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EASTFIELD COLLEGE

Eastfield College serves the eastern part of Dallas County, including East Dallas, Garland, and Mesquite. Sometimes known as the "Educational Village" because of its unique architecture, it is located on 244 acres at the intersection at Interstate 30 and Motley Drive in Mesquite. Eastfield began operation in 1970 and has continually strived to assess the educational and cultural needs of students and the community, in order to provide the finest in educational services.

Eastfield provides a full range of Academic Transfer programs balanced with Technical/Occupational Programs that are designed to equip students for rewarding careers in Metroplex businesses and industries. In addition, thousands of people each semester find rewarding growth opportunities through the extensive Community Service course offerings.

The Eastfield campus rises impressively from the plains of eastern Dallas County and is the scene of many seasonal athletic events held on its beautiful grass covered playing fields. Functional building clusters give students easy access to classrooms and labs and the overall aesthetic effect has earned Eastfield several architectural awards of excellence. The careful landscape planning includes many trees, shrubs and terraced areas as well as a beautiful outdoor swimming pool. In addition, the campus boasts an outstanding performance hall which serves the community for a variety of fine arts events.

Accreditation

Eastfield College is a member of:
- The Southern Association of Colleges and Schools
- The American Association of Community Colleges
- The Southern Association of Junior Colleges
- Association of Texas Colleges and Universities
- The League for Innovation in the Community College

Eastfield is recognized and sanctioned by the Coordinating Board of the Texas College and University System and the Texas Education Agency, and is an Affirmative Action EQUAL OPPORTUNITY INSTITUTION.

ACADEMIC CALENDAR

SUMMER SESSIONS, 1982

<table>
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<tr>
<th>Session</th>
<th>Dates</th>
<th>Events/Action</th>
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<tbody>
<tr>
<td>First Session</td>
<td>May 27 (M)</td>
<td>Registration</td>
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<td></td>
<td>May 31 (M)</td>
<td>Memorial Day holiday</td>
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<tr>
<td></td>
<td>June 1 (T)</td>
<td>Classes begin</td>
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<tr>
<td></td>
<td>June 2 (W)</td>
<td>Last day for tuition refund</td>
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<tr>
<td></td>
<td>June 4 (F)</td>
<td>4th class day</td>
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<tr>
<td></td>
<td>June 29 (T)</td>
<td>Last day to withdraw &quot;W&quot;</td>
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<tr>
<td></td>
<td>July 5 (M)</td>
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<td>July 6 (T)</td>
<td>Final examinations</td>
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<td>July 6 (T)</td>
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<th>Second Session</th>
<th>July 8 (R)</th>
<th>Registration</th>
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<td>July 12 (M)</td>
<td>Classes begin</td>
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<td></td>
<td>July 13 (T)</td>
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<tr>
<td></td>
<td>July 15 (R)</td>
<td>4th class day</td>
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<tr>
<td></td>
<td>Aug. 9 (M)</td>
<td>Last day to withdraw &quot;W&quot;</td>
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<td></td>
<td>Aug. 13 (F)</td>
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FALL SEMESTER, 1982

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<tr>
<td>Aug. 18 (W)</td>
<td>Faculty reports</td>
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<tr>
<td>Aug. 19, 20, 23 (RFM)</td>
<td>Registration</td>
</tr>
<tr>
<td>Aug. 24 (T)</td>
<td>Faculty development</td>
</tr>
<tr>
<td>Aug. 25 (W)</td>
<td>Classes begin</td>
</tr>
<tr>
<td>Aug. 28 (S)</td>
<td>Saturday classes begin</td>
</tr>
<tr>
<td>Sept. 1 (W)</td>
<td>Last day for tuition refund</td>
</tr>
<tr>
<td>Sept. 6 (M)</td>
<td>Labor Day holiday</td>
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<tr>
<td>Sept. 8 (W)</td>
<td>12th class day</td>
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<tr>
<td>Nov. 25 (R)</td>
<td>Thanksgiving holidays begin</td>
</tr>
<tr>
<td>Nov. 29 (M)</td>
<td>Classes resume</td>
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<tr>
<td>Nov. 30 (T)</td>
<td>Last day to withdraw &quot;W&quot;</td>
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<tr>
<td>Dec. 15 (W)</td>
<td>Last day of classes</td>
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<tr>
<td>Dec. 16-17, 20-21 (RFM)</td>
<td>Final examinations</td>
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<td>Dec. 18 (S)</td>
<td>Final exams, Sat. classes</td>
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SPRING SEMESTER, 1983

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<td>Jan. 10 (M)</td>
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<td>Jan. 13-17 (TWF)</td>
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<td>Jan. 17 (M)</td>
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<td>Feb. 17 (R)</td>
<td>District Conference Day</td>
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<td>Feb. 18 (F)</td>
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<tr>
<td>Mar. 14 (M)</td>
<td>Spring break begins</td>
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<td>Mar. 16 (F)</td>
<td>Spring holiday for all employees</td>
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<td>Mar. 21 (M)</td>
<td>Classes resume</td>
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<tr>
<td>Apr. 1 (F)</td>
<td>Easter Holidays begin</td>
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<tr>
<td>Apr. 4 (M)</td>
<td>Classes resume</td>
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<td>May 6 (F)</td>
<td>Last day to withdraw &quot;W&quot;</td>
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<td>May 13 (F)</td>
<td>Last day of classes</td>
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<td>May 14 (S)</td>
<td>Final exams, Sat. classes</td>
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<tr>
<td>May 16-18 (MTWR)</td>
<td>Final examinations</td>
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<td>May 19 (R)</td>
<td>Graduation</td>
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<td>May 19 (R)</td>
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EASTFIELD COLLEGE ADMINISTRATION

President ........................................ Eleanor Ott ........................................ 324-7600
Vice President of Instruction ................. Jerry Henson ........................................ 324-7195
Vice President of Student Services .......... Lee Graupman ................................. 324-7610
Vice President of Business Services ......... Richard A. Solo ................................ 324-7603
Associate Dean, Technical/Occupational Programs ...... Lu McClellen ....................... 324-7198
Associate Dean, Learning Resources .......... Robert L. Lhota ................................ 324-7168
Assistant Dean of Community Services Programs ... Carolyn Stock ................................ 324-7113
Administration Assistant ..................... Felix Zamora .................................. 324-7181
Director of Public Information ............... Vicki Matusik .................................. 324-7629
Director of Student Development .............. David Amidon .................................. 324-7185
Director of Counseling ......................... Larry G. Carter ................................ 324-7106
Director of Admissions and Registrar ........ Bobbie J. Trout .............................. 324-7100
Director of Financial Aids and Placement .... Furman Milton ................................ 324-7188
Director of Health Services ................... Cheri Reynolds ................................ 324-7190
DIVISION CHAIRPERSONS

Business ......................................... Victor Rizzo ...................................... 324-7116
Communication, Developmental Studies ........ Karin Lemme .................................. 324-7124
Humanities ..................................... John Stewart .................................. 324-7132
Math and Engineering ......................... John Daigh ..................................... 324-7672
Physical Education and Technology ......... Wilbur Dennis .................................. 324-7140
Science and Technology ....................... Edward Ruggiero ................................ 324-7143
Social Science and Human Services .......... Richard Cinclair ................................ 324-7156
DALLAS COUNTY COMMUNITY COLLEGE DISTRICT BOARD OF TRUSTEES
Seated from left: Jerry Gilmore, chairman; Pattie T. Powell; Robert H. Power. Standing from left: Bob Beard; Bart Rominger, vice-chairman; J.D. Hall, and Don Buchholz.

DALLAS COUNTY COMMUNITY COLLEGE DISTRICT ADMINISTRATORS
Chancellor .................................................. R. Jan LeCroy
Vice Chancellor of Business Affairs ............................. Walter Pike
Associate Vice Chancellor of Business Affairs .................... Ted B. Hughes
Vice Chancellor of Educational Affairs .......................... Terry O'Banion
Associate Vice Chancellor of Educational Affairs ................... Ruth Shaw
Assistant Chancellor of Planning ............................... Bill Tucker
Assistant to the Chancellor ....................................... Jackie Caswell
Director of Development ...................................... Carole Shlipak
Legal Counsel ................................................... Robert Young
Special Assistant to the Chancellor ............................ Lehman E. Marks
Director of Business Services ................................. Robb Dean
Director, Center for Telecommunications ..................... Rodger Pool
Director of Computer Services ................................ Jim Hill
Director of Community & Student Programs .................. Richard McCrary
Director of Facilities Management ............................. Edward Bogard
Director of Occupational Education ........................... Linda Coffey
Director of Personnel .......................................... Quincy Ellis
Director of Planning, Marketing, Research .................. Colin Shaw
Director of Public Information ................................. Claudia Robinson
Director of Purchasing ........................................ Mavis Williams
Director of Resource Development ............................ Bonny Franke
Director of Technical Services ................................. Paul Dumont
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<tr>
<td>Allison, Joe F.</td>
<td>Mathematics</td>
<td>East Texas State Univ.</td>
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<td>Amidon, David C., Jr.</td>
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<td>Arnold, Jackie</td>
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<td>Bailey, Kenneth</td>
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<td>Further study, Ohio State Univ.</td>
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<td>Baynham, James D.</td>
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<td>Blair, Oscar T.</td>
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<td>Brown, Emmett D.</td>
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<td>Bowers, James</td>
<td>Developmental Reading</td>
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<td>Bradshaw, Curt</td>
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<td>Northern Iowa, B.S.; North Texas State Univ.</td>
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<td>Bradshaw, Patti J.</td>
<td>Child Development</td>
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<td>Brown, Beverly</td>
<td>English</td>
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<td>B.S.; Univ. of Alabama</td>
<td>M.A. Further study, East Texas State Univ.</td>
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<td>Burden, Jacqueline</td>
<td>History</td>
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<td>Buffalo, B.A.; Univ. of Michigan</td>
<td>M.A.; Further study, University of Pittsburgh</td>
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<td>Carandang, Amado I.</td>
<td>Philosophy</td>
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<td>Carpenter, Robert W.</td>
<td>Accounting</td>
<td>North Texas State Univ.</td>
<td>B.B.A.; M.B.A.; CPA</td>
<td>State of Texas; Further study, North Texas State Univ.; Western State College of Colorado</td>
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<td>Carter, James</td>
<td>Automotive Technology</td>
<td>Southern Methodist Univ., NIASE</td>
<td>Further study, General Motors Training Center</td>
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</table>
Graupman, Lee ........................................ Vice President of 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
Hammer, Fred M. .................................... Chemistry
Texas A&M Univ., B.S. Ph.D.

Hegar, E. Allyn ........................................ Counselor, Psychology
Texas Tech Univ., B.A.; North Texas State Univ., M.Ed., Ed.D.

Heaton, Charles E. ................................. Director of Appraisal Center/CAI Lab
East Texas State Univ., B.S.; Further study: East 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 of Instructional Development
Amarillo College, A.A.; Hardin-Simmons Univ., B.A.; North Texas State Univ., M.L.S.; Further study: University 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.B.S.; Further study: North Texas State Univ.

Holt, Diane R. ....................................... 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.

Hutcheson, Michael E. ............................ Drafting
East Texas State Univ., B.S., M.S., Ed.D.

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

Jessen, Joel A. ........................................ Counselor
Univ. of Iowa, B.A., M.A.

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

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

Kennedy, Pat ........................................ Child Development
North Texas State Univ., B.A., M.S

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

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

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

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

Kugler, Ellen ........................................ Assistant Director of Student Development
Colorado State Univ., B.A., M.Ed.

Latham, Jim ......................................... Auto Body Technology
East Texas State Univ., B.A.; Further study: East Texas State Univ., Texas A&M Univ.

Lemme, Karin ........................................ Division Chairman, Communications/Developmental Studies

Lhota, Bob ........................................... Associate Dean, LRC
St. Vincent College, B.A., M.A.; Univ. of Pittsburgh, M.S.L.; Pacific Western Univ., Ph.D.

Lopez, Frank ............................. Mathematics
Southwest Texas State College, B.S.; Univ. of Texas at Austin, M.A.; Further study: Texas A&M Univ.

Lucky, Harrell C. ..................................... Music
Bethany Nazarene College, B.M.Ed.; Southwestern Baptist Seminary, M.C.M., D.M.E.; Further study: Academy of Music, Vienna, Austria

Lynch, Maurice ................................. Director of Physical Plant
Madriguera, Enric F. ............................. Music
Royal Conservatory of Music, Madrid, Spain; East Carolina Univ.

Martin, Diane M. ..................................... English
North Texas State Univ., B.A.; California State College at Fullerton, M.A.; Further study: East Texas State Univ., Univ. of Texas at Austin

Martinez, Ivan D. ............................... Government
Florida State Univ., B.A., M.S.

Massey, Aaron W. ................................. Counselor
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&M Univ.

Mathus, Don L. ..................................... Physical Education
South Plains College, A.A.; Texas Tech Univ., B.S., M.S.; Further study: North Texas State Univ.
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<td>Matustik, Vicki B.</td>
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<td>Air Conditioning and Refrigeration</td>
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<td>Associate Dean, Technical/Occupational Programs</td>
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<td>McClung, Ray O</td>
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<td>McCoy, David L.</td>
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<td>Mouledous, Pierrette M.</td>
<td>Performer's Certificate, Ecole Normale de Musique, Southern Methodist Univ., M.M.</td>
<td>Piano</td>
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<td>Olson, Margot</td>
<td>Carnegie-Mellon Univ., B.S.; Florida State Univ., M.S., Ph.D.</td>
<td>Instructional Development Consultant</td>
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<td>Ott, Eleanor</td>
<td>Rice Univ., B.A.; Southern Methodist Univ., M.A.</td>
<td>President</td>
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<td>Peimar, Ursula J.</td>
<td>Salve Regina College, B.A.; Univ. of Arizona, M.S.; Further study: Univ. of Arizona</td>
<td>Training Paraprofessionals for the Deaf Program</td>
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<td>Penney, Jane A.</td>
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<td>Sociology/Human Services</td>
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<td>Piloth, Theo</td>
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<td>Physics</td>
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<td>Pleasont, P. Leon Jr.</td>
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<td>Preston, David E.</td>
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<td>Sociology</td>
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<td>Priest, Andy J.</td>
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<td>Automotive Technology and Engineering</td>
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<td>Unv. of Texas at Austin, B.S.E.E.</td>
<td>Electronics</td>
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<td>Secretarial Science</td>
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<td>Texas Woman's Univ., B.S.; Director of Health Services</td>
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<td>Rice, Nina D.</td>
<td>Univ. of Central Arkansas, B.S.; George Peabody College, M.A.; Texas Woman's Univ., Ph.D.</td>
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<td>Rizzo, Victor J.</td>
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<td>Division Chairman, Business</td>
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<td>Robinson, Yvonne</td>
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<td>Ruggiero, Edward</td>
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<td>Sanders, Maria-Terri</td>
<td>El Centro College, A.A.; North Texas State Univ., B.A., M.A.; Further study: East Texas State Univ., Texas Tech Univ.</td>
<td>Spanish</td>
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<td>Schmitt, Allan B.</td>
<td>Univ. of Texas at Austin, B.S., M.S.E.E., Ph.D.E.</td>
<td>Electronics</td>
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<td>Schrup, Sara J.</td>
<td>Art Institute of Chicago, B.F.A.; Univ. of Dallas, M.A., M.F.A.</td>
<td>Art</td>
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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.

Slovak, Pauline Ar ....................................................... Business
Univ. of Arkansas at Monticello, B.S.E.; East Texas State Univ., M.A. Ed., D.

Smith, Maryle Bea ...................................................... English, German Philosophy
North Texas State Univ., B.B.A., M.B.E.; Further study: East Texas State Univ.

Solganick, Harvey ........................................................ English, German Philosophy
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

Solo, Richard A .............................................................. Vice-President of Business Services
Villanova Univ., B.S., Certified Public Accountant; Further studies: Univ. of Dallas

Starling, Susanne ........................................................... American History
Baylor Univ., B.A.; North Texas State Univ., M.A.; Further study North Texas State Univ.

Stewart, John D. ............................................................. Division Chairman, Humanities, Music
East Texas State Univ., B.M.Ed., M.Ed.; Indiana Univ., Ph.D.

Stover, Harryette B ....................................................... English
Southern Methodist Univ., B.A., M.A.; Further study: North Texas State Univ., East Texas State Univ.

Streeter, C. Allen ........................................................... Engineering
Louisiana State Univ., B.S., M.S.; Further Study: Southern Methodist Univ.; Professional Engineer Registration

Streng, Adolf C., Jr ........................................................ Psychology
Texas Lutheran College, B.A.; Wartburg Seminary, M.Div.; The Univ. of Chicago, M.A.; Roosevelt Univ., M.A.; Further study: Univ. of Maine, Iowa State Univ., Univ. of Colorado

Swinding, James A. ...................................................... Developmental Reading
Daytona Beach Community College, A.A. Florida State Univ., B.A., M.S.; Further study: Univ. of Nevada, East Texas State Univ.

Thorne, John M ............................................................. Accounting
East Texas State Univ., B.B.A., M.B.A.; Further Study: Univ. of Oklahoma

Thornton, Carolyn ....................................................... Counseling
Univ. of Cincinnati, B.A.; East Texas State Univ., M.S.

Tinsley, Sammy J ........................................................... Developmental Mathematics
Ouachita Baptist Univ., B.A.; Univ. of Mississippi, M.S., Ph.D.

Trout, Bobbie .............................................................. Registrar
Univ. of Texas at Austin, B.A.; Univ. of Texas at Dallas, M.A.

Weaver, Gayle M ........................................................... Biology
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

Weeks, Roger D ............................................................. Business
East Texas State Univ., B.B.A., M.B.A.; Further study: Univ. of Missouri

Whisnant, Robert A., Jr .................................................. Humanities
Univ. of South Florida, B.A., M.A.; Further study: East Texas State Univ.

Williams, Jerome ........................................................... Biology
East Texas State Univ., B.S., M.S.; Further study: East Texas State Univ., North Texas State Univ.

Wilson, Mary C ........................................................... English

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

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

Zamora, Felix ............................................................. Administrative Assistant to the President
School for International Training, B.S., Southern Methodist Univ., M.P.A.
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. 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 identity 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 17 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 may 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 requires certain assessment procedures for use in course placement prior to admission to a certificate or degree program, 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 or those who have earned a General Education Diploma (G.E.D.), who are 18 years of age or older, and whose high school class has graduated.
b. Graduates of an unaccredited high school who are 18 years of age or older.
c. Persons who do not hold a high school diploma or G.E.D. (but who are 18 years of age or older and whose high school class has graduated) may be admitted by giving evidence of an ability to profit from college instruction, such admission will be on a probationary basis.
d. High school seniors recommended by their high school principal.

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. supply official transcripts for all previous academic work with a minimum "C" average.

Contact the Admissions Office for 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 (Tex. ED. Code 2.09). 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 other 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. Tuition is subject to change without notice by the Board of Trustees or the Texas Legislature.

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.

DALLAS COUNTY COMMUNITY COLLEGE DISTRICT
TUITION AND STUDENT SERVICES FEE*

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<th>Semester</th>
<th>Dallas County</th>
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<th>Out-of-State, or Out-of-Country</th>
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The following definitions are brief guidelines only; please discuss any questions regarding proper tuition classification with Admissions Office personnel.

A Dallas County resident is one who (1) resides in Dallas County and (2) qualifies as an in-state resident. Texas law defines an in-state resident as an individual who is employed full-time in Texas for the 12-month period preceding registration. The Dallas County Community College District Board of Trustees has waived the difference in tuition between the out-of-state or out-of-district rates and Dallas County rates for a person and his/her dependents who owns real estate, business or personal within Dallas County. For information on documents necessary to prove such ownership or dependency, consult the Admissions Office. Classification as a state resident or qualification for a waiver of out-of-state fees applies only to U.S. citizens or permanent resident aliens.

The DCCCD Board of Trustees defines an Out-of-District student as (1) a student eighteen years of age or older who resides in a Texas county other than Dallas County or (2) a student who is less than eighteen (18) years of age whose parents live in a Texas county other than Dallas County. In either case, state residency requirements must be fulfilled (see above).

An out-of-state student is one who has come to Texas from out-of-state within the 12-month period prior to registration. Anyone who enrolls as an out-of-state student is presumed to remain out-of-state as long as the residence of the individual in Texas is for the purpose of attending school. An individual who would have been classified as a resident for the first five of the six years immediately preceding registration but who resided in another state for all or part of the year immediately preceding registration shall be classified as a resident student:

A foreign national or any other than a permanent resident visa must pay out-of-country tuition and fees.

*The tuition schedule above is subject to change without notice by action of the District Board of Trustees or the State of Texas.
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:** $45 for one hour per week (maximum) for one course, $25 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: A fee will be charged for each examination.**

* Available only to music majors enrolled for 12 hours or more.
** This fee can change without prior notice.

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.
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 is returned by a bank for any reason, including stop payment, the college business office may submit the check to the Justice of the Peace for appropriate legal action and collection. The Vice President of Student Services may also implement disciplinary procedures.

ADVISEMENT PROCEDURES

Individual assessment of skill levels is an important part of student success in college. Therefore, the District has provided an assessment process available through the counseling centers at each of the District colleges. Information gained from assessment is used to advise students in the selection of courses which can provide the best possible opportunity for academic success. All students are required to go through an assessment process and should schedule it prior to initial registration. 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.

NON-CREDIT STUDENT (AUDIT)

A person who meets the admission requirements of the District may, with the consent of the division chairperson and instructor, enroll in a credit course as a non-credit student. A non-credit student may attend class, but may not receive a final grade or credit for a course. An instructor may give an examination if he determines the examination is an essential component of the learning process. A fee in a credit course is the same for a non-credit student as for a credit student.

