All blank pages have been removed from this document.
In 1987, the Texas Legislature passed House Bill 2182. This bill, which becomes effective with the 1989 Fall Semester, requires that all Texas public college and university students be tested for reading, writing and mathematics skills. This legislation applies to students enrolling in the Dallas Community Colleges - Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View, North Lake and Richland.

Q. What is the Texas Academic Skills Program (TASP)?
A. TASP is a diagnostic testing program to assess the academic skills of students entering Texas public colleges and universities. It is designed to determine if students have the reading, writing and math skills necessary to succeed in college courses. The results of the test will point to specific academic strengths and weaknesses and will help advisors and counselors place students in courses in which they can do well and the necessary skills for college success can be developed. If students score poorly in one or more areas of the test, TASP requires them to enroll in Developmental Studies courses or be involved in other academic skills building efforts until all sections of the test are passed.

Q. Who must take the TASP test?
A. Beginning with the Fall 1989 semester, all college students will be expected to take TASP. More specifically, students desiring an Associate of Arts and Sciences Degree, an Associate of Applied Arts and Sciences Degree, a bachelor's degree or students planning to become a certified teacher in Texas MUST take and pass TASP.

Q. Are there any exemptions from taking the TASP test?
A. Students who have completed at least three (3) credit hours of college-level work prior to the 1989 Fall Semester will be exempt from taking TASP. Courses that count toward this exemption are those taken at the DCCCD or other regionally-accredited colleges or universities, and which will count toward graduation.

The following DCCCD courses or their equivalents will NOT count toward the three hours: Any course numbered below 100, Art 199, College Learning Skills 100, Developmental Communications 120, Human Development 100, Human Development 110, Library Skills 101, Music 199, and Theatre 199.

Q. Must a student take TASP prior to entering a DCCCD college?
A. No, it is not necessary that a student take TASP prior to enrolling. However, DCCCD students must take TASP prior to completing fifteen (15) hours of college-level courses. In most cases, 5 courses will equal 15 hours of credit.

Q. If students must take TASP by their 15th credit hour, does this mean they must pass TASP by their 15th credit hour?
A. No, students are required only to take TASP prior to completing their 15th credit hour. If students do not “pass” a section or sections of TASP, they will have the opportunity to improve their skills. Students must pass all sections of TASP before they can be awarded a degree from the DCCCD. Students who plan to transfer to a four-year state college or university will not be allowed to take junior or senior courses until they have passed all sections of TASP.

Q. How and when will the TASP test be given?
A. The three-part (reading, writing and mathematics) test will be given on a statewide basis at designated testing sites, much like the SAT and ACT tests. Each DCCCD college is a test site. During 1989, the test will be given on June 10, July 29, September 30, and November 18. Testing dates for 1990 will be announced later. TASP registration materials are available in the Counseling Centers and/or Testing Centers of each of the DCCCD colleges.

Q. What is the cost of the TASP test? Is there a study guide available?
A. The cost for the total test is $24. An Official TASP Study Guide can be purchased in DCCCD College Book Stores or it can be ordered by writing to TASP Project, P.O. Box 1403478, Austin, Texas, 78714-0347. The cost of the Study Guide is $12. Study Guides are available for reference use in each of the DCCCD college libraries.

Q. How will TASP affect students planning to attend a DCCCD college?
A. Students planning to attend a DCCCD college will continue to complete the usual steps for enrollment. TASP scores should be reported after being admitted by those who have taken TASP. However, for students who have not taken TASP, the college will indicate whether or not they should take the DCCCD’s assessment test. Then, before completing their 15th credit hour, students must take the TASP test.

If you would like more information on the Texas Academic Skills Program, please contact the college’s Counseling Center.
North Lake College
5001 N. MacArthur Blvd.
Irving, Texas 75038-3899

Call for information: Counseling — 659-5210, Admissions — 659-5220

This catalog contains policies, regulations, and procedures in existence at the time this publication went to press. The District Colleges reserve the right to make changes at any time to reflect current Board policies, administrative regulations and procedures, and applicable State and Federal regulations. This catalog is for information purposes and does not constitute a contract.

This publication prepared by the Dallas County Community College District Office of Public Information.

The Dallas County Community College District is an equal opportunity institution.
### Summer Sessions, 1989

**First Summer Session: (Based on 4 day class week)**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 29 (M)</td>
<td>Memorial Day Holiday</td>
</tr>
<tr>
<td>May 31 (W)</td>
<td>Registration (Richland Only)</td>
</tr>
<tr>
<td>June 1 (R)</td>
<td>Registration (All Campuses)</td>
</tr>
<tr>
<td>June 5 (M)</td>
<td>Classes Begin</td>
</tr>
<tr>
<td>June 8 (R)</td>
<td>4th Class Day</td>
</tr>
<tr>
<td>June 9 (F)</td>
<td>Class Day</td>
</tr>
<tr>
<td>June 22 (R)</td>
<td>Last Day to Withdraw With a Grade of &quot;W&quot;</td>
</tr>
<tr>
<td>July 4 (T)</td>
<td>Fourth of July Holiday</td>
</tr>
<tr>
<td>July 6 (R)</td>
<td>Final Exams</td>
</tr>
<tr>
<td>July 6 (R)</td>
<td>Semester Closes</td>
</tr>
<tr>
<td>July 10 (M)</td>
<td>Grades Due in Registrar's Office by 10:00 a.m.</td>
</tr>
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**Second Summer Session: (Based on 4 day class week)**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>July 11 (T)</td>
<td>Registration (All Campuses)</td>
</tr>
<tr>
<td>July 12 (W)</td>
<td>Classes Begin</td>
</tr>
<tr>
<td>July 18 (T)</td>
<td>4th Class Day</td>
</tr>
<tr>
<td>August 3 (R)</td>
<td>Last Day to Withdraw With a Grade of &quot;W&quot;</td>
</tr>
<tr>
<td>August 15 (T)</td>
<td>Final Exams</td>
</tr>
<tr>
<td>August 15 (T)</td>
<td>Semester Closes</td>
</tr>
<tr>
<td>August 17 (R)</td>
<td>Grades Due in Registrar's Office by 10:00 a.m.</td>
</tr>
</tbody>
</table>

### Fall Semester, 1989

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 21 (M)</td>
<td>Faculty Reports</td>
</tr>
<tr>
<td>August 21-24  (M-R)</td>
<td>Registration Period</td>
</tr>
<tr>
<td>August 25 (F)</td>
<td>Faculty Professional Development</td>
</tr>
<tr>
<td>August 25 (F)</td>
<td>Friday Only Classes Begin</td>
</tr>
<tr>
<td>August 26 (S)</td>
<td>Saturday Only Classes Begin</td>
</tr>
<tr>
<td>August 28 (M-R)</td>
<td>Classes Begin (M-R) Classes</td>
</tr>
<tr>
<td>September 1 (F)</td>
<td>No Friday Only Classes</td>
</tr>
<tr>
<td>September 2 (S)</td>
<td>No Saturday Only Classes</td>
</tr>
<tr>
<td>September 4 (M)</td>
<td>Labor Day Holiday</td>
</tr>
<tr>
<td>September 9 (S)</td>
<td>12th Class Day</td>
</tr>
<tr>
<td>November 2 (R)</td>
<td>Last Day to Withdraw With a Grade of &quot;W&quot;</td>
</tr>
<tr>
<td>November 23 (R)</td>
<td>Thanksgiving Holidays Begin</td>
</tr>
<tr>
<td>November 27 (M)</td>
<td>Classes Resume</td>
</tr>
<tr>
<td>December 8 (F)</td>
<td>Final Exams for Friday Only Classes</td>
</tr>
<tr>
<td>December 9 (S)</td>
<td>Final Exams for Saturday Only Classes</td>
</tr>
<tr>
<td>December 11-14 (M-R)</td>
<td>Final Exams for M-R Classes</td>
</tr>
<tr>
<td>December 14 (R)</td>
<td>Semester Closes</td>
</tr>
<tr>
<td>December 18 (M)</td>
<td>Grades Due in Registrar's Office by 10 a.m.</td>
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</table>

### Spring Semester, 1990

**First Summer Session: (Based on 4 day class week, except for first week)**

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<td>Registration (All Campuses)</td>
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<tr>
<td>June 4 (M)</td>
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<tr>
<td>June 7 (R)</td>
<td>4th Class Day</td>
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<tr>
<td>*June 8 (F)</td>
<td>Class Day (Only Friday Class Day)</td>
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<td>June 21 (R)</td>
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<td>July 4 (W)</td>
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<td>August 14 (T)</td>
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### Summer Sessions, 1990

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North Lake College makes educational and cultural opportunities available to all area citizens with its accessible location and active involvement within the community. This commitment to serve the community has resulted in a fine balance of academic courses, technical programs and continuing education offerings.

Outstanding facilities provide a stimulating and pleasant environment for students, and faculty and staff work hard to implement the best-known concepts in teaching and learning. This combination makes North Lake an exciting center for personal growth for each of its nearly 10,000 students.

The College is proud of its $21 million campus, but recognizes that learning can also take place outside of the traditional classroom. For that reason, North Lake has extended many of its course offerings into businesses, community and public centers, and a variety of other places where learning is important. North Lake also provides the auxiliary benefits of a complete counseling center, job placement service, flexible entry registration, self-paced study and other services that help students learn more efficiently.

The Campus

Opened in the fall of 1977, North Lake occupies 276 wooded acres in the Las Colinas area of Irving, at 5001 N. MacArthur Boulevard. This architecturally remarkable college is surrounded by gently rolling hills accentuated by a beautiful nine-acre lake. The energy-efficient buildings are designed in a series of terraces which follow the natural elevations of the building site.

North Lake's excellent facilities include a 450-seat Performance Hall, a 2,000 seat gymnasium, and a covered natatorium, complemented by exceptionally well-equipped laboratories, studios, and learning centers.

Accreditation

North Lake College is a fully recognized member of: The Southern Association of Colleges and Schools.

Institutional Memberships

The American Association of Community and Junior Colleges
The Texas Public Community/Junior College Association
The Texas Association of Colleges and Universities
The League for Innovation in the Community College

North Lake College 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.

President .................................................. James F. Horton, Jr. .............................. 659-5229
Vice President of Instruction ................. Joel E. Vela ........................................ 659-5240
Vice President of Student Development ........ Margaret Lewis .................. 659-5242
Vice President of Business Services .......... James P. Hughes .................... 659-5235
Dean of Career & Continuing Education ...... Richard Fleming ............. 659-5204
Dean of Educational Resources ................. Jim Picquet .............................. 659-5340
Director of Admissions and Registration ....... Stephen Twenge ............... 659-5225
Director of Cooperative Education .......... Richard Fleming ............. 659-5370
Director of Financial Aid ......................... Nancy Crumrin ................. 659-5227
Director of Public Information ................. David A. Wright .......... 659-5231
Director of Special Services Program .......... Mary Ciminelli ............... 659-5237
Natatorium Director ............................. Jean Henry ....................... 659-5358
Director of Counseling .......................... Lynda Edwards ............... 659-5216

DIVISION CHAIRPERSONS

Business Management ................................. Gary Bacon ....................... 659-5290
Communications ...................................... Patricia Mullin ................. 659-5270
Humanities/Math/Technology ....................... Grady Grizzle .................. 659-5320
Natural and Social Sciences and PE ............ Bob Agnew .................... 659-5250
Technology ................................................. Clifton Weaver .......... 659-5233

OTHER TELEPHONE NUMBERS

Admissions and Registration ......................... 659-5220
Business Office ...................................... 659-5244
Center for Women and Returning Adults .............. 659-5373
College Information .................................. 659-5230
Continuing Education Office ...................... 659-5200
Counseling Center .................................. 659-5210
Data Center ......................................... 659-5269
Health Center ....................................... 659-5209
Library ................................................. 659-5347
Personnel ............................................. 659-5246
Physical Plant ...................................... 659-5310
Placement Office .................................. 659-5211
Public Information .................................. 659-5230
Safety and Security ............................... 659-5300
Wallace Bookstore .................................. 550-0509
NORTH LAKE COLLEGE FACULTY AND STAFF

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Ates, Clarence . . . . . Counselor
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Blankenship, Patsy . . . . Office Careers
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Blevins, Larry G. . . . . Electricity
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Bolin, Bill . . . . . . . . . . . . Computer Information Systems/Engineering
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Bravo, Luis . . . . . . . . . . . . Accounting
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Texas, C.P.A.

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Nova, Ph.D.

Burns, Robert . . . . . . Electronics Technology
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Castilla, Rene . . . . . . Journalism
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Chamberlain, Enrique A . . . . . . Head Librarian
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Cherry, Grady . . . . . . English
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Crowley, Lee B. . . . . Instructional Development Consultant
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Davis, Jeanne . . . . . . . . . Psychology
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Henry, Jean Collins . . . . . . Natatorium Director
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Horton, James F. Jr. . . . . President
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Jim Hughes . . . . . . . . . . . . Vice President, Business Services
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Ironsides, Robert . . . . Mid-Management
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Univ., M.Ed.

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Virginia Jones . . . . . . College Nurse
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B.S., Texas Woman's Univ., M.S.

