all positions. Laboratory fee.

**WELDING (WE) 703, 713 (3)**
(See Cooperative Work Experience)
<table>
<thead>
<tr>
<th>Course</th>
<th>Page numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre</td>
<td>82</td>
</tr>
<tr>
<td>Training Paraprofessionals for the Deaf</td>
<td>114, 133</td>
</tr>
<tr>
<td>Transfer of Credits</td>
<td>25</td>
</tr>
<tr>
<td>Transportation Technology</td>
<td>116, 135</td>
</tr>
<tr>
<td>Transcripts</td>
<td>30</td>
</tr>
<tr>
<td>Tuition and Fees</td>
<td>22, 23, 88</td>
</tr>
<tr>
<td>Welding Technology</td>
<td>117, 136</td>
</tr>
</tbody>
</table>