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 and follow the prescribed procedure. Should circumstances prevent a student from appearing in person to withdraw from the College, the student may withdraw by mail by writing to the Registrar. No drop or withdrawal requests are accepted by telephone. Students who drop a class or withdraw from the College before the semester deadline receive a “W” (Withdraw) in each class dropped. The deadline for receiving a “W” is indicated on the academic calendar. After that time students receive a performance grade in each course.

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.

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.
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 must be awarded by the college which offers the program in which the student majored. If two or more schools offer the program, the student is granted the degree where the majority of the hours were taken. 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 will substitute Music 101-102 for this requirement.)
- 12 credit hours of History 101-102 and Government 201-202. No substitutions are allowed. Only 3 credit hours of history and 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 Theater 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 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.

Within five years of initial enrollment a student may graduate according to the catalog requirements in effect at the time of first enrollment or any subsequent catalog provided the requisite courses are still being offered. If a student fails to complete within five years all requirements of the catalog in effect at the time of initial enrollment, then the student may be required to graduate under a later catalog at the discretion of the institution.

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 of 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. 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 by the instructor. After this time, it is the responsibility of the student to withdraw from the course. A student, however, may be dropped from the class roll prior to the published withdrawal deadline notice for lack of attendance at the discretion of the instructor.

If an instructor drops a student, 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." Signatures of instructors and the Registrar are required.

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>Grade Point 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>F</td>
<td>Failing</td>
<td>0 points</td>
</tr>
<tr>
<td>WX</td>
<td>Incomplete</td>
<td>Not Computed</td>
</tr>
<tr>
<td>CR</td>
<td>Credit</td>
<td>Not Computed</td>
</tr>
</tbody>
</table>

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 regular 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 is 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.

Students who do not complete course requirements may receive a "WX" grade when the instructor determines that reasonable progress has been made and when the student can re-enroll for course completion prior to the certification date in the next regular semester. If the student re-enrolls and completes the course requirements, the "WX" remains for the first enrollment; a performance grade is given for the second...
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 Science 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 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 District 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 for each course examination. This fee must be paid prior to taking the examination and is not refundable. The College 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 may not be earned through credit by examination except as approved by the Vice President of Instruction.

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. (CLEP exam does not meet this requirement.)

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 often 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.

TELE COURSES
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 and on cable, 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 the faculty. 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 perspective of "who is to learn." These courses are taught by counselors and other qualified instructors. They offer academic credit which transfers to most institutions. Cooperative Work Experience 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.

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 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 division 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 in-depth 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. Assessment 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. The Financial Aid Needs Analysis Forms take 4-6 weeks to process. 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 and deadlines for applying. Some of the colleges have established priority deadlines for state grants and scholarships.

PELL GRANT

The PELL 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 PELL Grant. Other types of financial aid may be awarded if the student applies and qualifies. Eligibility for PELL Grant is based on financial need and satisfactory academic progress. Applications and additional information concerning the PELL Grant Program are available in the Financial Aid Office and in the counseling offices of most high schools. The application process takes approximately 4-6 weeks. In response to the PELL Grant application, a Student Aid Report (SAR) will be mailed directly to the student. The student should immediately review the SAR to make sure it is correct and bring it to the Financial Aid Office. The exact amount of the PELL Grant award will depend upon the aid index on the SAR 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 each semester. Students must apply each year.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (SEOG)

The SEOG is a Federal program to help pre-baccalaureate students with eligibility based solely on need. The amount of a SEOG award depends on the individual student's needs, the total number of applicants, and funds available. 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 for credit and some non-credit courses.

Students must apply each year for the TPEG.

TEXAS PUBLIC EDUCATIONAL -- STATE STUDENT INCENTIVE GRANT (TPE-SSIG)

The TPE-SSIG is a state program. To qualify, students must enroll for at least 6 credit hours per semester, make satisfactory progress toward their educational goal, be a Texas resident, and have financial need. Grants are awarded by eligibility on a first-come, first-served basis. Student must apply each year for the TPE-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. New students must have applied for and been denied a Texas Guaranteed Student Loan before applying for this 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 9% a year (adjusted).

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 will generally work 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 will generally work 20 hours per week.

SOCIAL SECURITY ADMINISTRATION

The Social Security Administration has offered benefits to students who met its criteria. However, most students who are not currently receiving Social Security Educational Benefits will not be eligible in Fall, 1982, because of a phase out of this program as part of the Omnibus Budget Reconciliation Act. Students need to contact the regional Social Security Administration Office regarding eligibility. The Admissions Office on campus acts as liaison between students and the Social Security Administration after eligibility has been established.

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 for tuition and fees to students who are vocationally handicapped as a result of a
physically or mentally disabling condition. This assistance is generally limited to students not receiving other types of aid. For information, contact Texas Rehabilitation Commission, 13612 Midway, Suite 530, Dallas, Texas 75234.

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 V.A. 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 V.A. and may lose future benefits. A veteran student must also maintain a satisfactory grade point average as outlined in the catalog. The above V.A. 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 some 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.

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. For a detailed description of the requirements, contact the Financial Aid Office.

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 Service. 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. Normally, a loan would not exceed tuition, fees, and books, but check with the Financial Aid Office for further details. 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.
enrollment. If the student does not re-enroll, the "WX" is converted to a performance grade.

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.

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 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 the immediately following semester or summer session without special permission. 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 exerted 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 the procedure for waiving scholastic deficiency should state in writing to the Registrar prior to registration and should inform a counselor of such intentions 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.

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.

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
SYNOPSIS:

VII. STUDENT RIGHTS AND RESPONSIBILITIES

General Provisions


a. Preamble
b. Scope

c. Definitions

2. Accrual with Policies, Rules, Regulations

3. Campus Regulations

a. General Provisions
b. Enumerated Standards

4. Disciplinary Proceedings

a. Administrative Disposition
b. Student Disciplinary Committee

c. Faculty Student Board of Review

5. Penalties

a. Authorized Disciplinary Penalties
b. Definitions of Penalties

6. Parking and Traffic Regulations

b. Scope

1. Class "day" a day on which classes before summer or summer session final examinations are scheduled, or on which summer session final examinations are given;

2. "Vice President of Student Services" means the Vice President of Student Services, his delegate(s) or his representative(s);

3. "Director of Student Development" means the Director of Student Development, his delegate(s) or his representative(s);

4. "Director of Campus Security" means the Director of Campus Security, his delegate(s) or his representative(s);

5. "Student" means a person enrolled in a college or the Dallas County Community College District;

6. "Student" means a person enrolled in a college of the Dallas County Community College District, or a person accused for admission to the college,

7. All vice presidents, deans, assistant deans, assistant directors, and division chairmen of the college for the purposes of this code shall be called administrators;

8. "Compliance" means a written statement 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. "Principal" means one which can result in suspension or expulsion from the college or denial of educational benefits;

12. "Minor violation" means one which can result in disciplinary action other than suspension or expulsion from the college;

13. "Evidence" means the Chancellor of the Dallas County Community College District, Office of Student Development, his delegate(s) or his representative(s);

14. "Director of Student Development" means the Director of Student Development, his delegate(s) or his representative(s);

15. "Board" means the Board of Trustees, Dallas County Community College District, Office of Student Development, his delegate(s) or his representative(s);

16. "Emergency" means the president of the college or the Dallas County Community College District;

17. "Student" means a person enrolled in a college of the Dallas County Community College District, or a person accused for admission to the college;

18. "Speech and Advocacy" means the student right to speech and advocacy, but the time, place, and manner of exercising speech and advocacy shall be regulated in such a manner to ensure orderly conduct and non-interference with college functions or activities, and identification of sponsoring groups or individuals. Meetings must be registered with the Public Affairs Office, and the activity may be called a meeting when the following conditions prevail at that activity:

a. When a group of persons is standing, sitting, or lounging so as to hear or see a presentation or discussion of a presentation or group of persons;

b. When the group of persons has preceded the beginning of discussions or presentations;

c. When a group of persons appears to be conducting a systematic discussion or presentation on a debatable topic.

19. "Breach of the peace" means the public performance of an activity which inserts the scheduled activities or processes of education may be classified as disruptive. No person who participates in any activity leading to disruptive activity will be violating college regulations and/or state law.

20. Following conditions shall normally be sufficient to classify behavior as disruptive:

a. Blocking or in any other way interfering with educational activities of the college;

b. Inciting others to violence and/or participating in violent behavior, e.g., assault, loud or vulgar language, lewd behavior, public, or any form of behavior acted out for the purpose of intimidating and influencing others;

21. "Intervention" means the activity or activity of the public gathering without prior approval of the college;

22. "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 public safety or college order at the college. Furthermore, the Vice President of Student Services shall enforce the provisions of the Texas Education Code, Section 34.331, Education Code, Section 34.331.21.

23. "No person or group of persons acting in concert may willfully engage in disruptive activity or disrupt a lawful assembly on the campus premises, or interrupt any activity at any institution of higher education or public vocational and technical school or institution.

24. "For the purpose of this section, disruptive activity means:

a. Obstructing or preventing the passage of persons in or out, entrance, or hallway of any building without the authorization of the administration of the school;

b. Seeking control of any building or portion of a building for the purpose of interfering with any administrative, educational, research, or recreational activity;

c. Preventing or attempting to prevent by force or violence or the threat of force or violence any lawful assembly authorized by the administration of the school;

d. Disrupting by force or violence or the threat of force or violence a lawful assembly in progress;

25. "Obstructing" means any act or any act of which any person is accused or threatened who willfully cause or permit by force or violence or by threats, or any act of force, violence or by threats, otherwise, interference with the free and undisturbed use of any building or place, properly or campus without the authorization of the administration of the school;

26. "For the purpose 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;

27. A person violates any provisions of this section if a mistreatment and upon conviction is punishable by a fine not to exceed $2000 or by confinement in jail for not less than 30 days nor more than 2 years, or both.

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

29. Nothing herein shall be construed to sustain an action upon any right of action for any person by the Board of Directors of the United States or the State of Texas.

30. Disrupting Alcoholic Beverages: Each college of the University of Texas shall adopt a policy specifically forbidding the drinking or possession of alcoholic beverages on its campus.

31. Drugs: Each college of the Dallas County Community College District specifically forbids the illegal possession, use, sale or purchase of drugs, narcotics, hallucinogenic or any other kind on state property.

32. Gambling: State law expressly forbids gambling of any kind by state employees.

33. Licensing: 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 having activities which involve any of the following factors singly or in conjunction:
(a) Any actions which seriously impair the physical welfare of any student (e.g., the taking of drugs or alcohol, and all consequences are held to be actions which seriously impair the physical welfare of students, and, therefore, accordingly, specifically prohibited).
(b) Activities which are by nature indecent, lewd, indecent, or morally corrupt.
(c) Activities which by their nature may 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, the educational mission, and the overall goals of the college. This policy is in distinction to the control of having activities, engaged in by an organization, rests in the elected and responsible officers of the college, as directed, and in the absence of a determination since it tests and approves the policy to be followed in these matters. It is accordingly recommended that all groups be notified in such a manner that all groups be notified in such a manner that the group as a whole, will be held singularly and collectively responsible for any actions considered to be unreasonable, immoral, and irresponsible with the policy limits determined above. Individual activity falling in this category shall be handled on an individual basis with resulting disciplinary action.

Academic Dishonesty
(a) The Vice President of Student Services may immediately notify the President of the College of any action by a student which is alleged to be in violation of any academic dishonesty.
(b) Academic dishonesty includes, but is not limited to, cheating, 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) Collaborating with another student during a test without authority;
(iv) Knowingly using, buying, selling, stealing, or attempting to steal books, papers, or other materials by trickery in whole or part of any class materials or any unattended test;
(v) Substituting for another student, or permitting another student to substitute for oneself, to take a test and submit responses;
(vi) Failing to possess appropriate documentation of a student's absence.
(vii) "Plagiarism" means the unauthorized incorporation of another's work and the unacknowledged incorporation of that work in one's written work without proper attribution.

"Collusion" means the unauthorized collaboration with another person in preparing work, with resulting disciplinary action.

Financial Transactions with the College
(a) No student may refuse to pay or fail to pay debts owed to or for the college.
(b) No student may give the college a check, draft, or order with intent to defraud the college.
(c) A student is liable for the full amount due on a check, draft, or order, or before the fifth class day of the regular semester or summer session, in the event that a student, in default of payment, is not properly refunded 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 institute disciplinary proceedings against a student who fails to present evidence to the college.

Dismissal of a student from the college community is a major factor of the college community or campus activities.

An individual may be given notice in writing in accordance with student policies for violation of any academic dishonesty. Any change in student's status will be served by such assistance.

(a) The Committee Chairman shall be notified of the date, time and place of the hearing. The hearing shall be held not more than ten (10) days after the date of the hearing. The hearing shall be held not more than ten (10) days after the date of the hearing. The hearing shall be held not more than ten (10) days after the date of the hearing.
(b) At least three (3) class days before the hearing date, the student shall be furnished with: The Committee Chairman with:
(iii) To choose a witness who testifies against him;
(iv) To cross-examine each witness who testifies against him;
(v) To have a stenographer present at the hearing to take a stenographic transcript of the hearing; at the student's expense, but the college is entitled to record the hearing by electronic means;
(vi) To appeal the Faculty-Student Board of Review, as provided, and appealed by the Faculty-Student Board of Review.

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.

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.

2. Prehearing
The vice president of student services may suspend a student who fails 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.

The vice president of student services may suspend a student who fails 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
(a) Charges arising out of a single transaction or occurrence may be grouped for the purpose of being heard together, or at the option of the Committee or upon request by one of the students involved, separate hearings may be held.
(b) At least three (3) class days before the hearing date, the student may request that the Committee Chairman:
(i) The name of each witness he wishes to present in addition to those present in the hearing;
by the college which he wants produced;
(iii) All moves sustaining the action of the Student Discipline Committee, would prevent the hearing;
(iv) The name of the legal counsel, if any, who appear with him;
(v) A request for a separate hearing, if any, and the grounds thereof;
(vi) When the hearing is set under waiver of notice or for other good cause determined by the Committee, so that a student concerned is ensnared to furnish the information described in paragraph (ii) above 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 Students Services, student or other persons designated by the President. The hearing shall be open to the public as space may permit, 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;
(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 inform the student of their rights, as stated in the notice of hearing;
(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 that the student has violated a Board policy, college regulation or administrative rule, the Committee will determine an appropriate penalty.
(vii) The Committee shall be in writing the hearing 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 presumptive value commonly accepted by reasonable men in the conduct of their affairs. The Committees shall exclude irrelevant, immaterial or cumulative 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 those communications were understood by the staff member and the student to be confidential Committee members may freely question student witnesses;
(b) The Committee shall require 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 exhibits, 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 received in evidence, written motions, pleas and any other materials considered by the Committee, and the Committee's decision;
(b) Notice of appeal is timely given when rendered.

4. Penalties
a. Authorized Disciplinary Penalties: The Vice President of Student Services, the Student Discipline Committee or the Faculty Student Board of Review of the College or a student's act
d. Initially selected from available members of the Board of Review;
(e) The Vice President of Students Services shall issue the student a written statement of the violation and penalty.
(f) The student may appeal the decision of the Vice President of Students Services to the Board of Review within ten (10) days of the decision.
(g) The Board of Review shall determine an appropriate penalty.
(h) The Board of Review shall modify or set aside the penalty.
(i) The Board of Review shall vacate the penalty.
(j) The Board of Review shall reduce the penalty.
(k) The Board of Review shall impose an additional penalty.
(l) The Board of Review shall impose a penalty.
(m) The Board of Review shall impose a penalty.
(n) The Board of Review shall impose a penalty.
(o) The Board of Review shall impose a penalty.
(p) The Board of Review shall impose a penalty.
(q) The Board of Review shall impose a penalty.
(r) The Board of Review shall impose a penalty.
(s) The Board of Review shall impose a penalty.
(t) The Board of Review shall impose a penalty.
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6. Reserved Parking Areas
   These reserved areas are designated by signs; all other parking areas are open and are non-reserved.
   (a) Handicapped persons area
   (b) Tow Away Areas
   (1) Handicapped persons area
   (2) Fire Lanes
   (3) Parking or driving on campus in areas other than those designated for vehicular traffic
   (4) Parking in "No Parking" zone
   (5) Parking on courtyards

6. General Information
   (1) College parking areas are regulated by state, municipal and campus statutes. College campus officers are commissioned to enforce traffic regulations.
   (2) All vehicles which park on the campus of the College shall bear a parking decal emblem. The parking decal may be secured from the College Security Division or during fall and spring registration periods. No fee is charged for the decal.
   (3) Placement of decal emblem
      (a) Class: Lower left corner of rear bumper.
      (b) Motorcycles, Motor Bikes, etc. Gas tank.
   (4) Campus Speed Limits
      (a) 10 M.P.H. in parking areas
      (b) 20 M.P.H. elsewhere on campus.
      (c) 5 M.P.H. in fire lanes.
   (d) Procedures
      (1) All motor vehicles must be parked in the parking lots between the parking lines. Parking in all other areas, such as campus drives, curb areas, courtyards, and loading zones, will be cited.
      (2) Citations may be issued for:
         (a) Speeding (the campus speed limit is 20 M.P.H. except where posted)
         (b) Reckless driving
         (c) Double parking
         (d) Driving wrong way in one-way lane
         (e) Parking in "No Parking" zone
         (f) Improper parking (parking outside the limits of a parking space).
         (g) Parking in wrong area (for example, handicapped or "No Parking" areas)
         (h) Parking trailers or boats on campus
         (i) Parking or driving on campus in areas other than those designated for vehicular traffic
         (j) Violations of all state statutes regulating vehicular traffic
         (k) Failure to display parking permit
         (l) Failure to display proper license plate
         (m) Failure to park in a proper place
         (n) Parked vehicles shall be removed from on-campus lots and chiefly off-campus lots as they become available.
         (o) A vehicle cited for a violation shall be towed at the owner's expense.

6. Parking and Driving
   (1) The Colleges, acting by and through their Board of Trustees, are authorized by state law to promulgate, enforce, and enforce traffic regulations. The College is located.
   (2) The College has the authority to issue and use of suitable vehicle identification insignia as permits to park and drive on campus. Permits may be suspended for the violation of campus parking and driving regulations.
   (3) The College campus officers have the authority to issue traffic tickets and summons of type now used by the Texas Highway Patrol. It is the general policy to issue these tickets for violations by visitors and persons holding no College permit. These tickets are returnable to the Justice of Peace Court in which the college is located. Furthermore, the campus officers are commissioned to issue campus citations which are returnable to the Department of Safety and Security at the Business Office.
   (4) Under the direction of the College President, the Department of Safety and Security shall post properly visible parking signs.
   (5) Each student shall file an application for a parking permit with the Security Office upon forms prescribed by the College.
   (6) These traffic regulations apply not only to automobiles but also to motor bikes, motorcycles and ordinary bicycles.
   (7) Procedures
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Course Descriptions
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.

ACCOUNTING (ACC) 131 (3)
BOOKKEEPING I (3 LEC.)
Prerequisite: Accounting 131. The fundamental principles of double-entry bookkeeping are presented and applied to practical business situations. Emphasis is on accounting statements, trial balances, work sheets, and financial statements. Adjusting and closing entries. A practice set covering the entire accounting 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.)
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) 203 (3)
INTERMEDIATE ACCOUNTING I (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) 204 (3)
MANAGERIAL ACCOUNTING (3 LEC.)
Prerequisite: Accounting 202. This course is an intensive study of the concepts, principles, and practices of modern financial accounting. Included are the purposes and procedures underlying financial statements.

ACCOUNTING (ACC) 205 (3)
COST 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) 206 (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 proprietors. Topics include personal exemptions, gross income, business expenses, non-business deductions, capital gains, and losses. Emphasis is on individual problems.

ACCOUNTING (ACC) 702 (2)
(SEE COOPERATIVE WORK EXPERIENCE)
ACCOUNTING (ACC) 713, 803, 813 (3)
(SEE COOPERATIVE WORK EXPERIENCE)
WINTER AIR CONDITIONING SYSTEMS (2 LEC., 3 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 are emphasized. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 114 (3)
HEAT LOAD ANALYSIS (2 LEC., 2 LAB.)
Prerequisites: Air Conditioning and Refrigeration 111 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) 115 (3)
UNIT AIR CONDITIONING SYSTEMS (2 LEC., 3 LAB.)
Prerequisites: Completion or enrollment in Air Conditioning and Refrigeration 111 and 113. 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) 116 (3)
SUMMER AIR CONDITIONING SYSTEMS (2 LEC., 3 LAB.)
Prerequisites: Credit or enrollment in Air Conditioning and Refrigeration 112, 114, and 115. 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) 117 (3)
DOMESTIC REFRIGERATION (2 LEC., 2 LAB.)
Prerequisites: Credit or enrollment in Air Conditioning and Refrigeration 111 and 113. 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) 118 (3)
WINTER AIR CONDITIONING SYSTEMS (2 LEC., 3 LAB.)
Prerequisites: Credit or enrollment in Air Conditioning and Refrigeration 113, 114, and 115. 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) 221 (3)
REFRIGERATION LOADS (2 LEC., 2 LAB.)
Prerequisites: Air Conditioning and Refrigeration 116. 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) 222 (3)
ADVANCED SYSTEMS (2 LEC., 3 LAB.)
Prerequisites: Air Conditioning and Refrigeration 116. 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) 223 (3)
MEDIUM TEMPERATURE REFRIGERATION SYSTEMS (2 LEC., 3 LAB.)
Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 221. 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) 224 (3)
SYSTEM TESTING AND BALANCING (2 LEC., 2 LAB.)
Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 222. 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) 227 (3)
LOW TEMPERATURE REFRIGERATION SYSTEMS (2 LEC., 3 LAB.)
Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 221. 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) 228 (3)
AIR CONDITIONING SYSTEM EQUIPMENT SELECTION (2 LEC., 3 LAB.)
Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 222. 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) 229 (3)
REFRIGERATION EQUIPMENT SELECTION (2 LEC., 2 LAB.)
Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 223 or 227. This course presents a procedure for selecting equipment and estimating the capacity of commercial refrigeration systems. Consideration is given to component compatibility, system control, balancing, and efficiency. Laboratory fee.