Keagy, Joan . . . . . . . . . . . Diagnactician/LD Specialist
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Kelemen, Paul . . . . . . . Counselor
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North Texas State Univ., Study

King, Floyd . . . . . . . . . . . Chemistry
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Kirchhoff, Edwin E. . . . . Economics
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Knowles, Jim ........................................... Physics
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Kubicek, Leonard .................................. Geology/Environmental Science
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Univ. of Northern Colorado, Ed.D.

Lewis, Margaret ................................. Vice President of Student Development
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Lindsey, Paul ...................................... Air Conditioning/Refrigeration

Lindstrom, Peter ................................ Mathematics
Allegheny College B.S., Kent State Univ., M.A.
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Long, Linda ........................................ Speech
El Centro College, A.A., Southern Methodist Univ., B.F.A.
North Texas State Univ., M.S., East Texas State Univ., Ed.D.

Madewell, D'Ann .................................. English
Kansas State College of Pittsburgh, B.A.
North Texas State Univ., M.A., Ph.D.

Magee, Paul ........................................ Sociology
Harding College, B.A., M.A., Washington Univ., M.A., Ph.D.

Mancusi, Dennis ................................. Program Director, Continuing Education
Carthage College, B.S., University of Wisconsin, M.S.

Mays, Marilyn ..................................... Mathematics
Texas Tech Univ., B.A., M.S., Southern Methodist Univ.,
Univ. of North Texas, Ph.D.

McClellan, Rachel .............................. Art
Univ. of Dallas, B.A., M.A.

Miller, Harvey .................................... Physical Education
Sam Houston Univ., B.S., M.Ed., Texas A&M Univ., Study

Mokhtari, Kouider ............................... Director, Center for Independent Study
University Med V, B.A., Ohio University, M.A., Ph.D.

Morman, Sherla Jean ............................. Mathematics
Southern Arkansas Univ., B.S., Louisiana State Univ., M.A.,
University of Houston, Ed.D.

Morton, Thomas .................................. Real Estate
Univ. of Texas, B.A., Western States Univ.
for Professional Studies, M.A., Ph.D.

Mullican, Patricia ............................... Chairperson, Communications Division
Miami University, B.A., University of Iowa, M.A., Univ. of Texas
at Austin, Ph.D.

Norwood, Annetta ................................ Accounting
Southern Methodist University, B.B.A., M.B.A.
University of Texas at Arlington, Study

Nunn, Bob .......................................... Gallery Director/Instructor
East Texas State Univ., B.A., University of Dallas, M.A., Southern
Methodist Univ., M.F.A.

Olson, Margot .................................... Instructional Development Consultant
Carnegie-Mellon Univ., B.S.,
Florida State Univ., M.S., Ph.D.

Osentowski, Francis ............................. Music
Keaney State College, B.M. Ed., North Texas State University,
M.M. Ed., D.M.A.

Padgett, Suzanne ............................... English
University of Arizona, B.A., M.A., Ph.D., Memphis State University,
M.A.

Parker, Brenda ................................. Instructor, Dance
Texas Christian Univ., M.F.A.

Parr, Lona ........................................ Instructor, Physical Education
Univ. of Texas, B.S., Southern Methodist Univ., M.S.

Picchioni, Anthony ............................. Instructor, History
Univ. of Texas at Arlington, B.A., M.A.
North Texas State Univ., M.Ed., Ph.D.

Picquet, Jim ....................................... Dean of Educational Resources
Texas A&M Univ., B.S., East Texas State Univ., M.S.

Powell, Joyce .................................... Instructor, English
Mississippi College, B.A., University of Mississippi, M.Ed., East
Texas State University, D.Ed.

Proctor, William H ......................... Instructor, Real Estate
Univ. of Texas, B.A., Princeton Theological Seminary, Th.M.

Ray, Marty ........................................ Instructor, Art
East Texas State Univ., B.A., Southern Methodist Univ., M.F.A.

Reppond, Kent M ......................... Instructor, Biology
Midwestern Univ., B.S., East Texas State Univ., M.S.

Rike, Charlotte ................................. Instructor, History
Univ. of Arkansas, B.A., Univ. of Wyoming, Study

Robbins, Dalton O ............................. Instructor, Diesel Mechanics
U.S.A.F. Schools; National Institute for Automotive Excellence
International Correspondence Schools; Dana Parts, Doctor of
Motors for Diesel Mechanics

Sanz, Matilda .................................... Instructor, English
Incarnate Word College, B.A., Texas A&M University, M.A.,
Texas Woman's Univ., Ph.D.

Scott, John Pope ............................... Technical Theatre Specialist
Univ. of Texas at Austin, B.F.A.

Seeley, Robert ................................. Instructor, English & German
North Texas State Univ., B.A., M.M.Ed.,
Southwestern Baptist Theological Seminary, D.M.A.

Sims, Ruth ....................................... Instructor, Biology
Texas Woman's Univ., B.A.
Univ. of Texas Southwestern Medical School, M.A., Ph.D.

Smidow, Barry ................................ Instructional Associate
East Texas State Univ., B.S.

Swaim, Gary D ................................. Instructor, Humanities
Univ. of California, Riverside, B.A.,
Univ. of Redlands/Clairemont Graduate School, Ph.D.

Thompson, Shirley ............................. Instructor, Physical Education
American River College, A.A., Texas Woman's Univ., B.S., M.A.,
Univ. of Texas at Arlington, Study

Thorpe, Diane ................................. Counselor
North Texas State Univ., B.S., M.Ed.

Todes, Jay ....................................... Instructor, Mid-Management
Univ. of Texas, B.A., M.A., Univ. of Houston, Ed.D.

Twenge, Stephen R ......................... Director Admissions/Registration
St. Cloud State Univ., B.S., M.A.

Vela, Joel ......................................... Vice President of Instruction
Incarnate Word College, B.A., Angelo State Univ., M.A.
Univ. of Wyoming, Ed.D.

Weatherby, Preston ............................. Director, Physical Plant
Texas Tech Univ., B.S.E.E.

Weaver, Clifton .............................. Chairperson, Technology Division
Southeastern State Univ., B.S., North Texas State Univ., M.Ed.

White, James .................................. Instructor, Mid-Management
Texas A&M Univ., B.B.A., North Texas State Univ., M.B.A.
North Texas State Univ., Study

Wilson, Kay ..................................... Instructor, Real Estate
Texas Woman's Univ., B.S., Study

Wilson, Roger ................................. Instructor, Carpentry
Texas State Technical Institute, A.A., B.A.

Woodcock, Martha ......................... Admissions Advisor
New York Univ., B.A.

Wright, David ................................. Director, Public Information
Univ. of Dallas, B.A., The Univ. of Texas at Dallas, M.A., Study
I. GENERAL INFORMATION

History of the Dallas County Community College District

The Dallas County Community College District comprises seven colleges located strategically throughout Dallas County. Together the colleges enroll approximately 75,000 students per semester 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. On December 10, 1987, the Dallas County Community College District broke ground for the $7 million Bill J. Priest Institute for Economic Development near downtown Dallas. The complex is scheduled for occupancy in February, 1989. All District services to the business community will be available through this central location.

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 (continuing education) programs on cultural, civic, and other topics.

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

District Responsibilities

To carry out the District philosophy, the colleges obviously must offer a wide range of programs and courses, including guidance services. These programs and courses must help each individual attain a high level of technical competence and a high level of cultural, intellectual, and social development. In addition, high professional standards for the academic staff must be maintained within a framework prescribed by the Board of Trustees. At the same time, the program and organization of each college must make maximum use of faculty and facilities.

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

League for Innovation

The Dallas County Community College District is a member of the League for Innovation in the Community College. The League is composed of 16 outstanding community college districts throughout the nation. Its purpose is to encourage innovative experimentation and the continuing development of the community college movement in America. Membership commits the District to research, evaluation, and cooperation with other community college districts. The goal is to serve the community with the best educational program and the fullest use of resources.
Equal Educational And Employment Opportunity Policy

The 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 disability. The District provides equal opportunity in accord with federal and state laws. Equal educational opportunity includes admission, recruitment, extra-curricular programs and activities, access to course offerings, counseling and testing, financial aid, employment, health and insurance services, and athletics. Existing administrative procedures of the College are used to handle student grievances. When a student believes a condition of the College is unfair or discriminatory, the student can appeal to the administrator in charge of that area. Appeals to high 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 12 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 the Education Amendment of 1980, Public Law 96-374, the College provides all students with information about its academic programs and financial aid available to students.

Standard 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.

If you are unable to complete the course (or courses) for which you have registered, it is your responsibility to withdraw formally from the course (or courses). Failure to do so will result in your receiving a performance grade, usually a grade of "F."

II. IMPORTANT TERMS AND ABBREVIATIONS

Academic advisor: A member of the college staff who assists students in planning appropriate academic programs.

Add: During any single semester, to enroll in additional course(s) after registration.

Admission: Formal application and acceptance as a credit student. A person wishing to enroll must complete an application, be accepted, and receive a letter of acceptance from the Registrar before registering.

Audit: Enrollment in a credit course without receiving academic credit.

Catalog: The book containing course descriptions, certificate and associate degree requirements, and general information.

Class Schedule: A booklet that is published prior to each semester listing classes, sections, dates, times, instructors' names, and meeting places. This booklet is used by students in preparing personal class schedules each semester.

Common Learning: "General Education" as defined by the Dallas County Community College District. Common Learning courses contain learning experiences that provide knowledge and skills necessary for living well and functioning competently in rapidly changing local, state, national, and world communities.

Concurrent enrollment: (a) Enrollment by the same student in two different DCCCD colleges at the same time; (b) Enrollment by a high school senior in one of the DCCCD colleges while still enrolled in high school; (c) Enrollment by a student in two related courses in the same semester; (d) Enrollment in both a DCCCD institution and a four-year institution at the same time; (e) Enrollment in both credit and Continuing Education courses at the same time.

Course load: The number of hours or courses in which a student is enrolled in any given semester.

Credit: The numerical value assigned to a course (see "Credit Hours/Semester Hours.")

Credit Hours/Semester Hours: The unit of credit earned for course work. Each college course is worth a certain number of credit or semester hours. This number is determined by the type of class and the number of hours per week it meets. For example, a 3 -credit- hour class (English, history, etc.) meets 3 hours per week during
the fall/spring semesters; a 4-credit-hour class (science, languages, etc.) meets 6 hours. Check this catalog or the current class schedule for the value of any course you wish to take.

**Credit/Non-credit:** Credit classes are those which award academic credit and may apply toward a degree. Non-credit classes do not apply toward a degree and are usually offered through Continuing Education.

**DCCCD:** Dallas County Community College District composed of Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View, North Lake and Richland Colleges.

**Developmental Studies Courses:** Courses that develop prerequisite skills in reading, writing, and mathematics. Because of the nature of these courses, the credit earned will not count toward graduation requirements and may not be transferred to colleges outside the DCCCD.

**Drop:** The act of officially withdrawing from a particular course without penalty before a specified date. See calendar in this catalog for “Last Day to Withdraw.” It is the student’s responsibility to drop a course by the date published.

**Electives:** Courses that do not count toward a major but are required for most college degrees. Electives are selected for personal interest, skill development or to increase one’s knowledge or understanding. Consult with an advisor before deciding upon electives.

**Fee:** A charge that the college requires for services in addition to tuition charges.

**Flexible-entry course:** A course beginning and ending on dates that are different from the regular semester. This is also referred to as “flex-entry” or “short semester registration.” Consult the class schedule for further information.

**Former Student:** One who has attended a DCCCD college in the past but not during the previous long semester.

**Full-time student:** A student who is enrolled for at least 12 credit hours during a semester or for 6 credit hours during a summer session.

**GPA:** Grade Point Average. Two different ways of computing a G.P.A. are utilized. For further explanation, see catalog section titled “Scholastic Standards.”

**Grade Points:** See catalog section titled “Scholastic Standards.”

**Grades:** See catalog section titled “Scholastic Standards.”

**Lab hours:** The number of hours a student spends each week in a laboratory or other learning environment.

**Lecture hours:** The number of hours a student spends each week in a classroom other than a laboratory.

**Major:** The subject or field of study in which the student plans to specialize. For example, one “majors” in automotive technology, business, etc.

**Part-time student:** A student who is enrolled for less than 12 credit hours during a semester or less than 6 credit hours in a summer session.

**Performance grade:** A grade of A, B, C, D, or F. This does not include the grades of W, I, or WX. See catalog section on “Academic Information” for more on grades and grade point averages.

**Prerequisite:** A requirement which must be met BEFORE enrolling for a specific course. For example, the prerequisite for English 102 is the successful completion of English 101. A prerequisite may be another course (high school or college), an appropriate assessment score, or permission of the instructor.

**Probation:** A warning for a student whose academic work or behavior is unsatisfactory. Students on academic probation may be suspended if their academic performance does not improve.

**Registration:** The official process for enrolling in courses. This involves selecting classes with the help of an advisor, completing all registration forms and paying fees. Check the class schedule for registration dates.

**Section:** A number indicating day/evening, hour, room number, and name of instructor for a particular course. For example, the section number differentiates among the various classes of English 101.

**Semester:** A term denoting the length of time a student is enrolled in a specific course. For example, there are two long semesters (Fall and Spring) which last approximately 16 weeks. There are two summer sessions or “semesters” (Summer I and Summer II) which last approximately weeks five-and-a-half weeks.

**Skills for Living:** Skills needed for living well with oneself, others, and changing environments. Skills for Living are discussed and learned throughout the curriculum and provide basic goals for all Common Learning courses.

**TASP:** Texas Academic Skills Program; see special section in this catalog about this testing program.

**Technical/occupational courses:** Courses that lead to a certificate or two-year degree in a technical or occupational program. These courses are designed to aid the student in developing entry-level skills to be utilized in the job market. Consult an advisor regarding transferability if you plan to attend a four-year institution.
Telecourses: Courses providing flexibility and convenience for students seeking college credit with minimum campus visits. Students watch the course television programs at home on regular broadcasts or cablecasts, complete the study guide and reading assignments, take tests on campus, and attend optional discussion meetings. Instructors are available during regular office hours or via telephone when assistance is needed.

Transfer courses: Courses that are designed to transfer to other colleges and universities. Students need to consult with an advisor or counselor about the transferability of specific courses. Because a course will transfer, that does not mean it will apply toward a specific major or degree at a four-year college or university.

Transcript: An official copy of a student's academic record which can be obtained through the Admissions Office. An official transcript must have the seal of the college affixed and the signature of the Registrar.

Withdrawal: The act of ending enrollment in classes. A student withdrawing must go through a formal procedure. It is the student's responsibility to withdraw officially by the appropriate date. See the calendar in this catalog or the class schedule for the "Last Day to Withdraw."

III. 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 admission.

Admission Requirements

Documentary evidence of Texas residency must be provided by all applicants claiming Texas residence and requesting resident tuition classification. This evidence must be submitted with the application for admission and must prove twelve (12) months of Texas residency immediately prior to the semester of enrollment. Failure to provide evidence will result in an applicant being classified as a nonresident for tuition/fee purposes. Contact the Admissions Office for specific information detailing required documentation.

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. The College admits a limited number of students in this category. The students are concurrently enrolled for a maximum of six hours of special study each semester, as long as the combined high school and college class load does not exceed sixteen (16) semester hours. (Each high school course is normally counted as the equivalent of one three-hour course.) Students must continue to make normal progress toward high school graduation.

Transfer Students

Transfer applicants are considered for admission on the basis of their previous college records. 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 allowed to register.

Non-Credit Students

Students enrolling for non-credit courses apply through the Office of Career and Continuing Education.

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:

1. complete a personal interview with the international student counselor and receive approval from the college,

2. present TOEFL (Test of English as a Foreign Language) test scores of 525 or higher and take the DCCCD
assessment tests,
3. be proficient in English and provide a letter in their own handwriting indicating educational and vocational plans,
4. show evidence of sufficient financial support for the academic year by submitting an I-134 (Affidavit of support) Immigration and Naturalization Service document,
5. provide written proof of negative tuberculin skin test or chest x-ray, polio immunization if applicant is under nineteen years of age, measles and rubella vaccines taken since January 1, 1968, and diphtheria/tetanus injections taken within the last ten years,
6. fulfill all admission requirements for international students at least 30 days prior to registration,
7. enroll as a full-time student (minimum of 12 credit hours),
8. supply official transcripts for all previous academic work with a minimum "C" average.

In addition to the requirements stated above, international students wishing to transfer from another U.S. higher education institution must also:
1. present documentation indicating "bona fide" non-immigrant status as an F-1 or M-1 student,
2. have pursued a full course of study at the institution last authorized to attend by I.N.S.,
3. present official transcripts verifying that the student:
   a. was "in-status" for the term immediately preceding this transfer, and
   b. has a minimum G.P.A. of 2.00 in all college work attempted.

Contact the Admissions Office for information.

Application and Admission Procedures
Applications may be submitted any time prior to registration. Earlier application is desirable because the student's place in registration is determined by the date of the applicant's file; submitting admissions documents early also insures that there is adequate time for effective counseling and schedule planning. A later place in registration often means that the classes a student desires 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. official transcripts: The following must be submitted: (1) for beginning college students an official transcript from the last high school attended; (2) for college transfer students, official transcripts for all previous college work attempted. The College accrediting agency requires transcripts, and the college uses them in program advisement.

All applicants may select only those classes available when they register. Students may enroll in certain courses at times other than regular semester registration. See the "Flexible Entry" courses section in this catalog and contact the Registrar's Office for additional information.

Students entering with academic deficiencies or low assessment scores may be admitted on probation and may be required to enroll in developmental or other programs designated by the College.

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.

Special Fees And Charges

Laboratory Fee: $2 to $8 a semester (per lab).

Class Fee: Variable special costs of the course not otherwise defined as "Laboratory Fee." Rental costs of specialized equipment and off-campus facilities are examples of "class fees."

Physical Education Activity Fee: $5 a semester.

Dance 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. This fee can change without prior notice.

Refund Policy: The refund policy of the District is based upon state regulations and on the fact that student tuition and fees provide only a fraction of the cost of offering
## TUITION AND STUDENT SERVICES FEE
### Fall and Spring Sessions

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The following definitions are brief guidelines only; please discuss any questions regarding proper tuition classification with admissions office personnel.

**TUITION REQUIREMENTS FOR LONG TERM:**

1. **Dallas County Residents** $12.00 per credit unit through ten credit units and $10.00 for each additional credit unit over ten credit hours; minimum of $36.00
2. **Out-of-District Residents** $33.00 per credit unit through ten credit units and $12.00 for each additional credit unit over ten credit units; minimum of $100.00
3. **Out-of-State Residents** $61.00 per credit unit; minimum of $200.00
4. **Out-of-Country Residents** $61.00 per credit unit; minimum of $200.00

**SUMMER SESSION**

1. **Dallas County Residents** $14.00 per credit unit through six credit units and $8.00 for each additional credit unit over six credit units; minimum of $36.00
2. **Out-of-District Residents** $46.00 per credit unit through six credit units and $10.00 for each additional credit unit over six credit units; minimum of $100.00
3. **Out-of-State Residents** $61.00 per credit unit; minimum of $200.00
4. **Out-of-Country Residents** $61.00 per credit unit; minimum of $200.00

The charge for auditing a course is the same as taking the course for credit.

*Provided he has established legal residence in the State of Texas, a student's county of residence is the county in which his legal guardian resides, if he is under 18 years of age and unmarried. Students 18 years of age and older and all married students are deemed to be residents of the county in which they reside.

**An "Out-of State Resident" is defined to be a student of less than 18 years of age, living away from his family and whose family resides in another state or whose family has not resided in Texas for twelve months immediately preceding the date of registration; or a student 18 years of age or older who has not been a resident of the state twelve months subsequent to his 18th birthday or for the twelve months immediately preceding the date of registration.

***A full-time District employee or his dependent who resides outside Dallas County is eligible for Dallas County tuition rates.

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.

The description of resident and non-resident status contained above are generally applicable, but the determination of residence status for tuition purposes is specifically governed by the provisions of V.T.C.A. Education Code, Section 54.052, the rules and regulations of the Coordinating Board, Texas College and University System, and judicial and/or administrative interpretations thereof. In the event of conflict between the above-noted descriptions and the latter authorities, the latter shall govern.

Pursuant to the authorization contained in the Texas Education Code Section 130.003, subsection (b)(4), the Board has waived the difference in the rate of tuition for non-resident and resident students for a person or his dependent, who owns property which is subject to ad valorem taxation by the District.

A foreign national on 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.
ed accurate opportunities. When students enroll in a class, they reserve places that cannot be made available to other students until they officially drop the class. In addition, the original enrollment of students represents a sizable cost to the District regardless of continuance in that class. Therefore, a refund is made only under the following conditions:

(1) Official withdrawal:
Students who officially withdraw from the institution shall have their tuition and mandatory fees refunded according to the following schedule:

**Fall and Spring Semesters**

Prior to the first class day ........................................ 100%
During the first five class days ......................... 80%
During the second five class days ....................... 70%
During the third five class days ......................... 50%
During the fourth five class days ....................... 25%
After the fourth five class days ......................... NONE

**Summer Semesters**

Prior to the first class day ........................................ 100%
During the first, second or third class day ............ 80%
During the fourth, fifth or sixth class day ............ 50%
After the sixth class day ........................................ NONE

(2) Official drop of a course or courses:
Students who reduce their semester credit hour load by officially dropping a course or courses and remain enrolled at the institution will have applicable tuition and fees refunded according to the following schedule:

**Regular Session**

During the first twelve class days ....................... 100%
After the twelfth class day ................................. NONE

**Summer Session**

During the first four class days ......................... 100%
After the fourth class day ................................. NONE

The first “class day” is to be counted as the officially published date when the semester begins.
Separate refund schedules may be established for optional fees such as intercollegiate athletics, cultural entertainment, parking, etc.
Tuition and fees paid directly to the institution by a sponsor, donor, or scholarship shall be refunded to the source rather than directly to the student.

(3) A student dropping a portion of his or her class load after the twelfth class day of a fall or spring semester (fourth class day of a summer session) is not entitled to a refund unless approved by the Refund Petitions Committee.

(a) Refund petitions, accompanied by an explanation of any existing circumstances, shall be submitted to the Refund Petitions Committee on the campus.

(b) If the petition is approved by the committee, the student shall be notified and shall receive a refund of tuition and fees according to the appropriate schedules in this policy.

(4) The student must submit the request for refund before the end of the semester or summer session for which the refund is requested.

(5) Mandatory fees shall include, but not be limited to, student activity fees, laboratory fees, private lesson fees, and physical education activity fees.

(6) Flexible entry courses are to be handled as regular semester length courses. The refund schedule will be prorated accordingly.

(7) Refund checks normally require a minimum of one month from date of approval for processing.

(8) The college academic calendar and the class schedule shall specify the last day for withdrawal with refund.

**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 the 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 Development may also implement disciplinary procedures. Students may be dropped from courses due to returned checks.

**Assessment and Advisement Procedures**
Assessment is the process of evaluating readiness for certain college courses and the probabilities for success in those courses. The College has an assessment program for entering students that is a required part of the enrollment process.

The assessment program includes the completion of a questionnaire that documents information on career and work plans, previous academic achievement and other relevant information. Assessment also includes an examination of individual skill levels in reading, writing and mathematics. Information on skills may come from ACT or SAT results, previous college-level work or from scores on the standardized tests administered free of charge by the College.

Because of the importance of such information, students should have official copies of ACT and/or SAT scores and transcripts mailed to the Admissions Office or bring them personally at the time of application. It is the responsibility of the student to make these available.

The assessment program provides information needed in advisement. Academic advisement sessions provide a framework for informed decision-making on the part of students and advisors. Information on a student's skills, abilities, career plans, educational background, life experiences, and motivation is important in helping the student and advisor make selections from the many educational options available.

Details of assessment and advisement procedures are available through the College Counseling Center or in the “Schedule of Classes” each semester.

**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 current 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 or she determines the examination is an essential component of the learning process. The fee in a credit course is the same for a non-credit student as for a credit student, except that a student service fee may not be charged.

Acceptance of Credit in Transfer
Undergraduate credits in transfer will be accepted from colleges and universities recognized by a national accrediting agency equivalent to the Commission on Colleges of the Southern Association of Colleges and Schools. Credits earned through other education programs, such as credit-by-examination, military experience, the U.S. Armed Forces Institute, are reviewed by the Registrar and credit is granted, if applicable.

Official transcripts from all higher education institutions must be on file before the evaluation can be accomplished in the Registrar's Office. Any questions concerning the validity of the document(s) will result in the need to have an official transcript(s) sent directly from the other institution(s) to the Registrar's Office. Transfer students admitted with a grade point deficiency cannot graduate until the deficiency is cleared by earning additional grade points.

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.

TASP (Texas Academic Skills Program) Test
The Texas Academic Skills Program (TASP) is required by state law to ensure that students enrolled in Texas public colleges possess the academic skills needed to perform effectively in college-level coursework. TASP includes a testing component designed to identify and provide diagnostic information about the reading, mathematics, and writing skills of students.

Students entering the DCCCD in Fall 1989 or thereafter must take the TASP prior to accumulating, or during the semester of enrollment in, 15 hours of college credit. Students who have had at least 3 hours of college-level credit prior to Fall, 1989 are exempted from the TASP requirement. Students enrolled in certain DCCCD certificate programs may be exempted from the TASP requirement.

TASP scores may be utilized in place of the DCCCD Assessment Program. Students scoring below a certain level must follow the advice of a counselor or academic advisor in developing a plan of action for courses. The successful completion of TASP may be a prerequisite to enrollment in some courses.

DCCCD students must pass all sections of TASP prior to being awarded certain Certificates, the Associate in Arts and Sciences Degree, or the Associate in Applied Arts and Sciences Degree. Students planning to transfer must pass all TASP sections before enrolling in upper division (junior or senior level) courses.