AIR CONDITIONING AND REFRIGERATION (ACR) 230 (2)
ENERGY CONSERVATION (2 LEC., 2 LAB.)
Prerequisite: Air Conditioning and Refrigeration 116. 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)

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.)
This course (cross-listed as History 110) is taught in two parts each semester. The first part of the course 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, the Toltec, and Aztec empires. The second part of the course deals with Mexican history and modern relations between the United States and Mexico. The student may register for either History 110 or Anthropology 110 but may receive credit for only one of the two.

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. This course is a multicultural approach to the study of human behavior. Emphasis is on intellectual, social and behavioral problems characteristic of multilingual, multicultural societies.

ANTHROPOLOGY (ANT) 231  (3)
INTRODUCTION TO ARCHAEOLOGY  (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) 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.)
Basic concepts of design with three- dimensional materials are explored. The use of mass, space, movement and texture is considered. Laboratory fee.

ART (ART) 114  (3)
DRAWING I  (2 LEC., 4 LAB.)
This beginning course investigates various media, techniques and subjects. It explores perceptual and descriptive possibilities and considers drawing as a developmental process as well as an end in itself.

ART (ART) 115  (3)
DRAWING 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 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 artists, 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. This course may be repeated for credit.

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 analytical 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.
LABORATORY FEE.

STAGES OF DESIGN: IDEA, SKETCHES, DEVELOPMENT OF THREE-DIMENSIONAL PROJECTS

FUNCTION, MATERIAL AND ESTHETIC FORM.

PREREQUISITE: ART MAJORS: ART 110, 111, 115 OR THE CONSENT OF THE INSTRUCTOR.

VARIOUS SCULPTURAL APPROACHES ARE EXPLORED. DIFFERENT MEDIA AND TECHNIQUES ARE USED. LABORATORY FEE.

PRINTMAKING I (2 LEC., 4 LAB)

PREREQUISITE: ART 205. THIS COURSE CONTINUES ART 205. EMPHASIS IS ON INDIVIDUAL EXPRESSION.

PRINTMAKING II (2 LEC., 4 LAB)

PREREQUISITE: ART 208. THIS COURSE CONTINUES ART 208. EMPHASIS IS ON INDIVIDUAL EXPRESSION. LABORATORY FEE.

CERAMICS I (2 LEC., 4 LAB)

PREREQUISITE: ART 110, ART 111, ART 115 OR THE CONSENT OF THE INSTRUCTOR.

ADVANCED PROBLEMS IN THE CREATION OF ARTISTIC AND PRACTICAL CERAMIC WARE. LABORATORY FEE.

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.

PRINTMAKING I (2 LEC., 4 LAB)

PREREQUISITE: ART 110, ART 111, ART 115 OR THE CONSENT OF THE INSTRUCTOR.

BASIC PRINTMAKING PROCESSES ARE INTRODUCED. INCLUDED ARE PLANOGRAPHIC, INTAGLIO, ETC. LABORATORY FEE.

PRINTMAKING II (2 LEC., 4 LAB)

PREREQUISITE: ART 220. THIS COURSE CONTINUES ART 220. EMPHASIS IS ON INDIVIDUAL EXPRESSION. LABORATORY FEE.

ASTRONOMY LABORATORY I (3 LAB)

PREREQUISITE: CREDIT OR CONCURRENT ENROLLMENT IN ART 101. THE STUDENT MAKES AND USES ELEMENTARY OBSERVATIONAL TECHNIQUES. LABORATORY FEE.

ASTRONOMY LABORATORY II (3 LAB)

PREREQUISITE: CREDIT OR CONCURRENT ENROLLMENT IN ART 102. THE STUDENT MAKES AND USES ELEMENTARY OBSERVATIONAL TECHNIQUES. LABORATORY FEE.

AUTO BODY (AB) 111 (3)

APPLIED BASIC PAINT PRINCIPLES (90 CONTACT HOURS)

PREREQUISITE: Concurrent enrollment in Auto Body 112. THIS COURSE WILL COVER HANDS-ON TECHNIQUES IN THE USE OF POWER AND HAND SANDING AS WELL AS USE OF THE SPRAY GUN. THE TECHNIQUES COVERED IN AUTO BODY 121 WILL BE COVERED. LABORATORY FEE.

AUTO BODY (AB) 122 (2)

APPLIED BASIC PAINT PRINCIPLES (60 CONTACT HOURS)

PREREQUISITE: Concurrent enrollment in Auto Body 122. THIS COURSE WILL COVER HANDS-ON TECHNIQUES IN THE USE OF POWER AND HAND SANDING AS WELL AS USE OF THE SPRAY GUN. THE TECHNIQUES COVERED IN AUTO BODY 121 WILL BE COVERED. LABORATORY FEE.

AUTO BODY (AB) 123 (3)

PAINT BLENDING AND SPOT REPAIR TECHNIQUES (90 CONTACT HOURS)

PREREQUISITE: Concurrent enrollment in Auto Body 124. THE USE OF MANUFACTURERS' CODES, MASS AND TINT TONE METHODS, AND COLOR SELECTION ARE EXAMINED. INITIAL COLOR MATCHING, CORRECTION, AND COLOR TINTING ARE COVERED. SPRAY GUN MAINTENANCE, OPERATION, PATTERNS AND CORRECTIVE ADJUSTMENTS RECEIVE PARTICULAR ATTENTION. POLISHING, TOUCH-UP, AND DETAILING PROCEDURES ARE STUDIED. TOPICS INCLUDE THE USE OF RUBBING COMPOUNDS, POLISHES, AND BUFFING TECHNIQUES. MINOR SURFACE REPAIRS ARE ALSO COVERED. LABORATORY FEE.

AUTO BODY (AB) 124 (2)

APPLIED BLENDING AND SPOT REPAIR TECHNIQUES (60 CONTACT HOURS)

PREREQUISITE: Concurrent enrollment in Auto Body 123. THIS COURSE EXAMINES POTENTIAL PROBLEMS THAT OCCUR IN THE APPLICATION OF THE FINISH ON TODAY'S AUTOMOBILE. RECOGNITION, PREVENTION, AND CORRECTION OF PROBLEMS ARE STRESSED. LABORATORY FEE.

AUTO BODY (AB) 139 (3)

BODY SHOP OPERATIONS (48 CONTACT HOURS)

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) 211 (3)
MAJOR PANEL REPLACEMENT (90 CONTACT HOURS)
Prerequisite: Concurrent enrollment in Auto Body 212. The use of power tools and cutting tools is presented. Emphasis is on the repair and replacement of panels. Laboratory fee.

AUTO BODY (AB) 212 (2)
APPLIED MAJOR PANEL REPLACEMENT (60 CONTACT HOURS)
Prerequisite: Concurrent enrollment in Auto Body 211. This course emphasizes repair and replacement of panels on in-service automobiles. The adjustment, repair and replacement of equipment and minor electrical apparatus are also covered. Laboratory fee.

AUTO BODY (AB) 213 (3)
MAJOR COLLISION AND FRAME REPAIR (90 CONTACT HOURS)
Students learn to use power frame alignment equipment through lecture, demonstration, and actual job repairs. Laboratory fee.

AUTO BODY (AB) 221 (3)
ADVANCED PAINT TECHNIQUES (90 CONTACT HOURS)
Prerequisite: Concurrent enrollment in Auto Body 222. This course focuses on the development of painting skills. Emphasis is on mixing colors, matching colors, and texture. Special decorative effects are also covered, such as simulated wood and vinyl application. Transfer repair, renewal, removal, film application, painting and taping techniques are included. Laboratory fee.

AUTO BODY (AB) 222 (2)
APPLIED ADVANCED PAINT TECHNIQUES (60 CONTACT HOURS)
Prerequisite: Concurrent enrollment in Auto Body 221. This course further develops painting skills with hands-on training, emphasizing mixing colors and matching color and texture of paint on in-service automobiles. Laboratory fee.

AUTO BODY (AB) 235 (3)
ESTIMATING (3 LEC.)
The procedures of estimating damage on automobiles are presented.

AUTO BODY (AB) 803 (3)
(See Cooperative Work Experience)
AUTO BODY (AB) 804 (4)
(See Cooperative Work Experience)

AUTOMOTIVE TECHNOLOGY (AT) 108 (4)
MINOR VEHICLE SERVICES (120 CONTACT HOURS)
This course introduces shop operations, customer relations, flat rate manuals, service manuals, safety, organizational design, pay structure, equipment, tools and basic operational theories. Also included are service procedures for lubrication, batteries, the cooling system, wheels and tires and new car pre-delivery service. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 110 (4)
ENGINE REPAIR I (120 CONTACT HOURS)
The operational theory of the internal combustion engine is studied. Engine rebuilding, mechanical diagnosis and failure analysis are introduced. Emphasis is on the proper use of hand tools, measuring instruments and equipment. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 112 (4)
ENGINE REPAIR II (120 CONTACT HOURS)
Prerequisite: Credit or concurrent enrollment in Automotive Technology 110. This course is a continuation of Engine Repair I. Engine rebuilding is continued with emphasis on in-service automobile repair. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 114 (4)
ENGINE ANALYSIS AND TUNE UP (120 CONTACT HOURS)
Techniques for diagnosing the automobile engine and other areas are covered. Electronics and conventional ignition systems are stressed. Carburetion and fuel injection systems are introduced. Complete tune-up procedures, using the latest test equipment are studied to insure the proper application to the automobile. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 116 (4)
FUEL AND EMISSION SYSTEMS (120 CONTACT HOURS)
This course covers the principles and functions of the automotive fuel system including the carburetor, fuel pump, gas tank and emission control systems. Diagnosis and repair and adjustment of emission control systems, repair and adjustment of the carburetor, fuel injection and their components are stressed. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 118 (4)
ELECTRICAL SYSTEMS (120 CONTACT HOURS)
This course covers the automobile electrical system, including batteries, wiring, lighting, alternators, generators, starters and voltage regulators. The use of electrical test equipment and schematics are covered. The proper care and use of tools is stressed. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 221 (4)
HEATING AND AIR CONDITIONING SYSTEMS (120 CONTACT HOURS)
This course focuses on the principles of operation and service techniques applied to automobile and air conditioning systems. Topics include components, testing, diagnosing charging and repair practices. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 223 (4)
BRAKE SYSTEMS (120 CONTACT HOURS)
This course covers diagnosis and repair of both drum and disc brake systems, power brake boosters, master cylinders, wheel cylinders and related component parts. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 225 (4)
FRONT END SYSTEMS (120 CONTACT HOURS)
This course will cover the proper techniques and procedures for complete front-end service, wheel alignment, replacement of worn parts, balancing wheels and related front-end and steering mechanisms. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 227 (4)
STANDARD TRANSMISSION AND DRIVE TRAINS (120 CONTACT HOURS)
This course includes the operating principles, construction, and maintenance of the manual transmission and related drive-train components. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 229 (4)
AUTOMATIC TRANSMISSIONS I (120 CONTACT HOURS)
The theory, operation and diagnosis of automatic transmissions are studied. Rebuilding of automatic transmission is introduced. Laboratory fee.

AUTOMOTIVE TECHNOLOGY (AT) 231 (4)
AUTOMATIC TRANSMISSIONS II (120 CONTACT HOURS)
Prerequisite: Credit or concurrent enrollment in Automotive Technology 229. This course is a continuation of Automatic Transmissions I. Transmission rebuilding is continued with emphasis on in-service automobile repair. Laboratory fee.
INTRODUCTORY BOTANY (3 LEC., 3 LAB.)
This course introduces plant form and function. Topics ranging from the cell to whole plants are presented for the non-science major. Local plant and animal life communities are studied with reference to basic ecological principles and techniques. Emphasis is upon classification. Laboratory fee.

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. Emphasis is on morphology and evolutionary relationships. Laboratory fee.

FIELD BIOLOGY (3 LEC., 3 LAB.)
Prerequisite: Eight hours of biological science or the consent of the instructor. Local plant and animal life are surveyed in relationship to the environment. Aquatic and terrestrial communities are studied with reference to basic ecological principles and techniques. Emphasis is upon classification, identification, and collection of specimens in the field. This course may be repeated for credit.
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)

Prerequisites: Developmental Mathematics 093 or equivalent and any one of the following: high school chemistry, Chemistry 115, or equivalent. This course is for science and science-related majors. It covers the laws and theories of matter. Emphasis is on reaction mechanisms, stereo-chemistry, transition state theory, and organic synthesis. 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 equilbrium, electrochemistry, and nuclear chemistry. Qualitative inorganic analysis is also included. Laboratory fee.

**CHEMISTRY (CHM) 115 (4)**
CHEMICAL SCIENCES (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)**
CHEMICAL SCIENCES (3 LEC, 3 LAB)

Prerequisite: Chemistry 115 or the consent of the instructor. 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, stereo-chemistry, 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, polynuclear aromatic compounds, amino acids, proteins, carbohydrates, sugars, and heterocyclic and related compounds. Instrumental techniques are used to identify compounds. Laboratory fee.

**CHILD DEVELOPMENT (CD) 127 (3)**
EARLY CHILDHOOD DEVELOPMENT, 5-12 YEARS (3 LEC)

This course covers the principles of normal child growth and development from five through twelve years of age. Emphasis is on physical, intellectual, emotional, and social growth. Special attention is given to before and after school care.

**CHILD DEVELOPMENT (CD) 137 (4)**
EARLY CHILDHOOD LEARNING ENVIRONMENTS, ACTIVITIES AND MATERIALS (3 LEC, 2 LAB)

This course is a study of appropriate learning experiences for young children in child-care centers. Emphasis is on quality environments, learning activities, materials and effective teaching techniques. The laboratory experience includes observation and participation with pre-schools and child-care centers in the community.

**CHILD DEVELOPMENT (CD) 140 (3)**
EARLY CHILDHOOD DEVELOPMENT, 0-3 YEARS (3 LEC)

This course covers the principles of normal child growth and development from conception through three years. Emphasis is on physical, intellectual, emotional, and social growth.

**CHILD DEVELOPMENT (CD) 141 (3)**
EARLY CHILDHOOD DEVELOPMENT, 3-5 YEARS (3 LEC)

This course covers the principles of normal child growth and development from three through five years of age. Emphasis is on physical, intellectual, emotional, and social growth.

**CHILD DEVELOPMENT (CD) 200 (1)**
APPLICATION OF LEARNING THEORIES (30 CONTACT HOURS)

This course provides application of child development learning theories with young children at the Parent/Child Study Center and other appropriate child-care facilities. It is repeated four times concurrently with required Child Development core or elective courses.

**CHILD DEVELOPMENT (CD) 203 (3)**
PARENTS AND THE CHILD, CAREGIVER/TEACHER (3 LEC)

Relationships between caregivers, teachers and parents of young children are studied. Emphasis is on ways to develop parental involvement in child care facilities. The course includes observation and participation with teachers, parents, and young children in group settings.

**CHILD DEVELOPMENT (CD) 209 (3)**
EARLY CHILDHOOD DEVELOPMENT SPECIAL PROJECTS (3 LEC)

Registration for this course must be preceded by an interview with a child development instructor. A particular dimension of child care is explored in depth by the student in an individual project. Participation in a designated child care center or facility directly related to the student's special project is included.

**CHILD DEVELOPMENT (CD) 233 (4)**
DIRECTED PARTICIPATION OF EARLY CHILDHOOD PROGRAMS (2 LEC, 5 LAB)

This course provides in-depth observation and participation experiences and activities with young children at the Parent/Child Study Center and other appropriate child-care facilities.

**CHILD DEVELOPMENT (CD) 236 (3)**
THE SPECIAL CHILD: GROWTH AND DEVELOPMENT (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
INTRODUCTION TO ADMINISTRATION OF CHILD CARE PROGRAMS (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
STUDIES IN CHILD GUIDANCE (2 LEC., 2 LAB.)
This course is a study of appropriate ways of guiding and teaching young children. Emphasis is on guidance principles that develop a positive self-concept in early childhood while recognizing individual differences and varied family situations. The course includes observation of and participation with young children in child-care facilities and interpretation of anecdotal records and case studies of young children.

CHILD DEVELOPMENT (CD) 244
APPLICATION OF CHILD DEVELOPMENT LEARNING THEORIES (2 LEC., 5 LAB.)
This course provides application of child development learning theories with young children at the Parent/Child Study Center and other appropriate child-care facilities.

CHILD DEVELOPMENT (CD) 246
ADVANCED ADMINISTRATIVE PRACTICES FOR CHILD CARE FACILITIES (3 LEC.)
Prerequisite: Child Development 238. This course is a study of advanced administrative procedures for child-care programs. Topics include planning, financial management, personnel policies, evaluation, leadership styles, and facility design.

CHILD DEVELOPMENT (CD) 250
SUPPORTIVE SERVICES FOR EXCEPTIONAL CHILDREN (3 LEC.)
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
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
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) 813
(See Cooperative Work Experience)

COLLEGE LEARNING SKILLS (CLS) 100
(3)
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
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
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.

COMPUTING SCIENCE (CS) 174
FUNDAMENTALS OF COMPUTING (3 LEC.)
Prerequisite: Two years high school algebra or Developmental Mathematics 093. This course is an introductory course designed primarily for students desiring credit towards a minor or major in computer science or other scientific field. It includes a study of algorithms and an introduction to a procedure-oriented language with general applications.

COMPUTING SCIENCE (CS) 175
INTRODUCTION TO COMPUTER SCIENCE (3 LEC.)
This course is an introduction to the fundamentals of information processing machines. Topics include history of computers, vocabulary, cultural impact, development of basic algorithms, number systems, and applications of elementary programming logic made through the use of the BASIC programming language.

COMPUTING SCIENCE (CS) 177
INTRODUCTION TO FORTRAN PROGRAMMING (2 LEC., 2 LAB.)
Prerequisites: Computing Science 174 or Computing Science 175 and Math 101 or the consent of the instructor based on equivalent experience. This course is an introduction to computing techniques using the FORTRAN language. Emphasis is on applications used to solve numeric problems in engineering, physical science, and mathematics. Laboratory fee.

COMPUTING SCIENCE (CS) 182
INTRODUCTION TO BASIC PROGRAMMING (2 LEC., 2 LAB.)
Prerequisites: Computing Science 174 or Computing Science 175 or the consent of the instructor based on equivalent experience. An introduction to the BASIC programming language. Proficiency will be developed as the student codes and executes several BASIC programs using interactive computing equipment. Laboratory fee.

COMPUTING SCIENCE (CS) 183
INTRODUCTION TO PL1 PROGRAMMING (2 LEC., 2 LAB.)
Prerequisites: Computing Science 174 or Computing Science 175 or the consent of the instructor based on equivalent experience. Study of PL1 language with numeric and non-numeric applications. Computing techniques will be developed in such areas as program design, basic aspects of string processing, recursion, internal searchsort methods, and simple data structures. Laboratory fee.

COMPUTING SCIENCE (CS) 184
INTRODUCTION TO COBOL PROGRAMMING (2 LEC., 2 LAB.)
Prerequisites: Computing Science 174 or Computing Science 175 or the consent of the instructor based on equivalent experience. An introduction to the COBOL programming language. Topics will include algorithmic processes, problem solving methods, programming style, flow charts, and various file processing techniques. Emphasis is on the language, its flexibility and power rather than on applications. Laboratory fee.

COMPUTING SCIENCE (CS) 185
INTRODUCTION TO PASCAL PROGRAMMING (2 LEC., 2 LAB.)
Prerequisites: Computing Science 174 or Computing Science 175 and Math 101 or the consent of the instructor based on equivalent experience. This course is an introduction to PASCAL. Topics will include problem solving and structured programming techniques introduced through
examples from applications such as text processing, numerical computing, and simulation, together with programming assignments. Laboratory fee.

**COMPUTING SCIENCE (CS) 186 (3)**
**INTRODUCTION TO ASSEMBLY LANGUAGE (2 LEC., 2 LAB.)**
Prerequisites: Computing Science 174 or Computing Science 175 and six semester hours of computer programming or the consent of the instructor based on equivalent experience. This course is an introduction to ASSEMBLY language programming. Topics will include machine representation of data and instructions, logical input/output control systems, subroutine and addressing concepts, and presentation of selected macro instructions. Laboratory fee.

**COMPUTING SCIENCE (CS) 250 (3)**
**CONTEMPORARY TOPICS IN COMPUTER SCIENCE (3 LEC.)**
Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Recent developments and topics of current interest are studied. Topics may include introduction to microcomputer systems, programming languages, or other advanced data processing concepts such as CICS. May be repeated when topics vary.

**COMPUTING SCIENCE (CS) 251 (4)**
**SPECIAL TOPICS IN COMPUTER SCIENCE (3 LEC., 3 LAB.)**
Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Current developments in the rapidly changing field of computer science and data processing are studied. Such topics may include advanced programming language concepts in BASIC, RPG II and RPG III, and PASCAL, or advanced data entry concepts. May be repeated when topics vary. Laboratory fee.

**COOPERATIVE WORK EXPERIENCE**
701, 711, 801, 811 (1)
702, 712, 802, 812 (2)
703, 713, 803, 813 (3)
704, 714, 804, 814 (4)
723, 733, 724, 734 for CVC ONLY
723, 733, 823, 824, 834 for BHC ONLY
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.

**DATA PROCESSING (DP) 129 (4)**
**DATA ENTRY CONCEPTS (2 LEC., 5 LAB.)**
Prerequisite: Office Careers 172 or one year of typing in high school or equivalent. This course provides skills using buffered display equipment. Emphasis is on speed and accuracy. Topics include performing the basic functions, record formatting with protected and variable fields, and using a variety of source documents. Program control, multiple programs, and program chaining are also covered. Laboratory fee.