For more complete information on TASP or to obtain a copy of the TASP Registration Bulletin, contact the Testing/Appraisal Center. Students must preregister to take TASP. All test fees are borne by the student although financial aid may be available to offset the cost for students deemed eligible.

IV. ACADEMIC INFORMATION

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>I</td>
<td>Incomplete</td>
<td>Not Computed</td>
</tr>
<tr>
<td>WX</td>
<td>Progress; re-enrollment</td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>Withdrawn</td>
<td>Not Computed</td>
</tr>
<tr>
<td>CR</td>
<td>Credit</td>
<td>Not Computed</td>
</tr>
</tbody>
</table>

Grade points earned for each course are determined by multiplying the number of points for each grade by the number of credit hours the course carries. For example, a student who takes a 3-hour course and earns an "A" accumulates 12 grade points for that course. A student's grade point average is computed by adding the total grade points.
point values for all courses and dividing by the number of credit hours attempted during the same period. For example, a student who takes the following courses and earns the following grades has a grade point average 2.93:

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

Total Credit Hours: 12
Total Grade Points: 35

\[
\frac{35}{12} = 2.93
\]

The student’s transcript and grade reports will indicate two different G.P.A.’s. G.P.A.(1) is based upon all DCCCD courses in which the student received a performance grade of A-F. G.P.A.(2) is based upon grade points earned in all DCCCD courses with the exception of those courses numbered 099 and below, Art 199, College Learning Skills 100, Developmental Communications 120, Human Development 100 and 110, Library Skills 101, Music 199, and Theatre 199 in which a student received a performance grade of A-F. G.P.A. (2) is utilized to determine eligibility for graduation; it is also the G.P.A. considered by four-year institutions when a student transfers.

For repeated courses, only the latest grade earned is included in cumulative grade point averages, even if the latest grade is lower than a preceding grade. However, transcripts do indicate all work completed in the District. When a student withdraws from a course being repeated, the cumulative grade point average is calculated by using the immediately preceding grade in the same course.

If a student believes an error has been made in determining a course grade, the instructor or appropriate division office should be contacted as soon as possible. Requests for grade changes will not be considered later than two years following the last day of the semester for which the grade was assigned.

An incomplete grade "I" may be given when an unforeseen emergency prevents a student from completing the work in a course. The "I" must be converted to a performance grade (one with a grade point value) within 90 days after the first day of classes in the subsequent regular semester. If the work is not completed after 90 days, the "I" is converted to a performance grade.

An Incomplete Contract is used to convert an incomplete grade to a performance grade and states the requirements for the satisfactory completion of the course. The Incomplete Contract must be agreed upon and signed by the instructor, the student and the division chairperson and submitted with the final grade report. When an Incomplete Contract must be submitted without the student’s signature, the instructor must include a statement indicating that the student is aware of and in agreement with the contract.

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 enrollment. If the student does not complete the course requirements, 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, Art 199, College Learning Skills 100, Developmental Communications 120, Human Development 100 and 110, Library Skills 101, Music 199, and Theatre 199 cannot be used to meet graduation requirements.

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 appropriate college official to carry a heavier load. Employed students carrying a full load (12 credit hours or more) should not work more than 20 hours per week. Students working more hours should reduce their academic load proportionately. The recommended load limit for day or evening students who are employed full-time is 6 credit hours. The recommended load limit in a six-week summer session is 6 credit hours. A total of 14 credit hours is the maximum that may be earned in any 12-week summer period.

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.
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. If a student is unable to complete a course (or courses) in which he/she is registered, it is the student's responsibility to withdraw from the course by the appropriate date. (The date is published in the academic calendar each year and in each semester's class schedule.) If the student does not withdraw, he/she will receive a performance grade, usually a grade of "F."

Students who are absent from class for the observance of a religious holiday may take an examination or complete an assignment scheduled for that day within a reasonable time after the absence if, not later than the 15th day of the semester, the student notified the instructor(s) that the student would be absent for a religious holiday. See Sec. 51.911 Tx. Educ. Code.

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. It is the student's responsibility to drop or withdraw. Failure to do so will result in receiving a performance grade, usually a grade of "F." Should circumstances prevent a student from appearing in person to withdraw from the College, the student may withdraw by mail or by letter 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 and the current class schedule. See "Refund Policy" for possible eligibility for a refund.

Academic Recognition

Full-time students who complete at least 12 hours of credit and earn a grade point average of 3.5-3.79 are listed on the Vice President's Honor Roll. Full-time students who complete at least 12 hours of credit and average 3.8-4.0 are placed on the President's Honor Roll. 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, 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 sessions 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 Development.

Grade Reports

A grade report is mailed to the address on record of enrollment to each student at the end of each semester. The grade report contains a listing of all credit courses attempted within the DCCCD, as well as information on academic standing. Interim grade reports are issued for other-than-semester length classes.

DCCCD Transcript of Credit

The DCCCD transcript of credit is a chronological listing of college credit courses attempted within the seven-college system of the DCCCD. The transcript is official if the document is embossed with the College seal and imprinted with the signature of the Registrar.

Upon written request of the student, the Registrar's Office will send an official transcript to the individual student or to any college or agency named. A fee of one (1) dollar (subject to change without notice) will be charged for each transcript requested. There is a minimum of two working days required for processing. A transcript will be released only if all obligations to the DCCCD have been settled.

The Electronic Transcript Network permits member colleges to send transcripts to one another through a computer network. Such transcripts can normally be sent within 24 hours of the request. Member colleges prefer to receive transcripts in this fashion rather than through the generation of an "official transcript."

Transfer credits from other institutions are not recorded on DCCCD transcripts. If a student desires a transcript of work completed at another institution, the student should secure it from that institution.

Degree Requirements

The College confers the Associate in Arts and Sciences Degree and the Associate in Applied Arts and Sciences Degree upon students who have completed all 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 last 15 credit hours required for graduation in any degree or certificate may not be earned through credit-by-examination except as approved by the College Vice President of Instruction.

Students seeking certificates or associate degrees must submit official transcripts of all previous work attempted before a certificate or degree will be awarded. Failure to submit official transcripts directly from the institutions attended will result in the degree or certificate not being awarded.

The degree must be awarded by the college that 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.

Students entering the DCCCD Fall, 1989, or thereafter, must successfully complete all sections of the TASP (Texas Academic Skills Program) Test before a degree or some certificates can be awarded. See the TASP catalog section for additional information.
The Common Learning Curriculum

The Common Learning curriculum is composed of required courses and clusters of courses designed to advance the learning that is common to all candidates for a degree.

The Core Curriculum consists of English 101, Speech Communication 101, and a math course numbered 100 or above. A grade of "C" or better in each of the three courses is required for graduation. Students are strongly advised to enroll in these courses in the first two semesters of study because skills necessary for success in other courses are taught in Core courses.

Common Learning course requirements beyond the Core are designed to help ensure that all graduates have general knowledge as well as the specific knowledge ordinarily associated with a major course of study or a technical program. Candidates for the Associate in Arts and Sciences Degree must take 34-36 hours in approved Common Learning courses beyond the Core. Candidates for the Associate in Applied Arts and Sciences Degree must choose six to eight hours of course work from two of the following clusters: Laboratory Science, Behavioral/ Social Science, Business, and Humanities.

Associate In Arts and Sciences Degree

Students must have a minimum of 61 credit hours, a grade of "C" or better in each of the three Core courses (English 101, Speech Communication 101, and math course numbered 100 or above), a grade point average of at least "C" (2.0), and a passing score on all sections of TASP (for students entering the DCCCD Fall, 1989 or thereafter) to receive the Associate in Arts and Sciences Degree. These 61 hours may be earned at any District college and must include:

- English 101 (3 credit hours) [A CORE COURSE REQUIREMENT]
- Speech Communication 101 (3 credit hours) [A CORE COURSE REQUIREMENT]
- A math course numbered 100 or above (3 credit hours) [A CORE COURSE REQUIREMENT]
- A sophomore literature course (3 credit hours) to be chosen from English 201, 202, 203, 204, 205, 206, 215, OR 216
- Laboratory Science (8 credit hours) to be chosen from Astronomy, Biology, Chemistry, Geology, Physical Science, OR Physics. (For Astronomy to meet this requirement, the student must successfully complete Astronomy 101 in combination with 103, and Astronomy 102 in combination with 104)
- Humanities (3 credit hours) to be chosen from Art 104, a foreign language, Humanities 101, Literature, Music 104, Philosophy 102, OR Theatre 101
- Physical Education activity course (1 credit hour) (NOTE: Neither chronological age nor military service are acceptable excuses for waiving the physical education requirement.)
- Behavioral Science (3 credit hours) to be chosen from Anthropology, Human Development, Psychology, OR Sociology
- History 101 AND 102 (6 credit hours) (NOTE: Only three credit hours of History may be earned through credit-by-examination.)
- Government 201 AND 202 (6 credit hours)

(Associate In Applied Arts and Sciences Degree

Students must have a minimum of 60 credit hours, a grade of "C" or better in each of the three Core Courses (English 101 OR Communications 131, Speech Communication 101, AND a math course numbered 100 or above), a grade point average of at least "C" (2.0), and a passing score on all sections of TASP (for students entering the DCCCD Fall, 1989 or thereafter) to receive the Associate in Applied Arts and Sciences Degree. These 60 hours must include:

- English 101 OR Communications 131 (3 credit hours) [A CORE COURSE REQUIREMENT]
- Speech Communication 101 (3 credit hours) [A CORE COURSE REQUIREMENT]
- A math course numbered 100 or above (3 credit hours) [A CORE COURSE REQUIREMENT]
- Six to eight credit hours chosen from TWO of the following clusters:
  - Laboratory Science: Astronomy, Biology, Chemistry, Geology, Physical Science, OR Physics. (For Astronomy to count as a lab science, the student must successfully complete Astronomy 101 in combination with 103 and Astronomy 102 in combination with 104)
  - Behavioral/Social Science: Anthropology, Government, History, Human Development, Psychology, OR Sociology
  - Humanities: Art 103, a foreign language, Humanities 101, Music 104, Philosophy 102, Theatre 101, English 201, English 202, English 203, English 204, English 205, English 206, English 215, OR English 216
  - Business: Business, Accounting, Management 136, Computer Information Systems, OR Economics. Cooperative Work Experience courses may not be used to meet Common Learning requirements
Where a technical/occupational program heavily emphasizes a specific cluster as part of its requirements, students are encouraged to select from other clusters to satisfy this requirement. For example, students pursuing an A.A.A.S. degree in accounting must enroll in many courses from the Business cluster as part of their program requirements. Therefore, to meet Common Learning requirements, the 6-8 additional hours should be selected from the other three clusters: Behavioral/Social Sciences, Humanities, or Laboratory Science.

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 the catalog for a more detailed explanation. A maximum of 4 physical education activity hours may be counted as credit toward graduation. The G.P.A. for an Applied Arts and Sciences Degree is based only on the hours used to meet degree requirements. The following courses will not count toward graduation nor the G.P.A. for graduation: Courses numbered 099 and below, Art 199, College Learning Skills 100, Developmental Communications 120, Human Development 100, Human Development 110, Library Skills 101, Music 199, and Theatre 199.

Certificate Career Programs

The requirements for certificates are detailed under specific programs in the Technical/Occupational Programs section of this catalog. A "C" (2.0) grade point average is required. The G.P.A. for a certificate is based only on the hours used to meet certificate requirements. The following courses will not count toward graduation nor the G.P.A. for graduation: Courses numbered 099 and below, Art 199, College Learning Skills 100, Developmental Communications 120, Human Development 100, Human Development 110, Library Skills 101, Music 199, and Theatre 199.

Procedure For Filling Degree And Certificate Plans And For Graduation

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

An annual graduation ceremony is held at the conclusion of the spring semester. Participation is ceremonial only and confers on a student no rights to a degree. December graduates may participate in the next commencement if they desire and July and August graduates may participate in the spring commencement if they desire, but neither is 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 prior to commencement.

In addition to other graduation requirements, a student has five (5) years from the date of original enrollment in the college granting the degree to complete the specific course requirements detailed in the college catalog. If the student does not fully complete the course requirements within five (5) years, the student must select a subsequent catalog year, provided the requisite courses are still being offered in the program.

The student has the ultimate responsibility to select and register for courses meeting graduation requirements.

Waiving Of Scholastic Deficiency

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

V. EDUCATIONAL AND SPECIAL OPPORTUNITIES

Academic Transfer Programs

The Dallas County Community College District offers a broad range of educational opportunities for the student whose goal is to transfer to a four-year institution. In addition to offering a strong, creative foundation for the freshman and sophomore years, the academic transfer curriculum is coordinated with several four-year institutions to insure the transfer of credits. Although each four-year school is different, students may guarantee transferability of their courses by being active and responsible in the advisement process. By consulting the four-year institution regularly and taking advantage of the resources available at each of the DCCCD colleges, students may insure that the transfer process is a positive experience.