**DATA PROCESSING (DP) 132 (4)**
**BEGINNING PROGRAMMING (3 LEC., 4 LAB.)**
Prerequisites: Computing Science 175 or the consent of the instructor. Concurrent enrollment in Data Processing 138 is advised. This course introduces programming skills using the COBOL language. Skills in problem analysis, flowcharting, coding, testing, and documentation are developed. Laboratory fee.

**DATA PROCESSING (DP) 136 (4)**
**INTERMEDIATE PROGRAMMING (3 LEC., 4 LAB.)**
Prerequisites: Data Processing 133 and Data Processing 138 or the consent of the instructor. Study of COBOL language continues. Included are levels of totals, group printing concepts, table build and search techniques, ISAM disk concepts, matching record, and file maintenance concepts using disk. Laboratory fee.

**DATA PROCESSING (DP) 137 (3)**
**DATA PROCESSING MATHEMATICS (3 LEC.)**
Prerequisites: One year of high school algebra or Developmental Math 091 or the consent of the instructor. This course introduces the principles of computer computation. Topics include the number system, fundamental processes; number bases, and the application of mathematics to typical business problems and procedures.

**DATA PROCESSING (DP) 138 (3)**
**SYSTEMS ANALYSIS AND DATA PROCESSING LOGIC (3 LEC.)**
Prerequisite: Computing Science 175 or the consent of the instructor. Concurrent enrollment in Data Processing 133 is advised. This course presents basic logic needed for problem solving with the computer. Topics include flowcharting standards, techniques for basic logic operations, table search and build techniques, types of report printing, conditional tests, multiple record types, and sequential file maintenance. System flowcharting is introduced.

**DATA PROCESSING (DP) 142 (3)**
**RPG PROGRAMMING (2 LEC., 2 LAB.)**
Prerequisite: Data Processing 133 or the consent of the instructor. This course introduces programming skills using the RPG II language. Emphasis is on language techniques and not on operation and functioning of the equipment. Programming problems emphasize card images and disk processing, and will include basic listings with levels of totals, multicard records, exception reporting, look ahead feature, and multifile processing. Laboratory fee.

**DATA PROCESSING (DP) 230 (4)**
**ADVANCED ASSEMBLY LANGUAGE CODING (3 LEC., 3 LAB.)**
Prerequisite: Data Processing 231 or the consent of the instructor. The development of programming skills using the assembly language instruction set set of the system 360 is covered. Topics include indexing, indexed sequential file organization, table search methods, data and bit manipulation techniques, code translation, advanced problem analysis, and debugging techniques. Floating point operations are introduced. Laboratory fee.

**DATA PROCESSING (DP) 233 (4)**
**OPERATING SYSTEMS AND COMMUNICATIONS (3 LEC., 4 LAB.)**
Prerequisite: Data Processing 133 or the consent of the instructor. Concepts and technical knowledge of an operating system, JCL, and utilities are presented. The internal functions of an operating system are analyzed. Training is given in the use of JCL and utilities. The emphasis of the operating system depends on the computer system used. Laboratory fee.

**DATA PROCESSING (DP) 231 (4)**
**ADVANCED PROGRAMMING (3 LEC., 4 LAB.)**
Prerequisite: Data Processing 136 or the consent of the instructor. This course focuses on basic concepts and instructions in the IBM 360/370 Assembler language, using the standard instruction set emphasizing the decimal features, with a brief introduction to fixed point operations using registers. Selected macro instructions, table handling, editing, printed output, and reading memory dumps are included. Laboratory fee.
DATA PROCESSING (DP) 232 (4)
APPLIED SYSTEMS (3 LEC., 4 LAB.)
Prerequisite: Data Processing 136 or the consent of the instructor. This course introduces and develops skills to analyze existing systems and to design new systems. Emphasis is on a problem study involving all facets of system design from the original source of data to final reports. Flowcharts and documentation are included.

DATA PROCESSING (DP) 233 (4)
OPERATING SYSTEMS AND COMMUNICATIONS (3 LEC., 4 LAB.)
Prerequisite: Data Processing 133 or the consent of the instructor. Concepts and technical knowledge of an operating system, JCL, and utilities are presented. The internal functions of an operating system are analyzed. Training given in the use of JCL and utilities. The emphasis of the operating system depends on the computer system used. Laboratory fee.

DATA PROCESSING (DP) 236 (4)
ADVANCED COBOL TECHNIQUES (3 LEC., 4 LAB.)
Prerequisite: Data Processing 133 or 136, or the consent of the instructor. Advanced problem solving techniques are studied using the COBOL programming language. Emphasis is placed on sequential and random processing techniques using disk. Additional ANSI COBOL conventions are covered. Set/search table lookup, sort, verb, report writer, and modular programming techniques are included. Laboratory fee.

DATA PROCESSING (DP) 242 (4)
COMPUTER HARDWARE AND DATA BASE SYSTEMS (3 LEC., 4 LAB.)
Prerequisites: Computing Science 175, one year of high level language, Data Processing 138 or the consent of the instructor. The organization and architecture of large, medium, small, mini, and micro computers are compared. Topics include digital number systems, machine language and assemblers, on-line and off-line data base systems, and data management. Currently used data bases (IMS, TOTAL, ADABAS, etc.) and graphic systems are emphasized. Laboratory fee.

DATA PROCESSING (DP) 243 (3)
COMPUTER CENTER MANAGEMENT (3 LEC.)
Prerequisite: Computing Science 175, a minimum of one semester of high level language, or the consent of the instructor. The management of a computer center is examined. Topics include analyzing, planning, organizing and controlling installations. The organization, production orientation, control, and personnel of the data processing department are covered. The effects of theses functions on information and real-time systems are explored. Methods for computer selection and evaluation are described.

DATA PROCESSING (DP) 244 (3)
BASIC PROGRAMMING (2 LEC., 2 LAB.)
Prerequisite: Computing Science 175 or the consent of the instructor. This course covers the fundamentals of the BASIC programming language. Students gain proficiency by writing and debugging programs using interactive microcomputers. Laboratory fee.

DATA PROCESSING (DP) 701, 711, 801, 811 (1)
See Cooperative Work Experience.

DATA PROCESSING (DP) 702, 712, 802, 812 (2)
See Cooperative Work Experience.

DATA PROCESSING (DP) 703, 713, 803, 813 (3)
See Cooperative Work Experience.

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 (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) 090 (3)
PRE-ALGEBRA MATHEMATICS (3 LEC.)
This course is designed to develop an understanding of number, 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
Students can improve their writing skills by taking Developmental Writing. These courses are offered for one to three hours of credit. Emphasis is on organization skills and research paper weaknesses.

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.

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, photopying, silk screen printing, printed circuit board etching, thermography, typographics, xerography, engraving, 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)
GEOLGICAL 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 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) 160 (2)
MANUFACTURING FUNDAMENTALS (2 LEC.)

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) 182 (2)
TECHNICIAN DRAFTING (1 LEC., 3 LAB.)

This course begins with architectural lettering, applied geometry, fasteners, sectionaling, tolerancing, and auxiliares. Experience is provided in using handbooks and other resource materials 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) 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, sectionaling, tolerancing, and auxiliary views. 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 diagrammatic 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, lettering 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)
PUMPING 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 exchangers. 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.)
Prerequisites: 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 (DFT) 243 (3)
ADVANCED PRINTED CIRCUIT DESIGN (2 LEC., 4 LAB.)
Prerequisite: Drafting 240. This course includes the design of double-sided or multilayer boards containing several types of electronic components, requiring selection of integrated circuit chips and combination of gates. Industry standards are followed in design development. Laboratory fee.

DRAFTING (DFT) 245 (3)
COMPUTER AIDED DESIGN (2 LEC., 4 LAB.)
Prerequisites: Drafting 183 or Engineering 105. Capabilities and limitations of the electronic computer as an aid to the designer are studied. Drafting procedures using an interactive system with computer graphics are practiced. Forms and uses of computer aided products are viewed in perspective with the overall design process. Laboratory fee.

DRAFTING (DFT) 247 (3)
APPLIED PRINTED CIRCUIT DESIGN (2 LEC., 4 LAB.)
Prerequisite: Drafting 240. Special applications of printed circuit design techniques and principles in particular systems of design are studied. Specialization may be focused by classification of the electronic circuits, of resources for design, and of processes for manufacture of the printed circuits. Laboratory fee.

DRAFTING (DFT) 250 (3)
SHEET METAL DESIGN (2 LEC., 4 LAB.)
Prerequisite: Drafting 183. This course includes the preparation of drawings for sheet metal developments. Topics include bend allowance, relief, standard bends for specific applications, cost factors to consider in manufacturing, metal specifications, finishing, coating, fasteners, and weldments. Laboratory fee.

DRAFTING (DFT) 251 (3)
INDUSTRIAL DESIGN (2 LEC., 4 LAB.)
Prerequisite: Drafting 250. This course includes the design of metal and plastic packages for electronic, optical, and mechanical components. Topics include standard boxes, panels, mounts, brackets, fasteners, grommets, and other standard parts used in the design of packages. Standard catalogs and manuals are used to design packages for specific situations. Laboratory fee.
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.)**
Prerequisites: 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 laboratory experiments on power factors, 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.)**
Prerequisites: 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 192 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) 239 (3)**
**MICROWAVE TECHNOLOGY (3 LEC.)**
Prerequisites: Electronics Technology 194 and Electronics Technology 231. Microwave concepts such as propagation, transmission lines including waveguides, standing waves, impedance matching, basic antennas and various basic microwave measurements are covered. Microwave measurement techniques such as power and frequency meter measurements and calibration, VSWR determinations, klystron characteristics, and waveguide tuning will be demonstrated. A basic radar system is discussed as time permits.

**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 190 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 265** (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 troubleshooting 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 computers. 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 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)  
**ENGINEERING MECHANICS I** (3 LEC.)  
Prerequisite: Drafting 182 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 II** (3 LEC.)  
Prerequisite: Credit or concurrent enrollment in Mathematics 124. 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 works, 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** (2 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 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 201** (3)  
**ENGINEERING MECHANICS II** (3 LEC.)  
Prerequisites: Engineering 107 and credit or concurrent enrollment in Mathematics 225. This is a study of dynamics. Particle 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 225. 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.

**ENGINEERING**  
**EGR 204** (3)  
**ELECTRICAL SYSTEMS ANALYSIS** (3 LEC.)  
Prerequisite: Credit or concurrent enrollment in Mathematics 225. 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) 208. (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 (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 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) 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.

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) 207 (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) 210 (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) 211 (3)
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. Contemporay literature and composition are studied.

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,
features, landforms, rocks, minerals, and fossils are surveyed. Map reading in the field. This course may be repeated for credit. Emphasis is on the identification, classification, and collection of specimens in the field. This course may be repeated for credit.

GEODESY (GEO) 201 (4) INTRODUCTION TO ROCK AND MINERAL IDENTIFICATION (3 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.

GEODESY (GEO) 202 (4) INTRODUCTION TO ROCK AND MINERAL IDENTIFICATION (3 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.

FIELD GEODESY (GEO) 205 (4) FIELD GEODESY (3 LEC., 3 LAB.)
Prerequisite: Geology 101 and/or Geology 102 or concurrent enrollment in Geology 101 or 102. Geologic 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. This course may be repeated for credit.

AMERICAN 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.)

STUDIES IN 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.

GRAPHIC ARTS (GA) 131 (3) GRAPHIC ARTS (3 LEC., 3 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 (3 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 (3 LEC., 4 LAB.)
Prerequisite: Concurrent enrollment in Graphic Arts 131. The basic operations of the varityper 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.

OFFSET PRINTING (GA) 140 (3) OFFSET PRINTING I (3 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.

OFFSET PRINTING II (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.

WESTERN CIVILIZATION (HST) 101 (3) WESTERN CIVILIZATION (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.)
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, 19th century, and the social, economic, and political factors of recent world history.

THE HERITAGE OF MEXICO (HST) 110 (3) THE HERITAGE OF MEXICO (3 LEC.)
This course (cross-listed as Anthropology 110) is taught in two parts each semester. The first part of the course 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, the Toltec, and the Aztec empires. The second
part of the course deals with Mexican history and modern relations between the United States and Mexico. The student may register for either History 110 or Anthropology 110, but may receive credit for only one of the two.

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) 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 America 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)
SPECIAL TOPICS IN HUMAN DEVELOPMENT (1 LEC)
This is a course intended to help the student succeed in college. Topics such as stress management, communications training for the handicapped, career exploration techniques, or educational concerns of adult students may be included. This course may be repeated for credit.

HUMAN DEVELOPMENT (HD) 104 (3)
EDUCATIONAL AND CAREER PLANNING (3 LEC)
This course is designed to help 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)
This course is designed to help the student increase self-awareness and to learn to relate more effectively to others. Students are made aware of their feelings, values, attitudes and behaviors. The course content focuses on developing communication skills such as assertiveness, verbal and nonverbal behavior, listening, and conflict resolution.

HUMAN DEVELOPMENT (HD) 106 (3)
PERSONAL AND SOCIAL GROWTH (3 LEC)
This course focuses on the interaction between the individual and society. Societal influences, adjustment to social change, personal roles, and problem-solving are stressed. Components of a healthy personality, alternative behaviors, and lifestyles that demonstrate a responsibility to self and society are studied.

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 communication 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.

HUMAN DEVELOPMENT (HD) 110 (1)
ASSESSMENT OF PRIOR LEARNING (1 LEC)
Prerequisite: Limited to students in Technical/Occupational programs. The consent of the instructor is required. This course is designed to assist students in documenting prior learning for the purpose of applying for college credit. Students develop a portfolio which includes a statement of educational/career goals, related non-collegiate experiences which have contributed to college-level learning, and documentation of such experiences. This course may be repeated for credit.

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.

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
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)

JOURNALISM (JN) 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 (JN) 102 (3)
NEWS GATHERING AND WRITING (2 LEC., 3 LAB)
Prerequisite: Typing ability. This course teaches what is news, news gathering techniques, and how to write the straight news story. Students write for the campus newspaper as part of the class. This is the basic course usually required for all future study in newspaper and magazine writing, advertising, broadcast journalism and public relations.

JOURNALISM (JN) 103 (3)
NEWS GATHERING AND WRITING (2 LEC., 3 LAB)
Prerequisite: Journalism 102. This is a continuation of Journalism 102 and is designed to sharpen the skills learned in that course. Students study more complex types of stories, such as features, profiles, follow-up stories, and sidebars. All students write for the campus newspaper as part of the class.

JOURNALISM (JN) 104 (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) 105 (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. This course is a continuation of Journalism 104.

JOURNALISM (JN) 106 (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. This course is a continuation of Journalism 105.

JOURNALISM (JN) 201 (3)
FEATURE WRITING (3 LEC.)
Prerequisite: Six hours of journalism or the consent of the instructor. This course covers research, interviewing techniques, and the development of feature stories for use in newspapers and magazines.

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.

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.

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.

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.

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.

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.

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.

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.

**MANAGEMENT (MGT) 180 (3)**
**PRINCIPLES OF PURCHASING (3 LEC.)**
An introduction to the purchasing function is provided. The course covers purchasing tasks and responsibilities, analytical techniques in buying, organizational interrelationships and coordination, measurement and control, and legal implications. Special emphasis is placed on the five tenets of buying: quality, quantity, time, price, and source.

**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.

**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.

**MANAGEMENT (MGT) 211 (3)**
**SMALL BUSINESS OPERATIONS (3 LEC.)**
Problems of daily operations of small business are introduced. Topics include compliance with regulations, personnel administration, accounts receivable management, and business insurance.

**MANAGEMENT (MGT) 212 (1)**
**SPECIAL PROBLEMS IN BUSINESS (1 LEC.)**
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.

**MANAGEMENT (MGT) 220 (3)**
**MATERIALS MANAGEMENT (3 LEC.)**
A study of the materials management concept, which includes the separate functions of purchasing, transportation, production, inventory control, warehousing, and trafficking is provided. Special emphasis is given to cost effectiveness, the materials cycle, contributions to organizational objectives, performance measurement, inventory cost trade-offs, and forecasting.

**MANAGEMENT (MGT) 224 (3)**
**QUALITY ASSURANCE (3 LEC.)**
A study of the techniques, concepts, and systems utilized in controlling quality is included. Special emphasis is placed on sampling techniques (methodology and results), acceptance/rejection procedures, procurement quality assurance, tooling inspection, and quality program planning and maintenance.

**MANAGEMENT (MGT) 230 (3)**
**SALESMAHSHIP (3 LEC.)**
The selling of goods and ideas is the focus of this course. Buying motives, sales psychology, customer approach, and sales techniques are studied.

**MANAGEMENT (MGT) 233 (3)**
**ADVERTISING AND SALES PROMOTION (3 LEC.)**
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.

**MANAGEMENT (MGT) 242 (3)**
**PERSONNEL ADMINISTRATION (3 LEC.)**
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.

**MANAGEMENT (MGT) 250 (4)**
**MANAGEMENT TRAINING (20 LAB.)**
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.

**MANAGEMENT (MGT) 251 (4)**
**MANAGEMENT TRAINING (20 LAB.)**
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.

**MANAGEMENT (MGT) 254 (2)**
**MANAGEMENT SEMINAR: ORGANIZATIONAL DEVELOPMENT (2 LEC.)**
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.

**MANAGEMENT (MGT) 255 (2)**
**MANAGEMENT SEMINAR: BUSINESS STRATEGY, THE DECISION PROCESS AND PROBLEM SOLVING (2 LEC.)**
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.

**MANAGEMENT (MGT) 280 (3)**
**INDUSTRIAL MANAGEMENT (3 LEC.)**
Prerequisite: Mid-Management 136. 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.

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

**MATHMATICS (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.

**MATHMATICS (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.

**MATHMATICS (MTH) 104 (5)**
**ELEMENTARY FUNCTIONS AND COORDINATE GEOMETRY (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 II (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, logarithmic and trigonometric functions, functions of two variables, complex numbers, vectors and analytic geometry which includes conics, transformation of coordinates, polar coordinates, and parametric equations.

**MATHEMATICS (MTH) 111 (3)**
**MATHEMATICS FOR BUSINESS AND ECONOMICS (3 LEC.)**

Prerequisite: Mathematics 110. This course is a study of the real numbers, distance, the straight line, conic sections, transformation of coordinates, polar coordinates, parametric equations, and three-dimensional space.

**MATHEMATICS (MTH) 121 (3)**
**ANALYTIC GEOMETRY (2 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, parametric equations, and three-dimensional space.

**MATHEMATICS (MTH) 124 (5)**
**CALCULUS I (5 LEC.)**

Prerequisite: Mathematics 105 or 106 or 121 or the equivalent. This course is a study of limits, continuity, derivatives, and integrals of algebraic and transcendental functions, with applications.

**MATHEMATICS (MTH) 130 (3)**
**BUSINESS MATHEMATICS (3 LEC.)**

Prerequisite: One year of high school algebra or Developmental Mathematics 091 or equivalent. This course is a study of sequences and limits, the development of mathematical reasoning needed for elementary teachers.

**MATHEMATICS (MTH) 139 (3)**
**APPLIED MATHEMATICS (3 LEC.)**

Prerequisite: One year of high school algebra or Developmental Mathematics 091 or equivalent. This course is a study of sequences and limits, the development of mathematical reasoning needed for elementary teachers.

**MATHEMATICS (MTH) 195 (3)**
**TECHNICAL MATHEMATICS (3 LEC.)**

Prerequisite: Mathematics 195. This course is designed for technical students. It includes a study of topics in projection, an introduction to logarithms, and an introduction to trigonometry, trigonometric functions and the solution of triangles.

**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) 221 (3)**
**LINEAR ALGEBRA (3 LEC.)**

Prerequisite: Mathematics 124 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) 225 (4)**
**CALCULUS II (4 LEC.)**

Prerequisite: Mathematics 224 or the equivalent. This course is a study of techniques of integration, polar coordinates, parametric equations, topics in vector calculus, sequences, series, indeterminate forms, and partial differentiation with applications.

**MATHEMATICS (MTH) 226 (3)**
**CALCULUS III (3 LEC.)**

Prerequisite: Mathematics 225 or the equivalent. This course is a study of topics in vector calculus, functions of several variables, and multiple integrals, with applications.

**MATHEMATICS (MTH) 230 (3)**
**DIFFERENTIAL EQUATIONS (3 LEC.)**

Prerequisite: Mathematics 225 or the consent of the 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 OF 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 repertory. This course may be repeated for credit.

MUSIC (MUS) 119 (1)
Guitar Class I (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) 120 (1)
Guitar Class II (2 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.

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.

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) 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.)  
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.

OFFICE CAREERS (OFC) 143 (1)  
CONTEMPORARY TOPICS IN OFFICE CAREERS (1 LEC.)  
Prerequisite: The consent of the instructor. This course emphasizes current topics of interest in office career fields. Realistic solutions to problems relevant to the needs of industry are presented. This course may be repeated for credit with different emphasis up to six hours.

OFFICE CAREERS (OFC) 159 (4)  
BEGINNING SHORTHAND (3 LEC., 2 LAB.)  
Prerequisites: Credit or concurrent enrollment in Office Careers 172 or one year of typing in high school. The principles of Gregg Shorthand 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. Laboratory fee.

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) 185 (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, proofreading, and grammar. Laboratory fee.

**OFFICE CAREERS (OFC) 172 (3)**
**BEGINNING TYPWRITING (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. Laboratory fee.

**OFFICE CAREERS (OFC) 174 (2)**
**INTERMEDIATE TYPWRITING (1 LEC., 2 LAB.)**
Prerequisites: 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 covered. Laboratory fee.

**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 marketable typed transcriptions under timed conditions is also stressed. Vocabulary and extensive production work capabilities are developed. Laboratory fee.

**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 the moral nature of the human are presented. Ethical issues and their metaphysical and epistemological bases are analyzed. Emphasis is on applying ethical principles in life.