Earning An Associate Degree Prior To Transferring

During the time of attendance in the DCCCD, students may elect to earn a two-year associate degree. The Associate in Arts and Sciences Degree is designed specifically for those students who plan to transfer to a four-year institution. The A.A.S. Degree requires students to complete many of the core courses that will also be required by most senior institutions. The flexibility of this degree program also allows students to complete many of the introductory courses specifically related to their major field of study. Additional information regarding the A.A.S. Degree can be found elsewhere in this catalog or from a counselor or advisor.

There are many advantages to completing the Associate in Arts and Sciences Degree program prior to transferring to a four-year institution. In addition to completing
many of the requirements for a four-year degree program, students are able to attend college close to home, enjoy small class sizes, pay lower costs for tuition and fees, and take advantage of many personalized and creative programs. In addition, students who complete this degree may become more marketable in the workplace should plans to complete the bachelor's degree become delayed or unobtainable. However, it is not required that a student complete the A.A.S. Degree prior to transferring.

Choosing A Major And Developing An Educational Plan

Some students will enter college with a clear idea of what major they will choose and to which senior institution they will transfer. However, the fact is that most students do not know where they will transfer or what their major may be.

There are several freshman-level core courses that will apply toward most majors. Students are encouraged to use the first semester to investigate their own interests. By the second or third semester, students should begin to develop a clear sense of which senior institution they will enter and the requirements for their chosen degree program.

The counseling personnel at each of the DCCCD campuses can provide assistance in developing a degree plan for almost any major. Listed below are some of the four-year majors students can begin in the DCCCD:

- Accounting
- Advertising
- Agriculture
- American Studies
- Anthropology
- Architecture
- Art
- Biological Science
- Botany
- Business Administration
- Chemistry
- City/Regional Planning
- Computer Science
- Dance
- *Dentistry
- Dietetics
- Drama
- Economics
- Engineering
- English
- Entomology
- Finance
- Fine Arts
- Foreign Languages
- Forestry
- Geography
- Geology
- Health Sciences
- History
- Home Economics
- Industrial Arts
- Interior Design
- Journalism
- *Law
- Liberal Arts
- Life Sciences
- Management
- Marine Biology
- Marketing
- Mathematics
- Medical Technology
- *Medicine
- Meteorology
- Microbiology
- Music
- Music Education
- Nursing
- Occupational Therapy
- Oceanography
- Optometry
- Pharmacy
- Philosophy
- Photojournalism
- Physical Education
- Physical Science
- Physical Therapy
- Physics
- Political Science
- Psychology
- Public Relations
- Radio/TV/Film
- Recreation
- Social Work
- Sociology
- Speech Communication
- Speech Pathology
- Teacher Preparation
- *Telecommunications
- Theatre
- Veterinary Medicine
- Wildlife Management
- Zoology

* These fields require study beyond the bachelor's degree.

College Resources For Transfer Students

Each of the DCCCD colleges offers many resources designed specifically for those students planning to transfer to a four-year institution. Students are encouraged to take advantage of these resources early in their collegiate experience, particularly if they are undecided upon a major or have not selected a senior institution. Many of the resources can assist students in making informed decisions when selecting courses, choosing a transfer institution, and completing all of the necessary steps in the transfer process.

The Counseling Center

Students are invited to utilize the valuable resources found in the Counseling Center, and are encouraged to seek the advice of a counselor/advisor when planning each semester of study.

The Counseling Center also maintains a number of guides, booklets, and other reference items designed for the transfer student. These materials are outlined below.

Course Selection Guides

Course Selection Guides offer a listing, in DCCCD course numbers, of courses necessary for a number
of majors at many institutions throughout Texas. Course Selection Guides are available for the following majors:

Accounting
Aerospace Engineering
Agriculture
Architecture
Art
Biology
Business Administration
Chemical Engineering
Chemistry
Civil Engineering
Computer Science
Criminal Justice
Economics
Electrical Engineering
English
Fashion Merchandising
Finance
Foreign Languages
Geography
Geology
History
Industrial Engineering
Interior Design
Journalism
Management
Marketing
Mathematics
Music
Music Education
Nursing
Pharmacy
Physical Education
Physical Therapy
Physics
Political Science
Pre-Law
Pre-Veterinary Medicine
Psychology
Radio/Television/Film
Social Work
Sociology
Speech Pathology/Audiology
Teacher Preparation
Undecided

Although the information on these guides has been reviewed by officials at the various senior institutions, the content is subject to change, and it is the responsibility of the student to verify with the institutions of their choice the applicability of this information. Counselors and academic advisors can also assist students with preparation for majors other than those listed above.

Equivalency Guides

Equivalency Guides offer a listing of how every course offered in the DCCCD transfers to a given senior institution. This information is helpful for those students who have selected a senior institution, but have yet to determine a major. Students should note that the transfer equivalencies shown on these guides offer information on how courses are generally accepted by the senior institution, and do not indicate how these courses may apply toward a particular major or degree program. A counselor/advisor can assist students in determining the applicability of courses to a particular major.

Other Resources

The Counseling Center has several other resources to assist transfer students, including a large collection of senior institution catalogs and bulletins, senior college admission application forms, and other specialized brochures and information materials. Students can also take advantage of several computer resources, such as DISCOVER, GIS, and SIGI. These simple computer programs are designed to help students clarify goals, identify career and occupational aptitudes, and research information about senior institutions. In addition, there are many activities planned especially for transfer students. These activities include College Days where officials from senior institutions visit on-campus to talk directly with students, special transfer workshops and seminars, and events designed to assist students in making career decisions.

Choosing A Catalog Year

Students who plan to transfer to a four-year institution have a choice to make regarding their requirements for graduation. Such students may select to graduate under the requirements (A) in existence at the senior institution during the student’s initial year of enrollment in a DCCCD college; (B) in existence at the time the major was selected; OR (C) in existence at the actual time of transfer. Students should check with the four-year institution about its policy on this matter.

Transferring students should keep a copy of the DCCCD catalogs, the four-year institution’s catalogs, and the Course Selection Guides valid at the time of initial enrollment in the DCCCD and at the time when a major was selected. DCCCD course syllabi should also be maintained.

Other Things To Consider

During the time of study in the DCCCD, students should begin to determine the necessary steps for completing the transfer admission process. The process may require a great amount of preparation, and students should be certain that they understand all of the requirements for admission, such as application deadlines, minimum grade point average requirements, limitation on the number of credit hours that are acceptable in transfer policies regarding acceptance of repeated courses, housing information, and financial aid application procedures. Students should also consider making a personal visit to
their chosen institution. Many senior institutions plan special activities and campus visitation periods where students can meet with representatives from all areas of the institution.

IT IS THE RESPONSIBILITY OF STUDENTS TO KNOW ANY SPECIFIC REQUIREMENT OF THE COLLEGE OR UNIVERSITY TO WHICH THEY WISH TO TRANSFER. THIS RESPONSIBILITY INCLUDES KNOWING COURSE REQUIREMENTS, NUMBER OF CREDIT HOURS ACCEPTED, AND GRADE POINT AVERAGE REQUIREMENTS.

Technical/Occupational Programs

Students who desire to enter a chosen field as skilled employees 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 are accredited college courses which lead to a Certificate of Completion or an Associate in Applied Arts and Sciences Degree. These programs are established only after studies verify that employment opportunities exist in business and industry.

The College attempts to match the community’s labor requirements with the ambitions and goals of its students. This realistic approach to occupational education is made possible by the excellent cooperation of local industry, business, and public agencies who 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 that identify additional needs.

Many technical/occupational courses can be offered on company sites for their employees.

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 Registrar’s Office has knowledge 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’s 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 a DCCCD 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 3 credit hours to apply toward the degree requirements in history and only 3 credit hours to apply toward the degree requirements in government.

Non-Traditional Learning

The College is committed to serve students and the community in the most effective manner possible while maintaining high standards of education. Students learn in a variety of ways and through a multitude of experiences. Therefore, the College will evaluate these learning experiences and grant equivalent college credit applicable to an Associate in Applied Arts and Sciences Degree or Certificate program. The following guidelines pertain to such evaluations:

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

2. Credit for specific courses offered by the College may be granted for non-traditional learning experiences after proper assessment of those experiences. Credit will be awarded on a course by course basis only. The student must be enrolled in the College that is assessing the learning experiences.

3. A student is required to complete at least 12 semester hours of course work with the District, 6 of which are in the student’s major occupational area, 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 Coordinating Board of Colleges and Universities.

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.

Telecourses

Students may take a variety of college-credit courses via television which are called "telecourses." Telecourses require the viewing of video programs on local cable systems, KDTN, Channel 2 or at campus Learning Resource Centers. Reading, writing and study guide assignments are required, as well as attendance at an on-campus orientation session. Three or four tests are administered on campus during each telecourse, and some courses require discussion meetings, laboratory sessions or field trips. Campus visits are scheduled for times convenient to students.

Content and credit for telecourses are equivalent to that of courses taken on campus. All telecourses are noted in the course description section of this catalog and their schedules included in the college class schedule. Telecourses may be taken in conjunction with on-campus classes, and students may enroll for them through normal registration processes. For more information, call the Telecourse Hotline: 324-7780.

Cooperative Work Experience

Students may enrich their education by enrolling in cooperative education courses. Cooperative education is a method of instruction that offers the student the opportunity to earn college credit for the development and achievement of learning objectives which are accomplished through current on-the-job experience.

Work experience must be related to a field of study and an occupational goal. This work experience takes place at work training stations approved by the College. Employers must be willing to enter into training agreements with the College and the student/employee. The College will assist a student in seeking approvable employment, if needed.

To enroll in a cooperative education course, students must:

- complete a student application form,
- have completed at least six semester hours in an occupational major or secure waiver of requirement from the instructor,
- declare a technical/occupational major or file a degree plan,
- be currently enrolled in a course related to the major area of study,
- be approved by the instructor.

Additional information regarding cooperative education may be secured from the Cooperative Education Office, the Division Office, or Counseling Office at each college. Technical/occupational programs that include cooperative education are indicated in this catalog.

International Studies

Each year a number of summer-abroad, intensive courses combine learning experiences with foreign travel. Such intensive courses are under the direct supervision of faculty, and college credit may be earned by students who successfully meet the learning objectives established for these courses. In previous years these courses have been offered in Austria, Australia, China, France, Great Britain, Germany, Russia, Jamaica, Spain, and Italy. Most of these courses are offered during the summer, and a complete listing for 1989-90 can be secured from the District Office of Student and International Programs (746-2410).

There are several semester-abroad programs available in Aix-en-Provence, France, in Puebla, Mexico, and in London, England at colleges in those countries. Prior knowledge of French is not required for participation in the France programs, although students are expected to enroll in such language courses during their period of participation. Semester-abroad opportunities are designed for mature students with at least a 2.5 cumulative grade point average.

Human Development Courses

In human development courses, students can learn skills useful in everyday living to promote their personal growth. Much of the success and satisfaction in life is dependent on good interpersonal communication skills, making healthy adjustments to our changing society, and pursuing a satisfying career. The human development curriculum gives the student an opportunity to obtain and practice skills in these important areas.

These courses are taught by counselors and other qualified instructors. They offer academic credits which transfer to most four-year institutions. The courses in human development enhance the total curriculum and blend in with the total concept of the community college. Campuses also offer special topics courses relevant to life issues. In addition, Speech Communications 101, a course combining aspects of interpersonal communications and public speaking, is required for DCCCD associate degrees.

Developmental Studies

Students whose assessment test scores (DCCCD, SAT, ACT, or TASP) indicate they lack the skills necessary to be successful in college-level courses will be advised to enroll in developmental courses. Successful completion of these courses will provide prerequisite skills for college-level work. Other students who wish to review and improve basic skills may also elect to take one or more developmental courses.

Reading, writing and mathematics courses are offered in classroom settings with laboratory support. These developmental courses provide instruction directly related to students' personal, academic and career goals.
Evening And Weekend College

In dynamic, growing communities such as those encompassing this college district, people have continuing educational needs, yet many of them have work schedules and personal involvements that make it impossible for them to attend college during normal daytime hours. For this reason, most courses offered during the day are also available in the evening and weekend college. Courses are offered both on campus and at selected community locations.

Evening and weekend courses offer high quality instruction, excellent facilities, and a variety of student services, including counseling, health, library, bookstore, food services, financial aid, and recreation. Instructors are selected from the College's own full-time staff, from outstanding Dallas area educators, and from other professional specialists interested in teaching. To enroll in the evening and weekend courses, contact the Director of Admissions.

Learning Resources Center and Library Obligations

The Learning Resources Center (LRC) supports the entire instructional program. The two major parts of the LRC are the library and instructional media services.

The library is a place where students can find print and non-print materials to supplement classroom learning or where - if they choose - they can actually take a course. The library helps students to learn in their own way and at their own speed. In addition to print materials and reference help, the library may provide slides, tapes, compact discs, computer software, videotapes, and films. The college has a growing collection of books on a wide variety of general information areas to support academic transfer programs and technical/occupational programs. In addition, there are special collections of career materials and pamphlets. The library also subscribes to current popular and technical periodicals as well as to area and national newspapers.

Instructional media services support the classroom instructional program and are responsible for all campus audio-visual equipment and non-print materials used in the classroom and for the production of instructional materials.

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

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.