**PHILOSOPHY (PHI) 208 (3)**
**STUDIES IN PHILOSOPHY (3 LEC.)**
The historical development 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.

**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 (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.

PHOTOGRAPHY (PHO) 207 (3)
PHOTOGRAPHY FOR PUBLICATIONS (2 LEC., 4 LAB.)
This course is designed for the student who is interested in journalistic, publications photography, and graphic arts procedures. It encourages skills in all three areas and prepares the student for a broad job market that includes photojournalism, printing, editing, composing, and general copy preparation. Students who enroll in this course should have a background in journalism, photography, and graphic arts and be of sophomore standing. 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 (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 designed for the student who is interested in health and physical education. 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) 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) 112 (1)
SOFTBALL AND SOCCER (3 LAB.)
Softball and soccer are taught and played. A uniform is required. Laboratory fee.

PHYSICAL EDUCATION (PEH) 113 (1)
HANDBALL AND RACQUETBALL (3 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 (3 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 (3 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 (3 LAB.)
Beginning archery is taught and played. Equipment is furnished. Laboratory fee.

PHYSICAL EDUCATION (PEH) 118 (1)
BEGINNING GOLF (3 LAB.)
Beginning golf is taught and played. Equipment is furnished. Laboratory fee.

PHYSICAL EDUCATION (PEH) 119 (1)
BEGINNING TENNIS (3 LAB.)
This course is designed for the beginner. Tennis fundamentals are taught and played. A uniform is required. Laboratory fee.

PHYSICAL EDUCATION (PEH) 120 (1)
BEGINNING BOWLING (2 LAB.)
Beginning bowling is taught and played. Equipment is furnished. Laboratory fee.

PHYSICAL EDUCATION (PEH) 122 (1)
BEGINNING GYMNASTICS (3 LAB.)
Beginning gymnastics is offered. Emphasis is on basic skills in tumbling and in the various apparatus events. A uniform is required. Laboratory fee.

PHYSICAL EDUCATION (PEH) 123 (1)
BEGINNING SWIMMING (2 LAB.)
This course teaches a non-swimmer to survive in the water. A uniform is required. Laboratory fee.

PHYSICAL EDUCATION (PEH) 124 (1)
SOCIAL DANCE (3 LAB.)
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.

PHYSICAL EDUCATION (PEH) 126 (1)
AEROBIC DANCE (3 LAB.)
This is a dance class which rhythmically combines dance movement with walking, jogging, and jumping to cause sustained vigorous combination of steps, geared to raise the heart rate to a proper target zone for conditioning purposes. Each routine can be "danced" at different intensities, depending on the physical condition of each participant. A uniform is required. Laboratory fee.

PHYSICAL EDUCATION (PEH) 127 (1)
BASKETBALL AND VOLLEYBALL (3 LAB.)
The techniques, rules, and strategy of basketball and volleyball are covered. Emphasis is on playing the games. A uniform is required. Laboratory fee.
Students are expected to officiate 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) 148 (2)
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) 149 (3)
INTRODUCTION TO PHYSICAL EDUCATION (3 LEC.)
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. 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) 131 (1)
WEIGHT TRAINING AND CONDITIONING (3 LAB.)
Instruction and training in weight training and conditioning techniques are offered. A uniform is required. This course may be repeated for credit. Laboratory fee.

PHYSICAL EDUCATION (PEH) 132 (1)
SELF-DEFENSE (3 LAB.)
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.

PHYSICAL EDUCATION (PEH) 134 (1)
OUTDOOR EDUCATION (3 LAB.)
Knowledge and skills in outdoor education and camping are presented. Planned and incidental experiences take place, including a week-end camp-out. Laboratory fee.

PHYSICAL EDUCATION (PEH) 144 (3)
INTRODUCTION TO PHYSICAL EDUCATION (3 LEC.)
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. 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) 131 (1)
WEIGHT TRAINING AND CONDITIONING (3 LAB.)
Instruction and training in weight training and conditioning techniques are offered. A uniform is required. This course may be repeated for credit. Laboratory fee.

PHYSICAL EDUCATION (PEH) 132 (1)
SELF-DEFENSE (3 LAB.)
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.

PHYSICAL EDUCATION (PEH) 134 (1)
OUTDOOR EDUCATION (3 LAB.)
Knowledge and skills in outdoor education and camping are presented. Planned and incidental experiences take place, including a week-end camp-out. Laboratory fee.

PHYSICAL EDUCATION (PEH) 144 (3)
INTRODUCTION TO PHYSICAL EDUCATION (3 LEC.)
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. 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 (2)
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) 149 (3)
INTRODUCTION TO PHYSICAL EDUCATION (3 LEC.)
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) 131 (1)
WEIGHT TRAINING AND CONDITIONING (3 LAB.)
Instruction and training in weight training and conditioning techniques are offered. A uniform is required. This course may be repeated for credit. Laboratory fee.

PHYSICAL EDUCATION (PEH) 132 (1)
SELF-DEFENSE (3 LAB.)
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.

PHYSICAL EDUCATION (PEH) 134 (1)
OUTDOOR EDUCATION (3 LAB.)
Knowledge and skills in outdoor education and camping are presented. Planned and incidental experiences take place, including a week-end camp-out. Laboratory fee.

PHYSICAL EDUCATION (PEH) 144 (3)
INTRODUCTION TO PHYSICAL EDUCATION (3 LEC.)
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. 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 (2)
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) 149 (3)
INTRODUCTION TO PHYSICAL EDUCATION (3 LEC.)
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) 131 (1)
WEIGHT TRAINING AND CONDITIONING (3 LAB.)
Instruction and training in weight training and conditioning techniques are offered. A uniform is required. This course may be repeated for credit. Laboratory fee.

PHYSICAL EDUCATION (PEH) 132 (1)
SELF-DEFENSE (3 LAB.)
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.

PHYSICAL EDUCATION (PEH) 134 (1)
OUTDOOR EDUCATION (3 LAB.)
Knowledge and skills in outdoor education and camping are presented. Planned and incidental experiences take place, including a week-end camp-out. Laboratory fee.

PHYSICAL EDUCATION (PEH) 144 (3)
INTRODUCTION TO PHYSICAL EDUCATION (3 LEC.)
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. 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.
This course is for non-science majors. It introduces principles of physics and does not require a mathematical background. Emphasis is on classical mechanics and thermodynamics. Historical developments and their impact on daily life are included. The principle of energy conservation is stressed, and current problems of world-wide energy production are examined. Laboratory fee.

**PHYSICS (PHY) 117 (4) CONCEPTS IN PHYSICS (3 LEC., 3 LAB.)**

This course is for non-science majors. It introduces principles of physics and does not require a mathematical background. Emphasis is on classical mechanics and thermodynamics. Historical developments and their impact on daily life are included. The principle of energy conservation is stressed, and current problems of world-wide energy production are examined. Laboratory fee.

**PHYSICS (PHY) 118 (4) CONCEPTS IN PHYSICS (3 LEC., 3 LAB.)**

This course is for non-science majors. It introduces principles of physics and does not require a mathematical background. Emphasis is on classical mechanics and thermodynamics. Historical developments and their impact on daily life are included. The principle of energy conservation is stressed, and current problems of world-wide energy production are examined. Laboratory fee.

**PHYSICS (PHY) 201 (4) GENERAL 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) 202 (4) GENERAL PHYSICS (3 LEC., 3 LAB.)**

Prerequisite: Physics 201 and credit or concurrent enrollment in Mathematics 225. 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) 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. 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 existence of God, world religions, mysticism, sexuality and religion, and the interpretation of death are included. This course may be repeated once for credit 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.

SOCIOLOGY (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.

SOCIOLOGY (SOC) 102 (3)
SOCIAL PROBLEMS (3 LEC)
This course is a study of social problems which typically include: crime, poverty, minorities, deviance, population, and health care. Specific topics may vary from semester to semester to address contemporary concerns.

SOCIOLOGY (SOC) 103 (3)
HUMAN SEXUALITY (3 LEC)
Students may register for either Psychology 103 or Sociology 103 but receive credit for only one of the two. Topics include physiological, psychological, and sociological aspects of human sexuality.

SOCIOLOGY (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.

SOCIOLOGY (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.

SOCIOLOGY (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.

SOCIOLOGY (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.

SOCIOLOGY (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.

SOCIOLOGY (SOC) 209 (3)
SELECTED TOPICS (3 LEC)
Prerequisite: Sociology 101 or the consent of the instructor. This is an elective course designed to deal with specific topics in sociology. Examples of topics might be: “urban sociology,” “women in society,” or “living with divorce.” As the topics change, this course may be repeated for credit.

SOCIOLOGY (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.

SOCIOLOGY (SOC) 211 (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.

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) 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.

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 pre-
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) 119 (1)
DEMONSTRATION LAB (1 LAB.)
This course provides practice before a live audience of theory learned in theatre classes. Scenes studied in various drama classes are used to show contrast and different perspectives. This course may be repeated for credit.

THEATRE (THE) 205 (3)
SCENE STUDY II (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 III (2 LEC., 3 LAB.)
Prerequisite: Theatre 205. This course is a continuation of Theatre 207. 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.

TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 140 (3)
INTRODUCTION TO DEAFNESS (3 LEC., 1 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 Paraprofessionals for the Deaf should enroll concurrently in Training Paraprofessionals 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. Laboratory fee.

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 Paraprofessionals 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. Laboratory fee.

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)**
**RECEPTIVE FINGERSPELLING (2 LAB.)**

Prerequisites: Training Paraprofessionals for the Deaf 141, 143, or concurrent enrollment in Training Paraprofessionals for the Deaf 240. This course increases the student’s ability to read fingerspelling. Video tapes are used to demonstrate fingerspelling — starting with two-letter words and progressing to words of several syllables. These words are presented individually as well as in sentences.

**TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 230 (4)**
**ETHICS AND SPECIFICS OF INTERPRETING (3 LEC., 2 LAB.)**

Prerequisite: Training Paraprofessionals for the Deaf 141 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. Laboratory fee.

**TRAINING PARAPROFESSIONALS FOR THE DEAF (TPD) 241 (4)**
**AUDIOBIOGRAPHY (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) 251 (4)**
**EDUCATIONAL/SPECIALIZED SIGNS (3 LEC., 2 LAB.)**

Prerequisites: Training Paraprofessionals for the Deaf 141, 142, 143 and 240. This course provides students with knowledge of specialized signs, particularly educational signs. Other contents covered are medical, sexual, legal, drug related and religious. Additional content areas are explored as needed. Laboratory fee.

**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, transportation documentation, and federal and state regulatory policies.

**TRANSPORTATION TECHNOLOGY (TRT) 146 (3)**
**TRANSPORTATION MANAGEMENT (3 LEC.)**

This course is for students majoring in transportation technology. It emphasizes current transportation methods. Included are carrier services, carrier pricing, transportation 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 (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)

VOCATIONAL NURSING (VN)
144 (3)
HEALTH MAINTENANCE THROUGH THE LIFE CYCLE (3 LEC.)
Prerequisite: Admission to the Vocational Nursing Program. This course presents the concepts necessary for general health maintenance including normal growth and development; geriatrics, normal nutrition for all ages; mental health principles; and the prevention and control of disease.

VOCATIONAL NURSING (VN)
145 (3)
NURSING PROCESS I (3 LEC.)
Prerequisite: Admission to the Vocational Nursing Program. Nursing process provides the basic concepts that serve as the foundation for other nursing courses. It includes an introduction to the health care delivery system, nursing as a profession, the nursing process, and communication techniques. The course focuses on meeting the basic physical and psychological needs of patients. A Calculation-Conversion Proficiency Test is a required component of the course.

VOCATIONAL NURSING (VN)
150 (8)
CLINICAL II (28 LAB.)
Prerequisite: Completion of Vocational Nursing 147, 148 with a grade of "C" or better. Must be concurrently enrolled in Vocational Nursing 149. This course provides the opportunity for students to use the nursing process and clinical skills to meet the needs of patients experiencing medical, surgical or emotional problems. Supervised practice in the administration of medications is included.

VOCATIONAL NURSING (VN)
152 (6)
NURSING PRACTICE (24 LAB.)
Prerequisite: Admission to the Vocational Nursing Program. This course emphasizes the scientific principles and nursing competency in nursing skills in simulated laboratory situations that prepare the student to meet the basic needs of patients in clinical situations. Selected clinical experiences enable the student to assess, plan, implement, and evaluate nursing care. Laboratory fee.

VOCATIONAL NURSING (VN)
153 (8)
MATERNAL CHILD HEALTH (7 LEC., 3 LAB.)
Prerequisite: Completion of Vocational Nursing 144, 145, 146 and all support courses with grade of "C" or better. This course focuses on the theory, principles and nursing skills related to meeting the basic needs of maternity, newborn, and pediatric patients. Laboratory fee.

VOCATIONAL NURSING (VN)
154 (7)
MATERNAL CHILD HEALTH CLINICAL (28 LAB.)
Prerequisites: Completion of Vocational Nursing 144, 145, 146 and all support courses with grade of "C" or better. Must be concurrently enrolled in Vocational Nursing 147. This course provides clinical experiences focusing on normal prenatal, labor and delivery, post partum, and newborn nursing care situations. Students also have the opportunity to apply the nursing process to the care of pediatric patients with acute or chronic problems. Laboratory fee.

VOCATIONAL NURSING (VN)
155 (10)
NURSING PROCESS II (8 LEC., 4 LAB.)
Prerequisites: Completion of Vocational Nursing 147, 148 with grade of "C" or better. This course focuses on the nursing care of patients with various medical, surgical or emotional problems. Drug and diet therapy and clinical skills used in caring for acutely or chronically ill patients are included. The topic of professional and vocational adjustment to the employee role is included. Laboratory fee.

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 % mild steel, welding up to and including % 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 % through % mild steel in the flat and vertical position using E60's series electrodes is covered. Laboratory fee.

WELDING (WE) 111 (2)
OXYFUEL (60 CONTACT HOURS)
This course gives both theory and practice in basic tools, equipment and processes used in welding and brazing guage materials. Lab work
includes preparation and performance of welded and brazed joints. Laboratory fee.

WELDING (WE) 112 (2) OXYFUEL II (60 CONTACT HOURS)
Prerequisite: WELDING 111. This course gives both theory and practice in the basic tools, equipment and procedures used in layout, cutting, shaping, forming and the heat treating of metals. Lab work includes the selection and use of fuel gases for heat treating and the set-up and usage of semi-automatic and manual cutting equipment. Laboratory fee.

WELDING (WE) 113 (2) SHIELDED METAL ARC WELDING I (60 CONTACT HOURS)
This course gives both theory and practice in the identification and usage of shielded metal arc welding electrodes. Laboratory work includes the use of E60 and E70 series including low hydrogen electrodes primarily in the flat and horizontal position. Laboratory fee.

WELDING (WE) 114 (2) SHIELDED METAL ARC WELDING II (60 CONTACT HOURS)
Prerequisite: WELDING 113. This course includes both theory and laboratory work, emphasizing the production and properties of mild steel alloys. Arc welding equipment set-up and operation are also included. Laboratory work will include the use of E60 and E70 series electrodes primarily in the vertical and overhead position. Laboratory fee.

WELDING (WE) 115 (4) SHIELDED METAL ARC WELDING III (120 CONTACT HOURS)
Prerequisite: WELDING 114. This course gives both theory and practice in code quality welding. Laboratory work includes passing standard test according to the American Welding Society and American Society of Mechanical Engineers for certifying procedures for 316L, 347 thickness range material in all positions. Laboratory fee.

WELDING (WE) 116 (4) SHIELDED METAL ARC WELDING IV (120 CONTACT HOURS)
Prerequisite: WELDING 115. This course is designed to introduce the basis of shielded metal arc welding of pipe. Lab work includes welding 3" through 10" schedule 40 mild steel pipe. The vertical, horizontal rolled and fixed using E60 and E70 series electrodes are included. Laboratory fee.

WELDING (WE) 117 (3) GENERAL METAL LAYOUT (60 CONTACT HOURS)
Prerequisite: Drafting 182 or equivalent. This course gives both theory and practice in blueprint reading, welding symbols, layout work and fabrication techniques of metal weldments. Lab work consists of developing shop drawings and fabrication of designed structures. Laboratory fee.

WELDING (WE) 118 (4) WELDING INSPECTION AND QUALITY CONTROL (120 CONTACT HOURS)
Prerequisites: WELDING 117 and six credit hours of welding lab courses or equivalent. This course is both a theory and practical application of welding codes, processes, testing procedures, testing equipment and weld discontinuities. Lab work emphasis is on inspection and qualification of welds and welding procedures.

WELDING (WE) 211 (2) GAS TUNGSTEN ARC WELDING I (60 CONTACT HOURS)
This course gives both theory and practice in the set-up and use of gas-tungsten arc welding of plate. Laboratory work will include setting up and using 18 gauge through 38" thick mild steel, stainless and aluminum. Welds will be made primarily in the flat and horizontal positions. Laboratory fee.

WELDING (WE) 212 (2) GAS TUNGSTEN ARC WELDING II (60 CONTACT HOURS)
Prerequisite: WELDING 211 or equivalent. This course gives both theory and practice in the set-up and use of gas tungsten arc welding of pipe. Lab work includes the welding of thin wall tubing and schedule 40 pipe. Welding is primarily in the vertical, horizontal rolled and horizontal fixed positions. Laboratory fee.

WELDING (WE) 213 (4) GAS TUNGSTEN ARC WELDING III (120 CONTACT HOURS)
Prerequisite: WELDING 212 or equivalent. This is an advanced theory and skills course in the use of gas tungsten arc welding of plate and pipe. Lab work will include passing the standard qualification test in a variety of metals in all positions. Laboratory fee.

WELDING (WE) 214 (2) GAS METAL ARC WELDING I (60 CONTACT HOURS)
This course gives both theory and practice in the set-up and use of gas metal arc welding processes of plate. Lab work will be on setting up and using gas metal arc welding equipment in welding 18 gauge 38" thick mild steel, stainless and aluminum, primarily in the flat and horizontal position. Laboratory fee.

WELDING (WE) 215 (2) GAS METAL ARC WELDING II (60 CONTACT HOURS)
Prerequisite: WELDING 214. This course gives both theory and practice in the set-up and use of gas metal arc welding processes of pipe. Lab work includes the welding of schedule 40 mild steel pipe in the vertical, horizontal rolled and fixed positions. Laboratory fee.

WELDING (WE) 216 (4) GAS METAL ARC WELDING III (120 CONTACT HOURS)
Prerequisite: WELDING 215. This is an advanced theory and skills course in the use of gas metal arc welding of plate and pipe. Lab work will be on passing the standard qualification test in plate and pipe on plate and pipe in a variety of metals and thickness ranges in all positions. Laboratory fee.

WELDING (WE) 217 (3) BASIC WELDING METALLURGY (90 CONTACT HOURS)
This is a theory type course designed to assist those students 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. Laboratory fee.

WELDING (WE) 218 (3) APPLIED WELDING METALLURGY (90 CONTACT HOURS)
Prerequisite: WELDING 217 and six credit hours of welding lab courses. This course is designed to assist the student in improving communication skills with welding engineers and metallurgists. The course includes a study of welding processes and their relationship to and effect upon metals and why they can or cannot be used for certain applications; the theory of heat treating and its many uses; the value of preheat, interpass temperature, and post-heat in welding procedures. This course should increase the students knowledge of what metals are made of and why they are used for specific industrial applications; to strengthen the knowledge and understanding of the grain structure of metals and the effect that welding processes have on them. Laboratory fee.
WELDING (WE) 219 (3)
WELDING DESIGN (60 CONTACT HOURS)
Prerequisites: Welding 117, and six credit hours of welding lab courses or equivalent. Concepts in designing products for welding, joint design and selection, weld size determination, welding costs, codes and applications in welding. A design project is chosen and carried to completion using the design team concept. Laboratory fee.

WELDING (WE) 220 (2)
SPECIAL WELDING APPLICATION 1 (60 CONTACT HOURS)
This is an advanced skills development course designed to allow the student to program his own specialization area course objectives under instructional supervision. This will allow a student to upgrade his present skills development level in order to meet employment reclassification requirements of a selected potential employer. This course is open only to those students in advanced standing or who are presently employed and in need of additional skill development. This course may be repeated for credit. Laboratory fee.

RECIPIROCAL TUITION AGREEMENT

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>
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<tr>
<td>Aviation Technology</td>
<td>MVC</td>
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<tr>
<td>Air Cargo</td>
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<td>Air Traffic Control</td>
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<td>Aircraft Dispatcher</td>
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<td>Airline Marketing</td>
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<td>Career Pilot</td>
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<td>Avionics</td>
<td>MVC</td>
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<tr>
<td>Automotive Parts</td>
<td>BHC</td>
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<tr>
<td>Automotive Machinist</td>
<td>BHC</td>
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<tr>
<td>Building Trades</td>
<td>NLC</td>
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<tr>
<td>Carpentry</td>
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<tr>
<td>Electrical</td>
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</tr>
<tr>
<td>Commercial Design &amp; Advertising</td>
<td>CVC</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>
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<td>D-tribution Technology</td>
<td>NLC</td>
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<tr>
<td>Engineering Technology</td>
<td>RLC</td>
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<tr>
<td>Food Service Operations</td>
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<tr>
<td>Graphic Communications</td>
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<td>Horology</td>
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<td>Hotel/Motel Operations</td>
<td>ECC</td>
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<tr>
<td>Human Services</td>
<td>EFC</td>
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<tr>
<td>Interior Design</td>
<td>ECC</td>
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<tr>
<td>Motorcycle Mechanics</td>
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<tr>
<td>Optical Technology</td>
<td>NLC</td>
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<tr>
<td>Outboard Marine</td>
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<tr>
<td>Engine Mechanics</td>
<td>CVC</td>
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<tr>
<td>Pattern Design</td>
<td>ECC</td>
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<tr>
<td>Purchasing Management</td>
<td>EFC, NLC</td>
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<tr>
<td>Retail Management</td>
<td>BHC, CVC</td>
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<tr>
<td>Solar Energy Technology</td>
<td>NLC</td>
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<tr>
<td>Vocational Nursing</td>
<td>ECC</td>
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</table>

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

*NE — Northeast Campus, NW — Northwest Campus, S — South Campus.
Technical/Occupational Programs
ACCOUNTING ASSOCIATE

(Associate Degree)

The Accounting Associate two-year program is designed to prepare a student for a career as a junior accountant in business, industry and government. Emphasis will be placed on internal accounting procedures and generally accepted accounting principles.

The Associate in Applied Arts and Sciences Degree is awarded for successful completion of at least 63 credit hours as outlined below. Students desiring a less comprehensive program that emphasizes bookkeeping procedures and practices should consider the General Office Certificate with elective emphasis on accounting careers. The General Office Certificate is available in the Office Careers Program.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>BUS 105</td>
<td>Introduction to Business</td>
</tr>
<tr>
<td>COM 131</td>
<td>Applied Composition and Speech or*</td>
</tr>
<tr>
<td>ENG 101</td>
<td>Composition and Expository Reading</td>
</tr>
<tr>
<td>MTH 130</td>
<td>Business Mathematics or</td>
</tr>
<tr>
<td>MTH 111</td>
<td>Mathematics for Business and Economics</td>
</tr>
<tr>
<td>OFC 160</td>
<td>Office Machines</td>
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<td><strong>TOTAL</strong></td>
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<th>SEMESTER II</th>
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<td>ACC 202</td>
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<tr>
<td>COM 132</td>
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<tr>
<td>ENG 102</td>
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<tr>
<td>CS 175</td>
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<tr>
<td>MGT 136</td>
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<td>† OFC 172</td>
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<table>
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<tr>
<th>SEMESTER III</th>
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<tbody>
<tr>
<td>ACC 203</td>
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<tr>
<td>ACC 204</td>
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<tr>
<td>ECO 201</td>
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<tr>
<td>GVT 201</td>
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<tr>
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<th>SEMESTER IV</th>
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<td>ACC 238</td>
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<td>ACC 239</td>
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<tr>
<td>BUS 234</td>
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<tr>
<td>ECO 202</td>
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<tr>
<td>OFC 231</td>
</tr>
<tr>
<td>† Electives</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
</tbody>
</table>

Electives — A minimum of 9 credit hours must be selected from the following:

- ACC 205: Business Finance
- ACC 207: Intermediate Accounting II
- ACC 238: Cost Accounting
- ACC 239: Income Tax Accounting
- ACC 703-713: Cooperative Work Experience
- 803-813: Cooperative Work Experience
- BUS 143: Personal Finance
- BUS 237: Organizational Behavior
- CS 250: Contemporary Topics in Computer Science
- CS 251: Special Topics in Computer Science and Data Processing
- MGT 206: Principles of Marketing
- PSY 105: Introduction to Psychology or
- PSY 131: Human Relations
- SPE 105: Fundamentals of Public Speaking
- Any CS or DP Programming course

* Eng 101 and Eng 102 may be substituted for COM 131 and COM 132 provided that SPE 105 is also taken.
† Students who can demonstrate proficiency by previous training, experience, or placement tests may substitute a course from the electives listed for this program.

Minimum Hours Required: 63
**AIR CONDITIONING AND REFRIGERATION TECHNOLOGY**  
(Associate Degree)

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.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>ACR 111 Principles of Refrigeration</td>
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<tr>
<td>ACR 113 Fundamentals of Electricity</td>
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</tr>
<tr>
<td>ACR 115 Unit Air Conditioning Systems</td>
<td>3</td>
</tr>
<tr>
<td>ACR 117 Domestic Refrigeration</td>
<td>3</td>
</tr>
<tr>
<td>COM 131 Applied Composition and Speech or ENG 101 Composition and Expository Reading</td>
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<tr>
<td>DFT 182 Technician Drafting</td>
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<thead>
<tr>
<th>SEMESTER II</th>
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<tr>
<td>ACR 112 Properties of Air</td>
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<tr>
<td>ACR 114 Heat Load Analysis</td>
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</tr>
<tr>
<td>ACR 116 Summer Air Conditioning Systems</td>
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</tr>
<tr>
<td>ACR 118 Winter Air Conditioning Systems</td>
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</tr>
<tr>
<td>HST 101 History of the United States or PSY 131 Human Relations</td>
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</tr>
<tr>
<td>MTH 195 Technical Mathematics</td>
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<thead>
<tr>
<th>SEMESTER III</th>
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<tbody>
<tr>
<td>ACR 221 Refrigeration Loads</td>
<td>3</td>
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<tr>
<td>ACR 223 Medium Temperature Refrigeration Systems</td>
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<tr>
<td>ACR 227 Low Temperature Refrigeration Systems</td>
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</tr>
<tr>
<td>ACR 229 Refrigeration Equipment Selection</td>
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</tr>
<tr>
<td>ACC 131 Bookkeeping I</td>
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</tr>
<tr>
<td>COM 132 Applied Composition and Speech or ENG 102 Composition and Literature</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>SEMESTER IV</th>
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<tbody>
<tr>
<td>ACR 222 Advanced Systems</td>
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<tr>
<td>ACR 224 System Testing and Balancing</td>
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<td>ACR 228 Air Conditioning System Equipment Selection</td>
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<tr>
<td>ACR 230 Energy Conservation</td>
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<tr>
<td>ACR 803 Cooperative Work Experience</td>
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</table>

Minimum Hours Required: 68

**AIR CONDITIONING AND REFRIGERATION**  
(Certificate)

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 I</th>
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</tr>
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<td>ACR 113 Fundamentals of Electricity</td>
<td>3</td>
</tr>
<tr>
<td>ACR 115 Unit Air Conditioning Systems</td>
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<tr>
<td>ACR 117 Domestic Refrigeration</td>
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<tr>
<td>MTH 195 Technical Mathematics</td>
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<tr>
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<tr>
<td>ACR 114 Heat Load Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ACR 116 Summer Air Conditioning Systems</td>
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<tr>
<td>ACR 118 Winter Air Conditioning Systems</td>
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<table>
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<tr>
<th>SEMESTER III</th>
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<td>ACR 229 Refrigeration Equipment Selection</td>
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</tr>
<tr>
<td>ACR 803 Cooperative Work Experience</td>
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</tbody>
</table>

Minimum Hours Required: 42

Minimum Hours Required: 68
**AUTO BODY TECHNOLOGY**

*(Associate Degree)*

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 I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB 111 Basic Metal Principles*</td>
<td>3</td>
</tr>
<tr>
<td>AB 112 Applied Basic Metal Principles*</td>
<td>2</td>
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<tr>
<td>AB 121 Basic Paint Principles*</td>
<td>3</td>
</tr>
<tr>
<td>AB 122 Applied Basic Paint Principles*</td>
<td>2</td>
</tr>
<tr>
<td>AB 123 Paint Blending and Spot Repair Techniques*</td>
<td>3</td>
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<tr>
<td>AB 124 Applied Paint Blending and Spot Repair Techniques*</td>
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<tr>
<td>WE 101 Basic Welding Principles</td>
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<td>MTH 195 Technical Mathematics</td>
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<th>SEMESTER II</th>
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<tbody>
<tr>
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<td>AB 114 Applied Minor Metal Repair*</td>
<td>2</td>
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<tr>
<td>AB 123 Paint Blending and Spot Repair Techniques*</td>
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<td>AB 124 Applied Paint Blending and Spot Repair Techniques*</td>
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<td>COM 131 Applied Composition and Speech</td>
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<thead>
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<th>SEMESTER III</th>
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<tbody>
<tr>
<td>AB 211 Major Panel Replacement*</td>
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<tr>
<td>AB 212 Applied Major Panel Replacement*</td>
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<tr>
<td>AB 213 Major Collision and Frame Repair</td>
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<tr>
<td>PSY 131 Human Relations</td>
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<th>SEMESTER IV</th>
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<tr>
<td>AB 139 Body Shop Operations</td>
<td>3</td>
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<tr>
<td>AB 211 Advanced Paint Techniques*</td>
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<tr>
<td>AB 222 Applied Advanced Paint Techniques*</td>
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<tr>
<td>AB 235 Estimating</td>
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<td>AB 803 or Cooperative Work Experience</td>
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</table>

Minimum Hours Required: **45**

*Must be enrolled in concurrently (at the same time): AB 111/112, AB 113/114, AB 121/122, AB 123/124, AB 211/212, AB 221/222

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**AUTO BODY TECHNOLOGY**

*(Certificate)*

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 repair person. This program offers the student a certificate in Auto Body Technology upon successful completion of the program.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>AB 111 Basic Metal Principles*</td>
<td>3</td>
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<tr>
<td>AB 112 Applied Basic Metal Principles*</td>
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<tr>
<td>AB 123 Paint Blending and Spot Repair Techniques*</td>
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<tr>
<td>AB 221 Advanced Paint Techniques*</td>
<td>3</td>
</tr>
<tr>
<td>AB 222 Applied Advanced Paint Techniques*</td>
<td>2</td>
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<tr>
<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>SEMESTER III</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB 139 Body Shop Operations</td>
<td>3</td>
</tr>
<tr>
<td>AB 213 Major Collision and Frame Repair</td>
<td>3</td>
</tr>
<tr>
<td>AB 235 Estimating</td>
<td>3</td>
</tr>
<tr>
<td>AB 803 or Cooperative Work Experience</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12-13</strong></td>
</tr>
</tbody>
</table>

Minimum Hours Required: **45**

*Must be enrolled in concurrently (at the same time): AB 111/112, AB 113/114, AB 121/122, AB 123/124, AB 211/212, AB 221/222

---

1 Electives — Must be selected from the following:

| AT 118 Electrical Systems | 4 |
| AT 221 Heating and Air Conditioning | 4 |
| AT 225 Front End | 4 |

*Must be enrolled in concurrently (at the same time): AB 111/112, AB 113/114, AB 121/122, AB 123/124, AB 211/212, AB 221/222
The purpose of this program is to prepare students for entry level employment as an automotive technician. This program of study will include theory, diagnosis, repair, overhaul and maintenance of automobiles. Emphasis is placed on operational theory, practical skills and accepted shop procedures.

**AUTOMOTIVE TECHNOLOGY**  
(Associate Degree)

The purpose of this program is to train persons for entry level positions in the field of Automotive Technology. A certificate is issued upon successful completion of the following listed courses.

**SEMESTER I**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 108 Minor Vehicle Services</td>
<td>4</td>
</tr>
<tr>
<td>AT 110 Engine Repair I</td>
<td>4</td>
</tr>
<tr>
<td>AT 112 Engine Repair II</td>
<td>4</td>
</tr>
<tr>
<td>COM 131 Applied Composition and Speech I</td>
<td>3</td>
</tr>
<tr>
<td>MTH 195 Technical Mathematics</td>
<td>3</td>
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</table>

**SEMESTER II**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 114 Engine Analysis and Tune-Up</td>
<td>4</td>
</tr>
<tr>
<td>AT 116 Fuel and Emission Systems</td>
<td>4</td>
</tr>
<tr>
<td>AT 118 Electrical Systems</td>
<td>4</td>
</tr>
<tr>
<td>PHY 131 Applied Physics</td>
<td>4</td>
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</table>

**SEMESTER III**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 221 Heating and Air Conditioning</td>
<td>4</td>
</tr>
<tr>
<td>AT 223 Brake Systems</td>
<td>4</td>
</tr>
<tr>
<td>AT 225 Front End Systems</td>
<td>4</td>
</tr>
<tr>
<td>† Elective</td>
<td>3-4</td>
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</table>

**SEMESTER IV**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>AT 227 Standard Transmissions and Drive Trains</td>
<td>4</td>
</tr>
<tr>
<td>AT 229 Automatic Transmissions I</td>
<td>4</td>
</tr>
<tr>
<td>AT 231 Automatic Transmissions II</td>
<td>4</td>
</tr>
<tr>
<td>AT 703 Cooperative Work Experience or</td>
<td>3</td>
</tr>
<tr>
<td>AT 714 Cooperative Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>† Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Minimum Hours Required: 15-16

† Elective — Must be selected from the following:

- AB 245 Welding for Auto Body
- BUS 105 Introduction to Business
- WE 101 Basic Welding and Cutting Practices
- AT 803 Cooperative Work Experience
- AT 814 Cooperative Work Experience

Minimum Hours Required: 67

† Elective — Must be selected from the following:

- GVT 201 American Government
- HD 105 Basic Processes of Interpersonal Relationship
- HUM 101 Introduction to the Humanities
- PSY 131 Human Relations

Total Credit Hours: 18-19
## CHILD DEVELOPMENT ASSOCIATE

(Associate Degree)

The Child Development program offers students an in-depth study of young children from birth to twelve years of age in conjunction with the Parent/Child Study Center that provides students day-to-day involvement with young children. The program is designed to enable students to provide an optimal learning and caring environment for children.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 135 Introduction to Early Childhood Programs and Services**</td>
<td>4</td>
</tr>
<tr>
<td>CD 140 Early Childhood Development, 0-3 Years**</td>
<td>3</td>
</tr>
<tr>
<td>COM 131 Applied Composition and Speech or ENG 101 Composition and Expository Reading</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101 Introduction to Sociology</td>
<td>3</td>
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<tr>
<td>† Elective</td>
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<td>**</td>
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<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>CD 137 Early Childhood Learning Environments, Activities and Materials**</td>
<td>4</td>
</tr>
<tr>
<td>CD 141 Early Childhood Development, 3-5 Years**</td>
<td>3</td>
</tr>
<tr>
<td>CD 812 Cooperative Work Experience or CD 813 Cooperative Work Experience or CD 814 Cooperative Work Experience</td>
<td>2 (3) (4)</td>
</tr>
<tr>
<td>HD 106 Personal and Social Growth or PSY 105 Introduction to Psychology</td>
<td>3</td>
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<tr>
<td>HST 102 History of the United States</td>
<td>3</td>
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<tr>
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<table>
<thead>
<tr>
<th>SEMESTER III</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>CD 100 Directed Participation in Early Childhood Programs* or CD 233 Directed Participation in Early Childhood Programs</td>
<td>4</td>
</tr>
<tr>
<td>CD 239 Studies in Child Guidance**</td>
<td>3</td>
</tr>
<tr>
<td>COM 132 Applied Composition and Speech or ENG 102 Composition and Literature</td>
<td>3</td>
</tr>
<tr>
<td>GVT 201 American Government</td>
<td>3</td>
</tr>
<tr>
<td>† Elective</td>
<td>2.4</td>
</tr>
<tr>
<td>**</td>
<td>15-17</td>
</tr>
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<table>
<thead>
<tr>
<th>SEMESTER IV</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>CD 150 Nutrition, Health and Safety of the Young Child**</td>
<td>3</td>
</tr>
<tr>
<td>CD 200 Application of Child Development Learning Theories* or CD 244 Application of Child Development Learning Theories</td>
<td>4</td>
</tr>
<tr>
<td>HUM 101 Introduction to the Humanities</td>
<td>3</td>
</tr>
<tr>
<td>SOC 203 Marriage and the Family</td>
<td>3</td>
</tr>
<tr>
<td>† Electives</td>
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<tr>
<td>**</td>
<td>15-17</td>
</tr>
</tbody>
</table>

Minimum Hours Required: 64

† Electives — Must be selected from the following:

- CD 125 Infant and Toddler Learning Environments, Activities, and Materials: 4
- CD 127 Early Childhood Development, 5-12 Years: 3
- CD 203 Parents and the Child Caregiver/Teacher: 3
- CD 209 Early Childhood Development Special Projects: 3
- CD 236 The Special Child: Growth and Development: 3
- CD 238 Introduction to Administration of Child Care Programs: 3
- CD 246 Advanced Administrative Practices for Child Care Facilities: 3
- CD 250 Supportive Services for Exceptional Children: 3
- CD 251 Learning Programs for Children with Special Needs: 3
- CD 253 Abuse Within the Family: 3
- CD 812 Cooperative Work Experience or CD 813 Cooperative Work Experience or CD 814 Cooperative Work Experience: 2 (3) (4)
- TPD 141 Beginning Sign Language: 4

* CD 100 and CD 200 are taken as one-hour courses concurrently with the six (6) required CD courses (** and ***), and one of the following (CD electives) CD 123, CD 127, CD 203, CD 238, or CD 246.

CD 100 and CD 200 are repeated for credit for a total of eight (8) hours and are equivalent to CD 233 and CD 244.

## CHILD DEVELOPMENT — SPECIAL CHILD CERTIFICATE

(Certificate)

This certificate program is planned to emphasize the needs of special children and their families.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 140 Early Childhood Development, 0-3 Years</td>
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<tr>
<td>CD 150 Nutrition, Health and Safety of the Young Child</td>
<td>3</td>
</tr>
<tr>
<td>CD 236 The Special Child: Growth and Development</td>
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</tr>
<tr>
<td>CD 239 Studies in Child Guidance</td>
<td>3</td>
</tr>
<tr>
<td>HD 106 Personal and Social Growth</td>
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<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>CD 141 Early Childhood Development, 3-5 Years</td>
<td>3</td>
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<tr>
<td>CD 250 Supportive Services for Exceptional Children</td>
<td>3</td>
</tr>
<tr>
<td>CD 251 Learning Programs for Children with Special Needs</td>
<td>4</td>
</tr>
<tr>
<td>CD 812 Cooperative Work Experience or CD 813 Cooperative Work Experience or CD 814 Cooperative Work Experience</td>
<td>2 (3) (4)</td>
</tr>
<tr>
<td>COM 131 Applied Composition and Speech or ENG 101 Composition and Expository Reading</td>
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<td>3.4</td>
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<tr>
<td>**</td>
<td>18-21</td>
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</table>

Minimum Hours Required: 33

† Elective — Must be selected from the following:

- CD 125 Infant and Toddler Learning Environments, Activities, and Materials: 4
- CD 127 Early Childhood Development, 5-12 Years: 3
- CD 203 Parents and the Child Caregiver/Teacher: 3
- CD 209 Early Childhood Development Special Projects: 3
- CD 236 The Special Child: Growth and Development: 3
- CD 238 Introduction to Administration of Child Care Programs: 3
- CD 246 Advanced Administrative Practices for Child Care Facilities: 3
- CD 250 Supportive Services for Exceptional Children: 3
- CD 251 Learning Programs for Children with Special Needs: 3
- CD 253 Abuse Within the Family: 3
- CD 812 Cooperative Work Experience or CD 813 Cooperative Work Experience or CD 814 Cooperative Work Experience: 2 (3) (4)
- TPD 141 Beginning Sign Language: 4
CDA TRAINING CERTIFICATE

(Certificate)

This certificate program provides course work to assist the student to prepare for the CDA (Child Development Associate) assessment process. Students interested in applying for this national credential should consult a Child Development Instructor.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 135</td>
<td>Introduction to Early Childhood Programs and Services</td>
<td>4</td>
</tr>
<tr>
<td>CD 140</td>
<td>Early Childhood Development, 0-3 Years</td>
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</tr>
<tr>
<td>CD 150</td>
<td>Nutrition, Health and Safety of the Young Child</td>
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</tr>
<tr>
<td>CD 239</td>
<td>Studies in Child Guidance</td>
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</tr>
<tr>
<td>HD 106</td>
<td>Personal and Social Growth</td>
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<td>3-4</td>
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<tbody>
<tr>
<td>CD 137</td>
<td>Early Childhood Learning Environments, Activities, and Materials</td>
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<tr>
<td>CD 141</td>
<td>Early Childhood Development, 3-5 Years</td>
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</tr>
<tr>
<td>CD 812</td>
<td>Cooperative Work Experience or</td>
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</tr>
<tr>
<td>CD 813</td>
<td>Cooperative Work Experience or</td>
<td>(3)</td>
</tr>
<tr>
<td>CD 814</td>
<td>Cooperative Work Experience</td>
<td>(4)</td>
</tr>
<tr>
<td>COM 131</td>
<td>Applied Composition and Speech or</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>Composition and Expository Reading</td>
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<tr>
<td>† Elective</td>
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<td>3-4</td>
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<tr>
<td>† Elective</td>
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<td>3-4</td>
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<td></td>
<td><strong>Total</strong></td>
<td><strong>18-22</strong></td>
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</tbody>
</table>

Minimum Hours Required: 37

† Electives — Must be selected from the following:

| CD 125 | Infant and Toddler Learning Environments, Activities, and Materials | 4      |
| CD 203 | Parents and the Child Caregiver/Teacher                     | 3      |
| CD 209 | Early Childhood Development Special Projects                | 3      |
| CD 236 | The Special Child: Growth and Development                   | 3      |
| CD 238 | Introduction to Administration of Child-Care Programs       | 3      |
| CD 248 | Advanced Administrative Practices for Child-Care Facilities  | 3      |
| CD 250 | Supportive Services for Exceptional Children                | 3      |
| CD 251 | Learning Programs for Children With Special Needs           | 4      |
| CD 253 | Abuse Within the Family                                      | 3      |
| TPD 141 | Beginning Sign Language                                      | 4      |
DATA PROCESSING PROGRAMMER

( Associate Degree )

This curriculum is intended for the preparation of entry-level or trainee computer programmers who will work in an applications setting to support the general, administrative, and organizational information processing function of industry, commerce, business and government service. It is designed as a two-year career program to prepare students for jobs. Graduates should be able to work in conjunction with a systems analyst in the programming environment usually found in a medium to large job shop. It is intended to provide a sufficient foundation so that graduates with experience and continued learning may advance in career paths appropriate to their own particular interests and abilities.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 175 Introduction to Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105 Introduction to Business or MGT 136 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>DP 137 Data Processing Mathematics or any business math*</td>
<td>3</td>
</tr>
<tr>
<td>COM 131 Applied Composition and Speech or ENG 101 Composition and Expository Reading</td>
<td>3</td>
</tr>
<tr>
<td>ACC 201 Principles of Accounting I**</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>15</td>
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</table>

<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>DP 133 Beginning Programming (COBOL)</td>
<td>4</td>
</tr>
<tr>
<td>DP 138 Systems Analysis and Data Processing Logic</td>
<td>3</td>
</tr>
<tr>
<td>ECO 201 Principles of Economics I or ECO 202 Principles of Economics II</td>
<td>3</td>
</tr>
<tr>
<td>ACC 202 Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>COM 132 Applied Composition and Speech or ENG 102 Composition and Literature</td>
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<table>
<thead>
<tr>
<th>SEMESTER III</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP 136 Intermediate Programming (COBOL)</td>
<td>4</td>
</tr>
<tr>
<td>DP 142 RPG Programming or DP 244 Basic Programming</td>
<td>3</td>
</tr>
<tr>
<td>DP 233 Operating Systems and Communications</td>
<td>4</td>
</tr>
<tr>
<td>ACC 203 Intermediate Accounting or ACC 238 Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3-4</td>
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<tr>
<td></td>
<td>17-18</td>
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<table>
<thead>
<tr>
<th>SEMESTER IV</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP 231 Advanced Programming (ALC)</td>
<td>4</td>
</tr>
<tr>
<td>DP 232 Applied Systems</td>
<td>4</td>
</tr>
<tr>
<td>DP 236 Advanced COBOL Techniques or other 200 level DP or CS course</td>
<td>3-4</td>
</tr>
<tr>
<td>Any approved DP or CS course</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>14-16</td>
</tr>
</tbody>
</table>

Minimum Hours Required: 62

† Electives — Must be selected from the following:

Any DP or CS course (including DP 700-800 Cooperative Work Experience)

DP 129 Data Entry Concepts
MG 136 Principles of Management
MG 206 Principles of Marketing
BUS 234 Business Law
BUS 237 Organizational Behavior
ECO 222 Principles of Economics II
MTH 202 Introductory Statistics
ENG 210 Technical Writing
BUS 105 Introduction to Business
ECO 201 Principles of Economics I

* MTH 111, MTH 112, MTH 130 or an equivalent business math course
** ACC 131 — Bookkeeping I, and ACC 132 — Bookkeeping II may be substituted for ACC 201 — Principles of Accounting

NOTE: Students may obtain credit toward a degree or certificate for only one of each of the pairs of courses listed below:

DP 133 or CS 184
DP 231 or CS 186
DP 244 or CS 182
CS 175 or CS 174
DIGITAL ELECTRONICS TECHNOLOGY

(Associate Degree)

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.