Continuing Education Programs

Within the Dallas County Community College District, Continuing Education is an educational development process that creates an instructional delivery system that is flexible, diverse, visionary, and responsive to the needs of its public, private, and corporate citizens. Continuing Education provides non-credit skills training, personal and professional courses, and programs for human, community, and economic development, and thus expands the available educational opportunities for all persons of all ages to participate in college programs.

Continuing Education instructors are professionals from the community chosen because they have proven experience in their field. Their objective is to share their knowledge, insight and expertise, to insure that students acquire a knowledge of the subject, and through a meaningful learning experience become equipped to better serve their community, business, and themselves.

Courses are offered as seminars, workshops and institutes -- the type of course is determined by the nature of the material, instructional approach, and the needs of the students. Usually there are no entrance requirements or examinations; however, some courses may have age restrictions and others may require a certain amount of experience in the subject field for enrollment. Admission is on a first-come, first-served basis. Registration is quick and easy, and may even be accomplished by phone.

Continuing Education classes are held on the campus of each college and in a variety of locations throughout the community. Classes and activities are conducted throughout the week, both during the day and evening hours, and also on Saturday and Sunday.

Because of the nature of Continuing Education course offerings, textbooks may not be required in some courses; however, other courses will require the purchase of texts and/or special class materials. To enhance the educational experience of those students who enroll in Continuing Education classes, library privileges are afforded every student during the term in which they are registered.

Scholarship funds are available for specific vocationally oriented courses. To apply for these scholarship funds please inquire at the Continuing Education Office.

Continuing Education Units (CEU's)

College credit may be awarded for some courses related to DCCCD vocational/technical/occupational programs. Special enrollment criteria and other restrictions apply before consideration can be given to student requests for Continuing Education/credit transfers. Inquire at the Continuing Education Office for more specific information.

For those vocational/technical courses for which no college credit is awarded, Continuing Education Units (CEU's) are transcripted upon successful completion of the course. In all recognized educational circles, one CEU is equal to "ten contact hours of participation in an organized Continuing Education or extension experience under responsible sponsorship, capable direction, and qualified instruction." The CEU is a means of recording and accounting for Continuing Education activities and meeting the certification requirements of certain professional organizations.

The Business and Professional Institute

The Business and Professional Institute (B.P.I.) develops and delivers training programs and provides services to businesses, industries, government agencies, and professional associations. The Institute custom designs training or provides college credit programs on request to be
taught on any of the college campuses or on-site at an office or plant. The duration of training or services is adjusted to meet special requirements and is based on a per-hour contract cost. A B.P.I. office is located on each campus and is staffed with training experts to assist the business community in identifying needs, developing programs and delivering training requests. Other B.P.I. services include conference planning, fitness/wellness programs, teleconferencing, basic skills assessment, and small business development assistance.

The Edmund J. Kahn Job Training Center

The Edmund J. Kahn Job Training Center provides skill training and basic education instruction to unemployed and underemployed adults as well as youths who have dropped out of high school. Graduates from this program are ideally suited to be placed as employees of the Business Incubation Center tenants or placed in entry level positions with corporations with whom the BPI is contracting.

The Small Business Development Center (SBDC)

In addition to providing counseling, training, and resources to small businesses throughout Dallas County, the Small Business Development Center provides incubator tenants with free one-on-one counseling in business management concerns, training programs, and referrals to other business professionals and services in the community.

The Center For Government Contracting

The Center for Government Contracting provides assistance to small business owners who are interested in becoming contractors with governmental agencies or subcontractors with large corporations who have government contracts. As a result of this assistance, if a contract is obtained, it usually means that additional employees are required. The Edmund J. Kahn Job Training Center can be a source for these employees. The Bid Assistance Center can serve the SBDC clients and can provide potential subcontracts for BPI clients.

The Business Incubation Center

The Business Incubation Center provides the same services as the Small Business Development Center but will also give new businesses a place to operate in a nurturing environment for one to three years. Services provided to incubator tenants, in addition to those services provided by the SBDC, will include the following:

- Accounting
- Child Care
- Conference Rooms
- Copier
- Financial Planning Assistance
- Mail
- Marketing & Advertising Consultancy
- Notary
- Parking
- Reception
- Secretary/Clerical
- Shipping & Receiving
- Teleconferencing Facilities
- Telephone Answering

Child Care Center

A Child Care Center is provided for the Bill J. Priest Institute for Economic Development and is a support service for students in the Job Training Center and for tenants of the Business Incubation Center.

International Trade Resource Center

The International Trade Resource Center is a small business development center for businesses interested in export. Counseling, seminars, and referrals are all part of the services offered by the Center.

VI. STUDENT DEVELOPMENT

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 Programs and Resources

The Student Programs and Resources Office plans and presents a wide variety of programs and activities for the general campus population and the surrounding community, including lectures, art gallery activities, and performance events. Programs often are coordinated with the various instructional divisions to provide students with valuable educational experiences. Leadership conferences, retreats, and service learning programs offer students opportunities to develop skills that can enrich the quality of their own lives and the life of their community. Student Programs and Resources seeks to involve students meaningfully in campus life. Recent research in higher education indicates that for many students involvement is an important contributor to academic success.

Counseling Center 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. 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 develop and clarify educational plans and make appropriate choices of courses.
3. Confidential personal counseling to make adjustment and life decisions about personal concerns.
4. Small group discussions led by counselors 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. Referral sources to provide in-depth assistance for such matters as legal concerns, financial aid, tutoring, job placement, medical problems, or emotional problems.

Tutoring Services

For students needing special assistance in course work, tutoring services are available. Students are encouraged to seek services through self referral as well as through instructor referral.
Testing/Appraisal 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, required for appropriate class placement.
4. Tests for selected national programs.

The Student Code of Conduct provisions regarding disruptive behavior and/or academic dishonesty apply equally to Test Centers as they do to classroom settings. Irregularities will be referred to the proper authorities for disciplinary action.

Health Center

Health is the most fundamental human need, and a high standard of physical and mental health is desirable for 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, 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.

Placement Services

The Dallas County Community College District provides job placement services free of charge to DCCCD students (credit and non-credit), alumni, and those in the process of enrolling. Staff members provide assistance by utilizing the computerized Career Planning and Placement System. This system contains lists of job openings in a variety of fields throughout the Metroplex. Staff members also provide assistance with establishing employment contacts, pre-employment skills training, job interviewing, writing a resume and cover letter, and developing job search strategies leading to success.

Special Services

The Special Services Office offers a variety of support services to enable students with disabilities to participate in the full range of college experiences. Services are arranged to fit the individual needs of the student and may include sign language interpreters, notetakers, tutors, mobility assistants, and loan of wheelchairs, audio tape recorders, talking calculators and audio tests (for those students with visual impairments or learning disabilities). Academic, career and personal counseling are also available. Students with special needs 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 Special Services Office or the Counseling Center.

Student Organizations

Information about participation in any organization may be obtained through the Student Programs and Resources 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 athletics teams is voluntary on a non-scholarship basis for students who meet requirements established by the Metro Athletic Conference. Some sports are associated with the National Junior College Athletic Association. 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 encourages participation. For additional information contact the intramural director in the Physical Education Office or the Student Programs and Resources 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 Safety Department**

Campus safety is provided within the framework of state law to "protect and police buildings and grounds of state institutions of higher learning." Because all laws of the state are applicable within the campus community, specially trained and educated personnel are commissioned to protect college property, personal property, and individuals on campus. Officers of the Campus Safety Department are licensed Peace Officers of the State of Texas. These officers are vested with full authority to enforce all Texas laws and rules, regulations, and policies of the College, including the Code of Student Conduct.

**VII. FINANCIAL AID**

Financial aid is available to help those students who, without such aid, would be unable to attend college. The primary resources for meeting the cost of education are the student, the parents and/or spouse. Financial aid, however, can remove the barriers for those families who cannot afford the cost of education beyond high school and can fill in the gap for families who can afford only part of the cost.

**How to Apply**

All students must complete the Financial Aid Application and return it to the Financial Aid office of the DCCCD college the student plans to attend. The Financial Aid Form of the College Scholarship Service must be completed using data from the 1040 Income Tax Return. This form is used to provide an analysis of financial need. It may be obtained from a high school counselor or from any DCCCD Financial Aid office. The FAF is to be mailed directly to the College Scholarship Service with the required processing fee noted on the form. Allow 4 to 6 weeks for the processing. The student should mail the FAF at least one month before the priority deadline for the semesters for which the student is applying.

1. The Department of Education will randomly select some applicants and require that information reported on the FAF or PELL Grant application be verified for accuracy. If the student's application is one that is selected, the student will be required to provide additional documents before financial aid can be awarded.
2. All eligible non-citizens must submit a copy of an INS card as proof of immigration status before financial assistance can be awarded.

For students who attended other colleges, universities, vocational or trade schools (including our DCCCD colleges), a Financial Aid Transcript must be sent from each institution to the Financial Aid office of the school where the student is applying. This procedure is required even though the student may not have received financial assistance at the previous institution.

Students born after December 31, 1959, and who are required under the Military Selective Service Act to register for the draft, must do so before financial aid can be approved. All students who apply for financial aid must sign a Registration Compliance Statement giving their selective service registration status before financial aid can be awarded.

**Deadlines for Applying**

Application for financial assistance received by the following dates will be given first priority:
- Academic Year — July 1
- Spring Only — November 1
- Summer Sessions — May 1

Applications received after these dates will be processed as time and availability of funds permit. Late applicants need to be prepared to pay their own registration costs until action on their application can be completed.

The student must reapply for financial assistance every year. The award does not continue automatically beyond the period awarded.

**Grants**

**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 cost of attending college. A time limit on a student's eligibility does exist depending on the student's undergraduate program of study.

All students applying for financial assistance through the College must apply for a Pell Grant. This is generally done through the FAF application discussed earlier. 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 8-10 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 all copies 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 program provides assistance for eligible undergraduate students who show exceptional financial need, are making satisfactory academic progress toward their educational goal and are enrolled for at least six credit hours. The maximum award for an academic year is $4,000; however, the actual amount of the grant may be limited to less than this, depending on the availability of funds at the school, the student's family financial condition and other financial aid the student is receiving. Priority is
given to students receiving Pell Grant. Students must apply each year for the SEOG.

Texas Public Educational Grant (TPEG)

The TPEG Program was enacted by the 64th Texas legislature to assist needy students attending state-supported colleges in Texas. To be eligible students must show financial need and be making satisfactory academic progress toward their educational goal. The actual amount of the grant will vary depending on the availability of funds at the school, the student’s family financial condition and other financial aid the student is receiving. This grant is available to students enrolled in 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 Program is a state grant that is matched with federal funds to provide financial assistance to needy students attending state-supported colleges in Texas. No more than 10% of the funds may be awarded to non-resident students. To qualify, students must enroll for at least 6 credit hours per semester, make satisfactory academic progress toward their educational goal, and have financial need. The maximum grant for an academic year is $2,500; however, the actual amount of the grant award may be less depending on the availability of funds and the degree of financial need. Grants are awarded by eligibility on a first-come, first-served basis. Students must apply each year for the TPE-SSIG.

Scholarships

DCCCD Foundation Scholarships

The DCCCD Foundation provides a sizeable scholarship program for students who attend one of the colleges of the DCCCD. These funds are made available through the colleges to needy students who, also, meet additional criteria of the scholarship funds. Application forms for these Foundation scholarships are available in the Financial Aid Office at each college.

Miscellaneous Scholarships

Several of the colleges have a limited number of scholarships available as a result of gifts from individuals, private industry, and community organizations. Generally, the eligibility criteria is the same as noted for the DCCCD Foundation Scholarships, and application forms are available in the Financial Aid Office.

Loans

Stafford Loans (formerly GSL)

The Higher Education Act of 1965, as amended, provided for student loans from private commercial lending agencies such as banks, savings and loan associations, credit unions and insurance companies. To be eligible students must now have financial need, make satisfactory academic progress toward their educational goal, and be enrolled for at least six (6) credit hours. As an undergraduate, the student may borrow up to $2,625 per year for the first two academic years and a maximum of $17,250 for all years of undergraduate study. The actual loan amount may be limited to less than this, depending on the cost of attendance, other financial aid, and family financial condition.

The interest rate is set by Congress and is currently 8%. Borrowers do not pay interest until six months after ceasing at least half-time enrollment. The U.S. Dept. of Education pays the interest during the time the student is enrolled and during the grace period of six months following enrollment. Repayment begins six months after the student leaves school or drops to less than half-time enrollment.

1. After July 1, 1988, the interest rate for first time borrowers will increase from 8% to 10% in the fifth year of repayment. The minimum payment will be $50 per month, and the loan must be repaid within 10 years. Lenders may charge a 5% loan origination fee on each loan in addition to the insurance premium charged on the loan. These charges will be deducted from the proceeds of the loan.

2. Under the Supplemental Loans to Students (SLS) Program, independent undergraduate students may be eligible to borrow up to $4,000 per academic year. Recent legislation requires an undergraduate to complete a needs analysis to determine whether there is Pell or GSL eligibility before an SLS loan can be completed, however. The loan maximum is $20,000 for all years of undergraduate study. The interest rate is variable, ranging from 9% to 12%. Repayment begins within 60 days after disbursement of the loan, except that the borrower is entitled to a deferment of the principal for at least half-time enrollment. Most lenders will capitalize the interest if the payments are deferred. Under the PLUS Program, parents may now borrow up to $4,000 per year for each dependent undergraduate student with the loan maximum for each eligible student of $20,000.

3. The current interest rate is variable. Repayment of principal and interest begins within 60 days after disbursement of the loan.

Hinson-Hazelwood College Student Loan Program (HHCSLP)

The Hinson-Hazelwood Loan is a state-funded Guaranteed Student Loan Program for students who are attending Texas colleges and are eligible to pay Texas resident tuition rates. All Hinson-Hazelwood Loan applicants must demonstrate financial need before a loan can be approved. The loan limit has been raised to $2,625 for the first two years of undergraduate study and a maximum of $17,250 for all years of undergraduate study. The actual loan amount may be limited to less than this depending on the cost of attendance, other financial aid, and the family’s financial condition. A 5% loan origination fee and an insurance premium on the life of the student will be taken from the total amount of each loan. The interest rate currently is 7% per year simple interest. No interest or payments are paid by the student while enrolled at least half-time or during the six month grace period.

The interest rate will remain the same throughout the life of the loan. The minimum payment will be $50 per month over a 5 to 10 year period depending on the total amount borrowed.

Emergency Short-Term Loans

The colleges of the DCCCD have limited short-term loan funds available which have been established by individuals and organizations, including the DCCCD Foundation, to meet emergency needs to students. Loans are
usually limited in amount and bear no interest. These loans must be repaid within 60 days of the date of the loan. A late fee of $5 will be added for late payment. Delinquent loans are turned over to a collection agency for recovery, and the student must pay the entire cost of collection. Because there is heavy use of these short-term loan funds at registration, students should apply before registration if help from this program is needed.

Employment

College Work-Study Program (CWSP)

The College Work-Study Program provides part-time employment for students with financial need who are making satisfactory academic progress toward their educational goals and are enrolled for at least 6 credit hours. The wage rate is $4.25 per hour and most students work 15 to 20 hours per week. Students are paid on the last working day of the month. The amount students can earn in a school year is determined by the amount of financial need and other aid awarded as part of the financial aid package. The majority of the students are employed on campus; however, some off-campus employment is also available. Students must apply each year for College Work-Study.

Student Assistants Employment Program (Non-Work-Study)

Part-time employment for students who do not have financial need is available on campus. The wage rate and the average hours worked per week are the same as the College-Work Study Program.

Off-Campus Employment

Students who need help finding jobs off-campus should apply at the Placement Office of the college they plan to attend. The wage rate varies with each job and financial need is not a requirement of employment.

Tuition Exemption Programs

In addition to the grants, scholarships, employment and loan programs already mentioned, the State of Texas and DCCCD offer a number of exemptions from tuition and fee charges. These exemptions are often overlooked simply because of their unusual nature. They are not related to family income or "financial need," nor do they require completion of a regular financial aid application. Check with the Financial Aid Office or the Registrar's Office for tuition exemption programs and the criteria for eligibility.

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.

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.

Federal Office Building
P.O. Box 368
Anadarko, OK 73005
(405) 247-6673

Veteran’s Benefits Program

The Veteran’s 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. 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.
2. A veteran student enrolled in television courses must be pursuing more on-campus credit hours than hours taken by television.
3. A veteran student who has successfully completed credit hours at another college or university must submit a transcript from that college or university before applying for VA benefits. The transcript is evaluated and credit granted when applicable.
4. A veteran student must enroll in courses required for a degree program. Information on degree requirements may be obtained from the Registrar’s Office.
5. A veteran student who withdraws from all courses attempted during a semester is considered as making unsatisfactory progress by the VA and may lose future benefits. A veteran student must also maintain a satisfactory grade point average as outlined in this catalog.

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

Under the Hazlewood Act certain Texas 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, must now be residents of Texas, and be ineligible for federal grants. Applications are available at the Financial Aid Office and will take a minimum of eight weeks to process. To apply, students must submit a Hazlewood Act application, a copy of their discharge papers and a Student Aid Report stating ineligibility to the Financial Aid Office.

Academic Progress Requirements

Federal law requires that students must be making satisfactory progress in their course of study in order to receive financial aid. DCCCD policy requires the following:

The Grade Point Average (G.P.A.) Requirement:
1. A student must maintain a 2.0 G.P.A. for each semester or the combined summer sessions for which an award is approved.
2. A new applicant must have a cumulative 2.0 G.P.A. on all credit hours earned from District colleges prior to the semester for which aid is requested.
3. A transfer student from a college outside the District must have a cumulative 2.0 G.P.A. as evidenced by an academic transcript. If no academic transcript is available at the time of the award, aid may be awarded on a probationary basis for one semester only.

Completion Requirement:
1. A student enrolled full-time (12 credit hours or more) must complete a minimum of 9 credit hours for any semester or the combined summer sessions for which funding is received.
2. A student enrolled three-quarter time (9-11 credit hours) or half-time (6-8 credit hours) must complete a minimum of 6 credit hours for any semester or the combined summer sessions for which funding is received.

Failure to Meet the Standards of Academic Progress:

1. Following the first semester in which the above standards of academic progress are not met, the student will be placed on probation for the duration of the next semester of funding.
2. A new applicant with less than a cumulative 2.0 G.P.A. will not have met the standards of academic progress; however, financial aid may be awarded on a probationary basis for one semester only.
3. The student who fails to meet the standards of academic progress during the semester of attendance while on probation will be placed on suspension and denied further funding for one semester or combined summer session.
4. During the first period of suspension, the student must enroll at least half-time for one semester at a District college, pay the expenses related to that enrollment and maintain the standards of academic progress before eligibility for financial aid will be reestablished.
5. If failure to meet satisfactory progress results in a second suspension from financial aid, the student must

6. Following any period of suspension, the student will again be eligible for funding on a probationary basis for one semester or combined summer session.
7. If failure to meet satisfactory progress results in a third suspension from financial aid, no additional aid will be awarded.
8. The colleges of the District shall enforce probation or suspension status of any student who transfers from one college to another within the District.

Notification:
A student who is placed on probation or suspension will be notified in writing of the student's status.

Incremental Measurement of Progress:
Academic progress of recipients will be measured three times a year following the Fall and Spring semesters and Summer II session for the entire summer enrollment.

Maximum Time Period for Completion of Educational Objective:
1. Each student receiving financial aid funds will be expected to complete his or her educational objective or course of study within a reasonable period of time. The maximum hour limit for the District is 75 credit hours.
2. Funding beyond the maximum hour limit may be approved by the Director of Financial Aid due to mitigating circumstances.

Appeal Process:
1. A student who has been denied financial aid because of a failure to meet any of the criteria of the standards of academic progress may petition the Director of Financial Aid to consider mitigating circumstances.
2. A student who has been denied financial aid may make written appeal of the Financial Aid Director's decision to the Vice President of Student Development. The President of the college shall be the final appeal authority.

Effects on Funding:
1. Certain courses not considered for funding are:
   a. courses taken by audit; and
   b. courses taken outside the degree plan; however, developmental course, if required as a prerequisite to enable a student to successfully complete a student's educational goal, will be considered for funding.
2. Credit hours earned by a placement test will not be considered for funding.
3. Courses for which an "I" (incomplete), "WX" or "W" (withdrawal) grade is received will not be treated as completed courses.
4. Repeated courses will be considered for funding.
CODE OF STUDENT CONDUCT

1. PURPOSE

The purpose of this document is to provide guidelines to the educational environment of the Dallas County Community College District. This environment views students in a holistic manner, encouraging and inviting them to learn and grow independently. Such an environment presupposes both rights and responsibilities. Free inquiry and expression are essential parts of this freedom to learn, to grow, and to develop. However, this environment also demands appropriate opportunities and conditions in the classroom, on the campus, and in the larger community. Students must exercise these freedoms with responsibility.

2. POLICIES, RULES, AND REGULATION

   a. Interpretation of Regulations

   Disciplinary regulations at the college are set forth in writing in order to give students general notice of prohibited conduct. The regulations should be read broadly and are not designed to define misconduct in exhaustive terms.

   b. Inherent Authority

   The college reserves the right to take necessary and appropriate action to protect the safety and well-being of the campus community.

   c. Student Participation

   Students are asked to assume positions of responsibility in the college judicial system in order that they might contribute their skills and insights to the resolution of disciplinary cases. Final authority in disciplinary matters, however, is vested in the college administration and in the Board of Trustees.

   d. Standards of Due Process

   Students who allegedly violate provisions of this code are entitled to fair and equitable proceedings under this code.

   The focus of inquiry in disciplinary proceedings shall be the guilt or innocence of those accused of violating disciplinary regulations. Formal rules of evidence shall not be applicable, nor shall deviations from prescribed procedures necessarily invalidate a decision or proceeding, unless significant prejudice to a student respondent or the college may result.

   e. Prohibited Conduct

   Students may be accountable to both civil authorities and to the college for acts which constitute violations of law and this code. Disciplinary action at the college will normally proceed during the pendency of criminal proceedings and will not be subject to challenge on the ground that criminal charges involving the same incident have been dismissed or reduced.

   f. Definitions

   In this code:

   (1) "aggravated violation" means a violation which resulted or foreseeably could have resulted in significant damage to persons or property or which otherwise posed a substantial threat to the stability and continuance of normal college or college-sponsored activities.

   (2) "cheating" means intentionally using or attempting to use unauthorized materials, information, or study aids in any academic exercise.

   (3) "college" or "institution" means the colleges of the Dallas County Community College District.

   (4) "college premises" means buildings or grounds owned, leased, operated, controlled, or supervised by the college.

   (5) "college-sponsored activity" means any activity on or off campus which is initiated, aided, authorized, or supervised by the college.

   (6) "collusion" means the unauthorized collaboration with another person in preparing work offered for credit.

   (7) "complaint" means a written summary of essential facts which constitute an alleged violation of published college regulation or policy.

   (8) "controlled substance" and "illegal drugs" are those as defined by the state-controlled substances act, as amended.

   (9) "distribution" means sale or exchange for personal profit.

   (10) "fabrication" means intentional and unauthorized falsification or invention of any information or citation in an academic exercise.

   (11) "group" means a number of persons who are associated with each other and who have not complied with college requirements for registration as an organization.

   (12) "hazing" is defined in Appendix B of this code.

   (13) "intentionally" means conduct that one desires to engage in or one's conscious objective.

   (14) "organization" means a number of persons who have complied with college requirements for registration.

   (15) "plagiarism" means intentionally representing the words or ideas of another as one's own in any academic exercise.

   (16) "published college regulation or policy" means standards of conduct or requirements located in the:

   (a) College Catalog

   (b) Board of Trustees Policies and Administrative Procedures Manual

   (c) Student Handbook

   (d) Any other official publication

   (17) "reckless" means conduct which one should reasonably be expected to know would create a substantial risk or harm to persons or property or which would otherwise be likely to result in interference with normal college or college-sponsored activities.

   (18) "sanctions" means any or all of the punitive actions described in Appendix A of this code.

   (19) "student" means a person who has paid fees and is taking or auditing courses through the Dallas County Community College District.

   (20) "violation" means an act or omission which is contrary to a published college regulation or policy.

   (21) "weapon" means any object or substance designed to inflict a wound, cause injury, or incapacitate, including, but not limited to, all firearms, knives, clubs, or similar weapons which are defined and prohibited by the state penal code, as amended.

   (22) "will" and "shall" are used in the imperative sense.

   g. Prohibited Conduct

   The following misconduct is subject to disciplinary action:

   (1) intentionally causing physical harm to any person on college premises or at college-sponsored activities, or inten-
(2) unauthorized use, possession, or storage of any weapon on college premises or at college-sponsored activities.

(3) intentionally initiating or causing to be initiated any false report, warning or threat of fire, explosion or other emergency on college premises or at college-sponsored activities.

(4) intentionally interfering with normal college or college-sponsored activities, including, but not limited to, studying, teaching, research, college administration, or fire, security, or emergency services.

(5) knowingly violating the terms of any disciplinary sanction imposed in accordance with this chapter.

(6) unauthorized distribution or possession for purposes of distribution of any controlled substance or illegal drug on college premises or at college-sponsored activities.

(7) intentionally furnishing false information to the college.

(8) forgery, unauthorized alteration, or unauthorized use of any college document or instrument of identification.

(9) unauthorized use of computer hardware or software.

(10) all forms of academic dishonesty, including cheating, fabrication, facilitating academic dishonesty, plagiarism, and collusion.

(11) intentionally and substantially interfering with the freedom of expression of others on college premises or at college-sponsored activities.

(12) theft of property or of services on college premises or at college-sponsored activities; having possession of stolen property on college premises or at college-sponsored activities.

(13) intentionally destroying or damaging college property or property of others on college premises or at college-sponsored activities.

(14) failure to comply with the direction of college officials, including campus security/safety officers, acting in performance of their duties.