Minimum Hours Required

64

ET 190 D.C. Circuits and Electrical Measurements 4
COM 131 Applied Composition and Speech or 3
ENG 101 Composition and Expository Reading 3
DFT 182 Technical Drafting* 2
MTH 195 Technical Mathematics** 3
† Technical Elective(s) 4

SEMIESTER II

ET 191 A.C. Circuits 4
ET 192 Digital Computer Principles 3
ET 193 Active Devices 4
COM 132 Applied Composition and Speech or 3
ENG 102 Composition and Literature 3
MTH 196 Technical Mathematics** 3
† Technical Elective(s) 4

SEMIESTER III

ET 260 Sinusoidal Circuits 4
ET 261 Pulse and Switching Circuits 4
ET 263 Digital Computer Theory 4
† Technical Elective(s) 4

SEMIESTER IV

ET 264 Digital Systems 4
ET 265 Digital Research 3
ET 266 Computer Applications 4
ET 267 Microprocessors 4

Minimum Hours Required 64

† Electives — Must be selected from the following:
ET 194 Instrumentation 3
ET 238 Linear Integrated Circuits 4
ET 268 Advanced Microprocessors 4
ET 704 Cooperative Work Experience 4
ET 713 Cooperative Work Experience 4
ET 802 Cooperative Work Experience 4
CHM 101 General Chemistry 4
CS 175 Introduction to Computer Science 3
EGR 101 Engineering Analysis 3
EGR 186 Manufacturing Processes 3
EGR 204 Electrical Systems Analysis 3
CS 181 Introduction to FORTRAN Programming 3
PHY 111 Introduction to General Physics 4
PHY 131 Applied Physics 4

DRAFTING AND DESIGN TECHNOLOGY — ELECTRONIC DESIGN OPTION

(Associate Degree)

This option prepares the student for employment as a drafter or engineering aide in a wide range of electronic industries. Information in related fields is provided to enable the student to work effectively with the engineer and professional staff. Enrollment in Drafting Cooperative Work Experience Courses (Co-op) provides on-the-job experience while in the program.

Minimum Hours Required: 61

†Technical elective may be selected from applied science, engineering, and cooperative work experience courses.

* DFT 184, DFT 231, or EGR 105 may be substituted.
** MTH 101 and MTH 104 may be substituted for MTH 195, MTH 105, MTH 121, MTH 124, MTH 225, MTH 226 may be substituted for either MTH 195 or MTH 196.
**DRAFTING AND DESIGN TECHNOLOGY**

(Associate Degree)

This program prepares the student for employment in a wide range of industries as a drafter or engineering aide. Information in related fields is provided to enable the student to work effectively with the engineer and professional staff. Enrollment in Drafting Cooperative Work Experience Courses (Co-op) provides on-the-job experience while in the program.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFT 183 Basic Drafting</td>
<td>4</td>
</tr>
<tr>
<td>DFT 135 Reproduction Processes</td>
<td>2</td>
</tr>
<tr>
<td>COM 131 Applied Composition and Speech or ENG 101 Composition and Expository Reading</td>
<td>3</td>
</tr>
<tr>
<td>MTH 195 Technical Mathematics or MTH 101 College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>‡ Technical Elective</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
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<thead>
<tr>
<th>SEMESTER II</th>
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<tbody>
<tr>
<td>DFT 160 Manufacturing Fundamentals Drafting Course*</td>
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<tr>
<td>DFT 160 Drafting Course* or Co-op**</td>
<td>3-4</td>
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<tr>
<td>COM 132 Applied Composition and Speech or ENG 102 Composition and Literature</td>
<td>3</td>
</tr>
<tr>
<td>MTH 196 Technical Mathematics or MTH 102 Plane Trigonometry</td>
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<td><strong>Total</strong></td>
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<tr>
<td>Drafting Course*</td>
<td>3-4</td>
</tr>
<tr>
<td>EGR 106 Descriptive Geometry</td>
<td>3</td>
</tr>
<tr>
<td>‡ Technical Elective or Co-op**</td>
<td>3</td>
</tr>
<tr>
<td>GOV 201 American Government or HST 101 History of the United States</td>
<td>3</td>
</tr>
<tr>
<td>HD 105 Basic Processes of Interpersonal Relationships or PSY 131 Human Relations</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15-16</strong></td>
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<table>
<thead>
<tr>
<th>SEMESTER IV</th>
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<tbody>
<tr>
<td>Drafting Course*</td>
<td>3</td>
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<tr>
<td>Drafting Course* or Co-op**</td>
<td>3</td>
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<tr>
<td>‡ Technical Elective</td>
<td>3</td>
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<tr>
<td>PHY 131 Applied Physics</td>
<td>4</td>
</tr>
<tr>
<td>GOV 202 American Government or HST 102 History of the United States</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
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</table>

Minimum Hours Required: 60

*Drafting Courses to be selected from the following:
- DFT 136 Geotechnical and Land Drafting 3
- DFT 184 Intermediate Drafting 3
- DFT 185 Architectural Drafting 4
- DFT 230 Structural Drafting 3
- DFT 231 Electronic Drafting 3
- DFT 232 Technical Illustration 3
- DFT 234 Advanced Technical Illustration 4
- DFT 235 Building Equipment (Mechanical and Electrical) 3
- DFT 236 Piping and Pressure Vessel Design 3
- DFT 245 Computer Aided Design 3
- DFT 250 Sheet Metal Design 3
- DFT 251 Industrial Design 3

**Drafting Co-op Courses to be selected from the following:
- DFT 703 Cooperative Work Experience 3
- DFT 713 Cooperative Work Experience 3
- DFT 803 Cooperative Work Experience 3
- DFT 813 Cooperative Work Experience 3
- DFT 704 Cooperative Work Experience 4
- DFT 714 Cooperative Work Experience 4
- DFT 804 Cooperative Work Experience 4
- DFT 814 Cooperative Work Experience 4

‡ Technical Electives may be selected from Drafting, Applied Science or Engineering Technologies as approved by the Drafting Department.
**GRAPHIC COMMUNICATIONS**

( Associate Degree)

The student's understanding of graphic processes is developed for employment in a commercial printing firm or a publication facility such as a newspaper or magazine. Students also learn production and management concepts and techniques useful in the field of graphic communications including photography and journalism.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA 131 Graphic Processes</td>
<td>3</td>
</tr>
<tr>
<td>GA 140 Offset Printing</td>
<td>3</td>
</tr>
<tr>
<td>COM 131 Applied Composition and Speech or ENG 101 Composition and Expository Reading</td>
<td>3</td>
</tr>
<tr>
<td>JN 101 Introduction to Mass Communications</td>
<td>3</td>
</tr>
<tr>
<td>OFC 172 Beginning Typing</td>
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<tr>
<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>SEMESTER II</th>
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<tbody>
<tr>
<td>GA 134 Basic Camera Operations</td>
<td>3</td>
</tr>
<tr>
<td>GA 136 Copy Preparation</td>
<td>3</td>
</tr>
<tr>
<td>COM 132 Applied Composition and Speech or SPE 105 Fundamentals of Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>MTH 130 Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>PHO 110 Introduction to Photography and Photo-Journalism</td>
<td>3</td>
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<td><strong>Total</strong></td>
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<tbody>
<tr>
<td>GA 206 Graphic Projects</td>
<td>3</td>
</tr>
<tr>
<td>GA 714 Cooperative Work Experience</td>
<td>4</td>
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<tr>
<td>JN 102 Introduction to Mass Communications</td>
<td>3</td>
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<tr>
<td>OFC 165 Introduction to Word Processing</td>
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<tr>
<td>PHO 120 Commercial Photography I</td>
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<tr>
<td>GA 240 Offset Printing II</td>
<td>3</td>
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<tr>
<td>ACC 131 Bookkeeping I or ACC 201 Principles of Accounting I</td>
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<tr>
<td>JN 103 News Gathering and Writing</td>
<td>3</td>
</tr>
<tr>
<td>PHO 121 Commercial Photography II or GA 814 Cooperative Work Experience</td>
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<tr>
<td>PHO 207 Photography for Publications</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
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</table>

Minimum Hours Required: 62

**GRAPHIC ARTS**

(Certificate)

This certificate program provides the student with skill development opportunities in the field of Graphic Arts. Successful completion of this certificate program qualifies a person for employment in a commercial printing firm or in the printing division of a large company.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
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</tr>
</thead>
<tbody>
<tr>
<td>GA 131 Graphic Processes</td>
<td>3</td>
</tr>
<tr>
<td>GA 140 Offset Printing</td>
<td>3</td>
</tr>
<tr>
<td>COM 131 Applied Composition and Speech or ENG 101 Composition and Expository Reading</td>
<td>3</td>
</tr>
<tr>
<td>MTH 139 Applied Mathematics</td>
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<tr>
<th>SEMESTER II</th>
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<tbody>
<tr>
<td>GA 134 Basic Camera Operations</td>
<td>3</td>
</tr>
<tr>
<td>GA 136 Copy Preparation</td>
<td>3</td>
</tr>
<tr>
<td>COM 132 Applied Composition and Speech or SPE 105 Fundamentals of Public Speaking</td>
<td>3</td>
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<td>PSY 131 Human Relations</td>
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<td><strong>3-4</strong></td>
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<tr>
<td><strong>Elective — Must be selected from the following:</strong></td>
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<tr>
<td>GA 714 Cooperative Work Experience</td>
<td>4</td>
</tr>
<tr>
<td>DFT 232 Technical Illustration</td>
<td>3</td>
</tr>
<tr>
<td>PHO 110 Introduction to Photography and Photo-Journalism</td>
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</tbody>
</table>

Minimum Hours Required: 30
MANAGEMENT CAREERS — MID-MANAGEMENT OPTION

(Associate Degree)

The Mid-Management option is a cooperative plan with members of the business community whereby the student attends college classes in management and related courses and concurrently works at a regular, paid, part-time or full-time job in a sponsoring business firm. 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.

CREDIT HOURS

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>MGT 136: Principles of Management</td>
<td>3</td>
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<tr>
<td>MGT 150: Management Training</td>
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<tr>
<td>MGT 154: Management Seminar: Role of Supervision</td>
<td>2</td>
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<tr>
<td>BUS 105: Introduction to Business</td>
<td>3</td>
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<tr>
<td>COM 131: Applied Composition and Speech</td>
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<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 151: Management Training</td>
<td>4</td>
</tr>
<tr>
<td>MGT 155: Management Seminar: Personnel Management</td>
<td>2</td>
</tr>
<tr>
<td>COM 132: Applied Composition and Speech</td>
<td>3</td>
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<tr>
<td>CS 175: Introduction to Computer Science</td>
<td>3</td>
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<tr>
<td>HUM 101: Introduction to the Humanities</td>
<td>3</td>
</tr>
<tr>
<td>MTH 111: Mathematics for Business and Economics I or MGT 153 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MTH 112: Mathematics for Business and Economics II or MGT 154 Management Seminar: Role of Supervision</td>
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</tr>
<tr>
<td>MTH 130: Business Mathematics</td>
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<table>
<thead>
<tr>
<th>SEMESTER III</th>
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<tbody>
<tr>
<td>MGT 250: Management Training</td>
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<tr>
<td>MGT 254: Management Seminar: Organizational Development</td>
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<tr>
<td>ACC 201: Principles of Accounting I</td>
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<td>ECO 201: Principles of Economics</td>
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<td>PSY 131: Human Relations</td>
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<thead>
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<tbody>
<tr>
<td>MGT 251: Management Training</td>
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<tr>
<td>MGT 255: Management Seminar: Business Strategy, the Decision Process and Problem Solving</td>
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<td>ECO 202: Principles of Economics II</td>
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<tr>
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<tr>
<td>1 Elective</td>
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</table>

Minimum Hours Required: 63

1 Elective — May be selected from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>MGT 137: Principles of Retailing</td>
<td>3</td>
</tr>
<tr>
<td>MGT 153: Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 212: Special Problems in Business</td>
<td>1</td>
</tr>
<tr>
<td>MGT 230: Salesmanship</td>
<td>3</td>
</tr>
<tr>
<td>MGT 233: Advertising and Sales Promotion</td>
<td>3</td>
</tr>
<tr>
<td>OFC 160: Office Machines</td>
<td>3</td>
</tr>
<tr>
<td>OFC 172: Beginning Typing</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Electives — May be selected from the following:

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<thead>
<tr>
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<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>MGT 137: Principles of Retailing</td>
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<tr>
<td>MGT 212: Special Problems in Business</td>
<td>1</td>
</tr>
<tr>
<td>MGT 230: Salesmanship</td>
<td>3</td>
</tr>
<tr>
<td>MGT 233: Advertising and Sales Promotion</td>
<td>3</td>
</tr>
<tr>
<td>OFC 160: Office Machines</td>
<td>3</td>
</tr>
<tr>
<td>OFC 172: Beginning Typing</td>
<td>3</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.

Students may substitute ACC 131 and ACC 132 for ACC 201. Only three hours may be applied to the required number of hours for granting the degree.

MANAGEMENT CAREERS — ADMINISTRATIVE MANAGEMENT OPTION

(Associate Degree)

The Administrative Management option offers a continuation of the traditional management and business studies. This option is designed for students seeking a detailed examination of management practices, techniques, and theories.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 136: Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105: Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>COM 131: Applied Composition and Speech</td>
<td>3</td>
</tr>
<tr>
<td>HUM 101: Introduction to the Humanities</td>
<td>3</td>
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<tr>
<td>1 Elective</td>
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<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 206: Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>ACC 201: Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>COM 132: Applied Composition and Speech</td>
<td>3</td>
</tr>
<tr>
<td>CS 175: Introduction to Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>MTH 111: Mathematics for Business and Economics I or MGT 153 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MTH 112: Mathematics for Business and Economics II or MGT 154 Management Seminar: Role of Supervision</td>
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<tr>
<td>MTH 130: Business Mathematics</td>
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<table>
<thead>
<tr>
<th>SEMESTER III</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>ACC 202: Principles of Accounting II</td>
<td>3</td>
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<tr>
<td>BUS 234: Business Law</td>
<td>3</td>
</tr>
<tr>
<td>ECO 201: Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>PSY 131: Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>1 Elective</td>
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<table>
<thead>
<tr>
<th>SEMESTER IV</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 242: Personnel Administration</td>
<td>3</td>
</tr>
<tr>
<td>BUS 237: Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>ECO 202: Principles of Economics II</td>
<td>3</td>
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<tr>
<td>OFC 231: Business Communications</td>
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Minimum Hours Required: 63

1 Electives — May be selected from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>MGT 137: Principles of Retailing</td>
<td>3</td>
</tr>
<tr>
<td>MGT 153: Small Business Management</td>
<td>3</td>
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<tr>
<td>MGT 212: Special Problems in Business</td>
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<tr>
<td>MGT 230: Salesmanship</td>
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<td>MGT 233: Advertising and Sales Promotion</td>
<td>3</td>
</tr>
<tr>
<td>OFC 160: Office Machines</td>
<td>3</td>
</tr>
<tr>
<td>OFC 172: Beginning Typing</td>
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</tbody>
</table>

Students may substitute ACC 131 and ACC 132 for ACC 201. Only three hours may be applied to the required number of hours for granting the degree.
MANAGEMENT CAREERS — ADMINISTRATIVE MANAGEMENT OPTION
(Associate Degree)
The Administrative Management option offers a continuation of the traditional management and business studies. This option is designed for students seeking a detailed examination of management practices, techniques, and theories.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 136 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>COM 131 Applied Composition and Speech*</td>
<td>3</td>
</tr>
<tr>
<td>HUM 101 Introduction to the Humanities</td>
<td>3</td>
</tr>
<tr>
<td>† Elective</td>
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</table>

<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 206 Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>ACC 201 Principles of Accounting I**</td>
<td>3</td>
</tr>
<tr>
<td>COM 132 Applied Composition and Speech*</td>
<td>3</td>
</tr>
<tr>
<td>CS 175 Introduction to Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>MTH 111 Mathematics for Business and Economics I or MTH 112 Mathematics for Business and Economics II or MTH 130 Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>† Elective</td>
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<table>
<thead>
<tr>
<th>SEMESTER III</th>
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</tr>
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<tbody>
<tr>
<td>ACC 202 Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 234 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>ECO 201 Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>PSY 131 Human Relations</td>
<td>3</td>
</tr>
<tr>
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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>MGT 242 Personnel Administration</td>
<td>3</td>
</tr>
<tr>
<td>BUS 237 Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>ECO 202 Principles of Economics II</td>
<td>3</td>
</tr>
<tr>
<td>OFC 231 Business Communications</td>
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<td>3</td>
</tr>
<tr>
<td>† Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Minimum Hours Required: 63

† Electives — May be selected from the following:
- MGT 137 Principles of Retailing
- MGT 153 Small Business Management
- MGT 212 Special Problems in Business
- MGT 230 Salesmanship
- MGT 233 Advertising and Sales Promotion
- OFC 160 Office Machines
- OFC 175 Beginning Typing

* 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.
** Students may substitute ACC 131 and ACC 132 for ACC 201. Only three hours may be applied to the required number of hours for granting the degree.

MANAGEMENT CAREERS — PURCHASING MANAGEMENT OPTION
(Associate Degree)
This option is designed to develop the fundamental skills and knowledge which enable individuals to assume technical and decision making positions within the purchasing function of profit and non-profit organizations.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>MGT 136 Principles of Management</td>
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<tr>
<td>MGT 160 Principles of Purchasing</td>
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</tr>
<tr>
<td>BUS 105 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>COM 131 Applied Composition and Speech*</td>
<td>3</td>
</tr>
<tr>
<td>MTH 111 Mathematics for Business and Economics I or MTH 112 Mathematics for Business and Economics II or MTH 130 Business Mathematics</td>
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<table>
<thead>
<tr>
<th>SEMESTER II</th>
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<tbody>
<tr>
<td>MGT 220 Materials Management</td>
<td>3</td>
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<tr>
<td>ACC 201 Principles of Accounting I**</td>
<td>3</td>
</tr>
<tr>
<td>COM 132 Applied Composition and Speech*</td>
<td>3</td>
</tr>
<tr>
<td>HUM 101 Introduction to the Humanities</td>
<td>3</td>
</tr>
<tr>
<td>† Elective</td>
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<table>
<thead>
<tr>
<th>SEMESTER III</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 206 Principles of Marketing</td>
<td>3</td>
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<tr>
<td>MGT 280 Industrial Management</td>
<td>3</td>
</tr>
<tr>
<td>CS 175 Introduction to Computer Science</td>
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<td>ECO 201 Principles of Economics I</td>
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<td>PSY 131 Human Relations</td>
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<tr>
<td>MGT 224 Quality Assurance</td>
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<td>BUS 234 Business Law</td>
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Minimum Hours Required: 60

† Electives — May be selected from the following:
- MGT 230 Salesmanship
- MGT 233 Advertising and Sales Promotion
- ACC 202 Principles of Accounting II
- BUS 237 Organizational Behavior
- MTH 232 Introductory Statistics
- OFC 231 Business Communications
- TRT 287 Physical Distribution Management I

* 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.
** Students may substitute ACC 131 and ACC 132 for ACC 201. Only three hours may be applied to the required number of hours for granting the degree.
**OFFICE CAREERS — ADMINISTRATIVE ASSISTANT OPTION**

(Associate Degree)

The primary objective of the Administrative Assistant Option to the Office Careers Program is to prepare students for positions as assistants to administrators within public and private firms and agencies. Emphasis in this program is on the development of organizational and management skills in addition to basic office skills.

### Semester I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFC 160</td>
<td>Office Machines</td>
<td>3</td>
</tr>
<tr>
<td>† OFC 172</td>
<td>Beginning Typing ** or</td>
<td></td>
</tr>
<tr>
<td>† OFC 174</td>
<td>Intermediate Typing</td>
<td></td>
</tr>
<tr>
<td>† COM 131</td>
<td>Applied Composition and Speech</td>
<td></td>
</tr>
<tr>
<td>MTH 130</td>
<td>Business Mathematics</td>
<td></td>
</tr>
<tr>
<td>BUS 105</td>
<td>Introduction to Business</td>
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<tr>
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**Minimum Hours Required: 17-18**

### Semester II

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<thead>
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<td>OFC 273</td>
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</tr>
<tr>
<td>OFC 162</td>
<td>Office Procedures</td>
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</tr>
<tr>
<td>OFC 185</td>
<td>Introduction to Word Processing</td>
<td></td>
</tr>
<tr>
<td>CS 175</td>
<td>Introduction to Computer Science</td>
<td></td>
</tr>
<tr>
<td>MGT 136</td>
<td>Principles of Management</td>
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</tr>
<tr>
<td>† COM 132</td>
<td>Applied Composition and Speech</td>
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<td>† Elective</td>
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**Minimum Hours Required: 17**

### Semester III

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<td>† OFC 273</td>
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<td>† Elective</td>
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<tr>
<td>OFC 231</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>ACC 131</td>
<td>Bookkeeping I</td>
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<tr>
<td>ACC 201</td>
<td>Principles of Accounting</td>
<td></td>
</tr>
<tr>
<td>PSY 131</td>
<td>Human Relations or</td>
<td></td>
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<tr>
<td>PSY 105</td>
<td>Introduction to Psychology</td>
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**Minimum Hours Required: 17**

### Semester IV

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<tr>
<td>OFC 255</td>
<td>Office Management or</td>
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<tr>
<td>BUS 237</td>
<td>Organizational Behavior</td>
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<tr>
<td>HUM 101</td>
<td>Introduction to Humanities</td>
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<td>† Electives</td>
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</table>

**Minimum Hours Required: 15**

### Electives — Must be taken from the following:

- OFC 803804 Cooperative Work Experience
- ACC 132 Bookkeeping II
- ACC 202 Principles of Accounting II
- BUS 143 Financial Management
- BUS 234 Business Law
- BUS 237 Organizational Behavior
- MGT 136 Principles of Management
- MGT 242 Personnel Administration
- CS 250 Contemporary Topics in Computer Science
- CS 251 Special Topics in Computer Science
- ECO 201 Principles of Economics I
- SPE 105 Fundamentals of Public Speaking

**Students may be placed in typing courses based on proficiency level determined by previous training, experience and/or placement tests.**

**Students may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the Division Chair. However, students must take SPE 105 as an elective when substituting ENG 101 and ENG 102.**

**OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 160.**

**OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.**

---

**OFFICE CAREERS — GENERAL OFFICE**

(Certificate)

The General Office Certificate Program is designed to provide the student with a basic working knowledge and skills in various office activities. A general knowledge of business concepts and procedures is provided.

### Semester I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFC 160</td>
<td>Office Machines</td>
<td>3</td>
</tr>
<tr>
<td>† OFC 172</td>
<td>Beginning Typing **</td>
<td>3</td>
</tr>
<tr>
<td>† COM 131</td>
<td>Applied Composition and Speech</td>
<td>3</td>
</tr>
<tr>
<td>MGT 242</td>
<td>Business Law</td>
<td></td>
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<tr>
<td>BUS 105</td>
<td>Introduction to Business</td>
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**Minimum Hours Required: 19**

### Semester II

<table>
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<tbody>
<tr>
<td>ACC 131</td>
<td>Bookkeeping I</td>
<td>3</td>
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<tr>
<td>BUS 105</td>
<td>Introduction to Business</td>
<td></td>
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<tr>
<td>CS 175</td>
<td>Introduction to Computer Science</td>
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</tr>
<tr>
<td>† Electives</td>
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</table>

**Minimum Hours Required: 16**

### Electives — Must be taken from the following:

- OFC 103 Speedwriting Theory
- OFC 104 Speedwriting Dictation
- OFC 159 Beginning Shorthand
- OFC 162 Office Procedures
- OFC 165 Introduction to Word Processing
- OFC 174 Intermediate Shorthand
- OFC 201 Principles of Accounting I
- COM 132 Applied Composition and Speech
- PSY 105 Introduction to Psychology
- PSY 131 Human Relations or
- MGT 136 Principles of Management
- MGT 242 Personnel Administration
- BUS 234 Business Law
- CS 250 Contemporary Topics in Computer Science
- OFC 273 Advanced Typing
- OFF 275 Secretarial Procedures
- OFC 203 Cooperative Work Experience or
- OFC 998 Cooperative Work Experience

**Students who demonstrate proficiency by previous training, experience or placement tests may substitute a course from the electives listed for the program.**

**OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 160.**

**OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.**

**OFC 187, OFC 188 and OFC 189 taken cumulatively will be equivalent to OFC 166.**
### OFFICE CAREERS — GENERAL OFFICE
(Certificate — Office Clerical Emphasis)

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFC 160</td>
<td>Office Machines*</td>
</tr>
<tr>
<td>OFC 162</td>
<td>Office Procedures</td>
</tr>
<tr>
<td>OFC 172</td>
<td>Beginning Typing**</td>
</tr>
<tr>
<td>COM 131</td>
<td>Applied Composition and Speech</td>
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<tr>
<td>MTH 130</td>
<td>Business Mathematics</td>
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<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>OFC 165</td>
<td>Introduction to Word Processing</td>
</tr>
<tr>
<td>OFC 174</td>
<td>Intermediate Typing</td>
</tr>
<tr>
<td>OFC 231</td>
<td>Business Communications</td>
</tr>
<tr>
<td>ACC 132</td>
<td>Bookkeeping I</td>
</tr>
<tr>
<td>BUS 105</td>
<td>Introduction to Business</td>
</tr>
<tr>
<td>CS 175</td>
<td>Introduction to Computer Science</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

**Minimum Hours Required:**

35

**Electives — Must be taken from the following:**

- OFC 103 Speedwriting Theory
- OFC 104 Speedwriting Dictation
- OFC 159 Beginning Shorthand
- OFC 166 Intermediate Shorthand***
- OFC 231 Business Communications
- ACC 132 Bookkeeping I
- ACC 201 Principles of Accounting I
- COM 132 Applied Composition and Speech
- PSY 105 Introduction to Psychology or
- PSY 131 Human Relations
- MGT 136 Principles of Management
- BUS 234 Business Law
- CS 250 Contemporary Topics in Computer Science
- OFC 273 Advanced Typing
- OFC 275 Secretarial Procedures
- OFC 803 Cooperative Work Experience or
- OFC 804 Cooperative Work Experience *(4)*

**Students who can demonstrate proficiency by previous training, experience or placement tests may substitute a course from the electives listed for the program.

* OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 160.
** OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.
*** OFC 187, OFC 188 and OFC 189 taken cumulatively will be equivalent to OFC 166.

### OFFICE CAREERS — GENERAL OFFICE
(Certificate — Accounting Emphasis)

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
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<td>OFC 160</td>
<td>Office Machines*</td>
</tr>
<tr>
<td>OFC 172</td>
<td>Beginning Typing**</td>
</tr>
<tr>
<td>ACC 131</td>
<td>Bookkeeping I or</td>
</tr>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>OFC 103</td>
<td>Speedwriting Theory</td>
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<tr>
<td>OFC 104</td>
<td>Speedwriting Dictation</td>
</tr>
<tr>
<td>OFC 159</td>
<td>Beginning Shorthand</td>
</tr>
<tr>
<td>OFC 162</td>
<td>Office Procedures</td>
</tr>
<tr>
<td>OFC 166</td>
<td>Intermediate Shorthand***</td>
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<tr>
<td>OFC 174</td>
<td>Intermediate Typing</td>
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<tr>
<td>OFC 231</td>
<td>Business Communications</td>
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<tr>
<td>ACC 132</td>
<td>Bookkeeping I</td>
</tr>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>COM 132</td>
<td>Applied Composition and Speech</td>
</tr>
<tr>
<td>PSY 105</td>
<td>Introduction to Psychology or</td>
</tr>
<tr>
<td>PSY 131</td>
<td>Human Relations</td>
</tr>
<tr>
<td>MGT 136</td>
<td>Principles of Management</td>
</tr>
<tr>
<td>BUS 234</td>
<td>Business Law</td>
</tr>
<tr>
<td>CS 250</td>
<td>Contemporary Topics in Computer Science</td>
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<tr>
<td>OFC 273</td>
<td>Advanced Typing</td>
</tr>
<tr>
<td>OFC 275</td>
<td>Secretarial Procedures</td>
</tr>
<tr>
<td>OFC 803</td>
<td>Cooperative Work Experience or</td>
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<tr>
<td>OFC 804</td>
<td>Cooperative Work Experience</td>
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</tbody>
</table>

**Minimum Hours Required:**

35

**Electives — Must be taken from the following:**

- OFC 103 Speedwriting Theory
- OFC 104 Speedwriting Dictation
- OFC 159 Beginning Shorthand
- OFC 162 Office Procedures
- OFC 166 Intermediate Shorthand***
- OFC 174 Intermediate Typing
- OFC 231 Business Communications
- ACC 132 Bookkeeping I
- ACC 201 Principles of Accounting I
- COM 132 Applied Composition and Speech
- PSY 105 Introduction to Psychology or
- PSY 131 Human Relations
- MGT 136 Principles of Management
- BUS 234 Business Law
- CS 250 Contemporary Topics in Computer Science
- OFC 273 Advanced Typing
- OFC 275 Secretarial Procedures
- OFC 803 Cooperative Work Experience or
- OFC 804 Cooperative Work Experience *(4)*

**Students who can demonstrate proficiency by previous training, experience or placement tests may substitute a course from the electives listed for the program.

* OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 160.
** OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.
*** OFC 187, OFC 188 and OFC 189 taken cumulatively will be equivalent to OFC 166.
OFFICE CAREERS — LEGAL SECRETARY OPTION

(Associate Degree)

The primary objective of this option is to prepare students to become competent legal secretaries, capable of performing office and clerical duties within public and private firms and agencies. Students enrolled in the program will have an opportunity to secure intensive training in basic skills. An Associate in Applied Arts and Sciences Degree is awarded for successful completion.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>OFC 159 Beginning Shorthand or OFC 103 Speedwriting</td>
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</tr>
<tr>
<td>OFC 160 Office Machines</td>
<td>3</td>
</tr>
<tr>
<td>† OFC 172 Beginning Typing** or OFC 174 Intermediate Typing</td>
<td>(2)</td>
</tr>
<tr>
<td>† COM 131 Applied Composition and Speech</td>
<td>3</td>
</tr>
<tr>
<td>MTH 130 Business Mathematics</td>
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<td>** Total: 15-16</td>
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<th>SEMESTER II</th>
<th>CREDIT HOURS</th>
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<tbody>
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<td>† OFC 174 Intermediate Typing* or OFC 273 Advanced Typing</td>
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<td>OFC 162 Office Procedures</td>
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</tr>
<tr>
<td>ACC 131 Bookkeeping 1 or ACC 201 Principles of Accounting I</td>
<td>3</td>
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<td>BUS 105 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>† COM 132 Applied Composition and Speech</td>
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<table>
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<tr>
<td>OFC 165 Introduction to Word Processing</td>
<td>3</td>
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<tr>
<td>OFC 167 Legal Terminology and Transcription</td>
<td>3</td>
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<tr>
<td>OFC 231 Business Correspondence</td>
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<tr>
<td># OFC 266 Advanced Shorthand</td>
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<tr>
<td>OFC 273 Advanced Typing or † Elective</td>
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<tr>
<td>CS 175 Introduction to Computer Science</td>
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<th>CREDIT HOURS</th>
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<td>OFC 274 Legal Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>OFC 275 Secretarial Procedures or OFC 803 Cooperative Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>OFC 804 Cooperative Work Experience</td>
<td>4</td>
</tr>
<tr>
<td>HUM 101 Introduction to Humanities</td>
<td>3</td>
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<tr>
<td>PSY 131 Human Relations or PSY 105 Introduction to Psychology</td>
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<td>** Total: 15-16</td>
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</tbody>
</table>

Minimum Hours Required: 67
OFFICE CAREERS — PROFESSIONAL SECRETARY OPTION

(Associate Degree)

The primary objective of this option is to prepare students to become competent secretaries, capable of performing office and clerical duties within public and private firms and agencies. Students enrolled in the program will have an opportunity to secure intensive training in basic skills. An Associate in Applied Arts and Sciences Degree is awarded for successful completion.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>OFC 160 Office Machines*</td>
</tr>
<tr>
<td>OFC 159 Beginning Shorthand or Speedwriting</td>
</tr>
<tr>
<td>OFC 103 Speedwriting</td>
</tr>
<tr>
<td>↓ OFC 172 Intermediate Typing** or OFC 174 Advanced Typing (2)</td>
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<tr>
<td>↓ COM 131 Applied Composition and Speech</td>
</tr>
<tr>
<td>MTH 130 Business Mathematics</td>
</tr>
<tr>
<td>15-16</td>
</tr>
<tr>
<td>SEMESTER II</td>
</tr>
<tr>
<td>OFC 166 Intermediate Shorthand*** or OFC 104 Speedwriting Dictation</td>
</tr>
<tr>
<td>↓ OFC 174 Intermediate Typing or OFC 273 Advanced Typing</td>
</tr>
<tr>
<td>OFC 162 Office Procedures</td>
</tr>
<tr>
<td>ACC 131 Bookkeeping I or ACC 201 Principles of Accounting I</td>
</tr>
<tr>
<td>BUS 105 Introduction to Business</td>
</tr>
<tr>
<td>↓ COM 132 Applied Composition and Speech</td>
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<tr>
<td>17-18</td>
</tr>
<tr>
<td>SEMESTER III</td>
</tr>
<tr>
<td>OFC 165 Introduction to Word Processing</td>
</tr>
<tr>
<td>OFC 231 Business Correspondence</td>
</tr>
<tr>
<td>CS 175 Introduction to Computer Science</td>
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<tr>
<td># OFC 266 Advanced Shorthand</td>
</tr>
<tr>
<td>PSY 131 Human Relations or PSY 105 Introduction to Psychology</td>
</tr>
<tr>
<td>↓ OFC 273 Advanced Typing or</td>
</tr>
<tr>
<td>↓ Elective</td>
</tr>
<tr>
<td>18-19</td>
</tr>
<tr>
<td>SEMESTER IV</td>
</tr>
<tr>
<td>OFC 265 Word Processing Practices and Procedures</td>
</tr>
<tr>
<td>OFC 275 Secretarial Procedures or OFC 803 Cooperative Work Experience or OFC 804 Cooperative Work Experience (4)</td>
</tr>
<tr>
<td>HUM 101 Introduction to Humanities</td>
</tr>
<tr>
<td>↓ Electives</td>
</tr>
<tr>
<td>15-17</td>
</tr>
</tbody>
</table>

Minimum Required Hours: 67
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 studies with special emphasis given to actual social service agency involvement and work.

### SOCIAL WORK ASSOCIATE (Certificate)

**SEMESTER I**
- HS 131 Orientation to Human Services 3
- ENG 101 Composition and Expository Reading 3
- PSY 105 Introduction to Psychology 3
- SOC 101 Introduction to Sociology 3
- † Elective 3-4
  
  **SEMESTER II**
- ENG 102 Composition and Literature 3
- PSY 201 Developmental Psychology 3
- SOC 102 Social Problems 3
- SOC 206 Introduction to Social Work 3
- † Elective 3-4

**Minimum Hours Required:** 30

### SOCIEAL WORK ASSOCIATE (Certificate)

**SEMESTER I**
- HS 131 Orientation to Human Services 3
- COM 131 Applied Composition and Speech* 3
- HD 107 Developing Leadership Behavior 3
- PSY 131 Developing Leadership Behavior 3
- SOC 101 Introduction to Sociology 3

**SEMESTER II**
- HS 233 Counseling for the Paraprofessional 3
- HS 235 Introduction to Mental Health 3
- HS 244 Social Work Problems and Practices 3
- HS 703 Cooperative Work Experience 3
- SOC 206 Introduction to Social Work 3

**Minimum Hours Required:** 30

† Electives — Must be selected from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
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<td>ANT 101</td>
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</tr>
<tr>
<td>BIO 116</td>
<td>Biological Science</td>
<td>4</td>
</tr>
<tr>
<td>CD 140</td>
<td>Early Childhood Development</td>
<td>3</td>
</tr>
<tr>
<td>GVT 201</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>GVT 202</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>HST 101</td>
<td>History of the United States</td>
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</tr>
<tr>
<td>HST 102</td>
<td>History of the United States</td>
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</tr>
<tr>
<td>HUM 101</td>
<td>Introduction to the Humanities</td>
<td>3</td>
</tr>
<tr>
<td>PEH 101</td>
<td>Fundamentals of Health</td>
<td>3</td>
</tr>
<tr>
<td>PEH 257</td>
<td>Advanced First Aid and Emergency Care</td>
<td>3</td>
</tr>
<tr>
<td>PSY 207</td>
<td>Social Psychology</td>
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<td>RD 101</td>
<td>Effective College Reading</td>
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<tr>
<td>SOC 205</td>
<td>Introduction to Social Problems</td>
<td>3</td>
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<td>SOC 231</td>
<td>Urban Social Problems</td>
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<tr>
<td>SPA 101</td>
<td>Beginning Spanish</td>
<td>4</td>
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</table>

* HS 703, HS 704, HS 713, HS 714, HS 802, HS 804, HS 812, HS 814, may be taken with consent of instructor.

† English 101 may be substituted with the approval of the program coordinator.

**SEMESTER I**
- HS 131 Orientation to Human Services 3
- ENG 101 Composition and Expository Reading 3
- PSY 105 Introduction to Psychology 3
- SOC 101 Introduction to Sociology 3
### TRAINING PARAPROFESSIONALS FOR THE DEAF

**Associate Degree**

This program is designed to train individuals at a paraprofessional level to work with the deaf. 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.

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<tr>
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**Minimum Hours Required:** 68

* TPD 247 may be repeated for credit as topics vary

### TRAINING PARAPROFESSIONALS FOR THE DEAF

**Certificate**

This certificate 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.

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**Minimum Hours Required:** 32

* TPD 247 may be repeated for credit as topics vary

† Electives — Must be selected from the following:

- HD 105 Basic Processes of Interpersonal Relationships 3
- HD 106 Personal and Social Growth 3
- PSY 105 Introduction to Psychology 3
- PSY 201 Developmental Psychology 3
TRANSPORTATION TECHNOLOGY

(Associate Degree)

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.

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1 Electives — Must be selected from Business Electives listed below or the following:

- GVT 201 American Government 3
- GVT 202 American Government 3
- HD 107 Developing Leadership Behavior 3
- HST 101 History of the United States 3
- HST 102 History of the United States 3
- MTH 112 Mathematics for Business and Economics II 3
- SPE 105 Fundamentals of Public Speaking 3

1 Business Elective — Must be selected from the following:

- TAT 250 Studies in Transportation Technology* 1
- ACC 205 Business Finance 3
- BUS 234 Business Law 3
- BUS 237 Organizational Behavior 3
- CS 175 Introduction to Computer Science 3
- ECO 201 Principles of Economics I 3
- ECO 202 Principles of Economics II 3
- MGT 206 Principles of Marketing 3
- OFC 160 Office Machines 3
- OFC 172 Beginning Typing 3

*TRT 250 may be repeated with different emphasis for elective credit.

Minimum Hours Required: 60
WELDING TECHNOLOGY

(Associate Degree)

The Welding Technology program is designed to prepare the student in the basic processes of oxyacetylene and arc welding plus many specialized welding applications as options to fit the specific needs of the student. In addition, instruction is offered in related support areas such as metallurgy, tooling, drafting, pattern layout and characteristics of materials. Thus, the program offers preparation for both entry level jobs as well as welding inspectors.

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.

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Minimum Hours Required: 65

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Minimum Hours Required: 65

† Electives must be selected from the following:
ACC 131      Bookkeeping I
ACC 132      Bookkeeping II
GVT 201      American Government
MTH 111      Mathematics for Business and Economics
WE 218       Applied Welding Metallurgy
WE 220       Special Welding Application I

WELDING TECHNOLOGY

(Certificate)

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Minimum Hours Required: 35

* WE 704 Cooperative Work Experience may be substituted for WE 213 or WE 216.
VOCATIONAL NURSING

The Vocational Nursing Program is a twelve month program offered at Eastfield College under the administration and accreditation of the El Centro College Vocational Nursing Program. Students apply for admission to Eastfield College, attend classes at Eastfield College but receive their certificate of completion from El Centro College. The program is accredited by the Board of Vocational Nurse Examiners for the State of Texas. Upon completion of the program, the student may write the State Licensing Examination for Vocational Nurses, in order to become a Licensed Vocational Nurse (LVN).

The Vocational Nursing Program prepares individuals to give direct patient care under the supervision of a registered nurse or a physician. The program includes classroom and laboratory work on campus as well as clinical experience at various area hospitals. Students are admitted to the program in both the fall and spring semesters.

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<th>LAB HOURS</th>
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Admission requirements include an orientation session, satisfactory scores on a pre-entrance examination, and completion of all requirements for admission as a full time student to the college.
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* Programs are offered at the designated colleges through El Centro College.
** Second Year courses are offered at the designated colleges through El Centro College.