(15) violation of published college regulations or policies. Such regulations or policies may include those relating to entry and use of college facilities, use of vehicles and media equipment, campus demonstrations, misuse of identification cards, and smoking.

(16) use or possession of any controlled substance or illegal drug on college premises or at college-sponsored activities.

(17) unauthorized presence on or use of college premises.

(18) nonpayment or failure to pay any debt owed to the college with intent to defraud.

(19) use or possession of an alcoholic beverage on college premises with the exception of specific beverage-related courses within the El Centro food service program.

Sanctions for violations of prohibited conduct for (1) through (6) may result in EXPULSION; for (7) through (12) may result in SUSPENSION; for (13) through (19) may result in sanctions other than expulsion or suspension.

Repealed or aggravated violations of any provision of this code may also result in expulsion or suspension or in the imposition of such lesser penalties as are appropriate.

3. DISCIPLINARY PROCEEDINGS

a. Administrative Disposition

(1) Investigation, Conference and Complaint

(a) When the Vice President of Student Development (VPSD as referred to in this code) receives information that a student has allegedly violated a published college regulation or policy, the VPSD or a designee shall investigate the alleged violation. After completing the preliminary investigation, the VPSD may:

(ii) Prepare a complaint based on the alleged violation for use in disciplinary hearings along with a list of witnesses and documentary evidence supporting the allegation.

The VPSD will notify the complainant of the disposition of the complaint. If the VPSD dismisses the allegation, the complainant may appeal to the President for review in writing within (5) working days after disposition.

(b) The President or a designee may suspend a student immediately and without prior notice for an interim period pending disciplinary proceedings, when there is evidence that the continued presence of the student on college premises poses a substantial threat to himself or herself, to others, or to the stability and continuance of normal college functions. A student who is suspended on an interim basis shall be given an opportunity to appear before the President or a designee within five (5) working days from the effective date of the interim suspension. A hearing with the President shall be limited to the following issues only:

(i) the reliability of the information concerning the student's conduct, including the matter of his or her identity; and

(ii) whether the conduct and surrounding circumstances reasonably indicate that the student's continued presence on college premises poses a substantial threat to himself or herself, to others or to the stability and continuance of normal college functions.

After the hearing, the President or designee may modify the interim suspension as reasonable to protect the student, public, and college.

(c) No person shall search a student's personal possessions for the purpose of enforcing this code unless the student's prior permission has been obtained or unless a law enforcement officer conducts the search as authorized by law.

(2) Summons

(a) The VPSD shall summon a student regarding an alleged violation of this code by sending the student a letter. The letter shall be sent by certified mail, return receipt requested, addressed to the student at his or her last known address as it appears in the records of the Registrar's Office or shall be delivered personally to the student.
(b) The letter shall direct a student to appear at a specific time and place not less than five (5) working days after the date of the letter. The letter shall describe briefly the alleged violation and cite the published college regulation or policy which allegedly has been violated.

(c) The VPSD has authority to place a student on disciplinary probation if the student fails, without good cause, to comply with a letter of summons, or to apply sanctions against the student as provided in this code.

(3) Disposition

(a) At a conference with a student in connection with an alleged violation of this code, the VPSD shall provide the student with a copy of this code and discuss administrative disposition of the alleged violation.

(i) If a student accepts the administrative disposition, the student shall sign a statement that he or she understands the charges, his or her right to a hearing or to waive same, the penalty or penalties imposed, and that he or she waives the right to appeal. The student shall return the signed form by 5:00 p.m. of the day following administrative disposition.

(ii) If a student refuses administrative disposition of the alleged violation, the student is entitled to a hearing as provided herein. The VPSD shall note the date of refusal in writing and the student shall acknowledge in writing such date.

Administrative disposition means:

* the voluntary acceptance of the penalty or penalties provided in this code.
* other appropriate penalties administered by the VPSD.
* without recourse by the student to hearing procedures provided herein.

(b) The VPSD shall prepare an accurate, written summary of each administrative disposition and send a copy to the student (and, if the student is a minor, to the parent or guardian of the student), to the Director of Campus Security, to the complainant, and to other appropriate officials.

b. Student Discipline Committee

(1) Composition: Organization

(a) When a student refuses administrative disposition of a violation, the student is entitled to a hearing before the Student Discipline Committee. The hearing request must be made to the VPSD in writing, on or before the sixth (6th) working day after the date of refusal of administrative disposition. The committee shall be composed of equal numbers of students, administrators and faculty of the college. The committee and its chair shall be appointed by the President for each hearing on a rotating basis or on a basis of availability. The committee chair will be selected from the administration or faculty. 

(b) The chairman of the committee shall rule on the admissibility of evidence, motions, and objections to procedure, but a majority of the committee members may override the chairman’s ruling. All members of the committee are expected to attend all meetings and are eligible to vote in the hearing.

(c) The chairman shall set the date, time, and place for the hearing and may summon witnesses and require the production of documentary and other evidence.

(d) The VPSD shall represent the college before the Student Discipline Committee and present evidence to support any allegations of violations.

(2) Notice

(a) The committee chairman shall notify the student of the date, time, and place for the hearing by sending the student a letter by certified mail, return receipt requested, addressed to the student at his or her address appearing in the Registrar’s Office records. The letter shall specify a hearing date not less than five (5) nor more than (10) working days after date of the letter. If a student is under 18 years of age, a copy of the letter shall be sent to the parents or guardian of the student.

(b) The chairman may for good cause postpone the hearing so long as all interested parties are notified of the new hearing date, time, and place.

(c) The notice shall advise the student of the following rights:

(i) To a private hearing or a public hearing (as he or she chooses);
(ii) To appear alone or with legal counsel if the alleged violation subjects the student to expulsion or suspension. The role of legal counsel is limited as provided in the code;
(iii) To have a parent or legal guardian present at the hearing;
(iv) To know the identity of each witness who will testify;
(v) To cause the committee to summon witnesses, and to require the production of documentary and other evidence possessed by the College;
(vi) To cross-examine each witness who testifies;
(vii) To cross-examine each witness who testifies;
(viii) To cross-examine each witness who testifies;
(ix) To cross-examine each witness who testifies;
(x) To cross-examine each witness who testifies;
(xi) To cross-examine each witness who testifies;

(d) A student who fails to appear after proper notice and without good cause will be deemed to have pleaded guilty to the violation pending against him. The committee shall impose appropriate penalty and notify the student in the same manner as the notice of hearing.

(e) Legal counsel who represents a student in a hearing where the alleged violation subjects the student to expulsion or suspension is limited to advising and assisting the student. This limitation means that legal counsel shall not cross-examine witnesses, make objections, testify, or perform other similar functions generally associated with legal representation. The same preceding limitation applies to counsel who represents the college. Student representation by legal counsel is not permitted in a hearing where the alleged violation does not subject the student to expulsion or suspension.

(3) Preliminary Matters

(a) Charges arising out of a single transaction or occurrence, against one or more students, may be heard together, or, upon request by one of the students-in-interest, separate hearings may be held.

(b) There will be disclosure of all evidence to both sides prior to the hearing.

(c) At least by 12:00 noon, five (5) full working days before the hearing date, the student concerned shall furnish the committee chairman with:

(i) The name of each witness he or she wants summoned and a description of all documentary and other evidence possessed by the college which he or she wants produced.

(ii) An objection that, if sustained by the chairman of the Student Disciplinary Committee, would prevent the hearing;

(iii) The name of the legal counsel, if any, who will appear with the student;

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

(a) The hearing shall be conducted by the chairman who shall provide opportunities for witnesses to be heard. The college will be represented by legal counsel if the student is represented by legal counsel in a hearing where the student is subject to expulsion or suspension.

(b) If a hearing may result in expulsion or suspension of a student, the college will have a court reporter present to transcribe the proceedings. If a hearing will not result in expulsion or suspension of a student, legal representation is not permitted and recording of the hearing by any means is not permitted unless authorized by law.

(c) If the hearing is a private hearing, the committee shall proceed generally as follows:

(i) Persons present: the complainant, the VPSD and the student with a parent or guardian if desired.

(ii) Before the hearing begins, the VPSD or the student may request that witnesses remain outside the hearing room.

(iii) The VPSD shall read the complaint;

(iv) The VPSD shall inform the student of his or her rights, as stated in the notice of hearing;

(v) The VPSD shall present the college’s case;

(vi) The student may present his or her defense;

(vii) The VPSD and the student may present rebuttal evidence and argument.

(viii) The committee, by majority vote, shall determine the guilt or innocence of the student regarding the alleged violation.

(ix) The committee shall state in writing each finding of a violation of a published college regulation or policy. Each committee member concurring in the findings shall sign the statement. The committee may include in the statement its reasons for the finding. The committee shall notify the student in writing, of its decision as in (ix) above.

(d) If the hearing is a public hearing, the committee shall proceed generally as follows:

(i) Persons present: the complainant, the VPSD and the student with a parent or guardian if desired. Designated college representatives for the following groups may have space reserved if they choose to attend:

* Faculty Association
* College Newspaper
* President

Other persons may attend based on the seating available. The Chairman may limit seating accommodations based on the size of the facilities.

(ii) Before the hearing begins, the VPSD or the student may request that witnesses remain outside the hearing room.

(iii) The VPSD shall read the complaint;

(iv) The VPSD shall inform the student of his or her rights, as stated in the notice of hearing;

(v) The VPSD shall present the college’s case;

(vi) The student may present his or her defense;

(vii) The VPSD and the student may present rebuttal evidence and argument;

(viii) The committee, by majority vote, shall determine the guilt or innocence of the student regarding the alleged violation.

(ix) The committee shall state in writing each finding of a violation of a published college regulation or policy. Each committee member concurring in the finding shall sign the statement. The committee may include in the statement its reasons for the finding. The committee shall notify the student in the same manner as the notice of hearing.

A determination of guilt shall be followed by a supplemental proceeding in which either party may submit evidence or make statements to the committee concerning the appropriate penalty to be imposed. The past disciplinary record of a student shall not be submitted to the committee prior to the supplemental proceeding. The committee shall determine a penalty by majority vote and shall inform the student, in writing, of its decision as in (ix) above.

(5) Evidence

(a) Legal rules of evidence shall not apply to hearings under this code. Evidence that is commonly accepted by reasonable persons in the conduct of their affairs is admissible. Irrelevant, immaterial, and unduly repetitious evidence may be excluded.

(b) The committee shall recognize as privileged communications between a student and a member of the professional staff of the Health Center, Counseling or Guidance Center where such communications were made in the course of performance of official duties and when the matters discussed were understood by the staff member and the student to be confidential. Committee members may freely question witnesses.

(c) The committee shall presume a student innocent of the alleged violation until there is a preponderance of evidence, presented by the VPSD, that the student violated a published college regulation or policy.

(d) All evidence shall be offered to the committee during the hearing.

(e) A student defendant may choose not to testify against himself or herself. The committee will make a determination based on the evidence presented.

(6) Record

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

(7) Petition for Administrative Review

(a) A student is entitled to appeal in writing to the President who may alter, modify, or rescind the finding of the committee and/or the penalty imposed by the committee. A student is ineligible to appeal if the penalty imposed is less than suspension or expulsion. The President shall automatically review every penalty of expulsion. Sanctions will not be imposed while appeal is pending.

(b) A student is entitled to appeal in writing to the Board of Trustees through the President, the Chancellor, and the Chairman of the Board. An appeal from the Student Discipline Committee is by review of the record (not de novo).

(c) A petition for review is informal but shall contain, in addition to the information required, the date of the Board of Trustees' action and the student's reasons for disagreeing with the committee's action. A student shall file his or her petition with the President on or before the third working day after the day the Discipline committee determines the penalty. If the President rejects the petition, and the student wishes to petition the Chancellor, he or she shall file the petition with the
2. Definitions:

APPENDIX A - SANCTIONS

d. "Withholding of transcript of degree" may be imposed upon a student on whom it is imposed.

c. "Disciplinary probation" means further violations may result in suspension for engaging in activities as illustrated by, but not limited to the following: being intoxicated, misuse of I.D. card, creating a disturbance in or on college premises and gambling.

d. Withholding of transcript of degree

APPENDIX B - HAZING

1. Personal Hazing Offense

a. A person commits an offense if the person:

(1) engages in hazing;

(2) solicits, encourages, directs, aids, or attempts to aid another person in engaging in hazing;

(3) intentionally, knowingly, or recklessly permits hazing to occur; or

(4) has firsthand knowledge of the planning of a specific hazing incident involving a student in an educational institution, or firsthand knowledge that a specific hazing inci-
2. Organization Hazing Offense
   a. An organization commits an offense if the organization condones or encourages hazing or if an officer or any combination of members, pledges, or alumni of the organization commits or assists in the commission of hazing.
   b. The above offense is a misdemeanor punishable by a fine of not less than $5,000 nor more than $10,000, confinement in county jail for not more than one year nor more than two years, or both such fine and confinement.

3. Consent Not a Defense
   It is not a defense to prosecution of a hazing offense that the person against whom the hazing was directed consented to or acquiesced in the hazing activity.

4. Immunity from Prosecution
   Any person reporting a specific hazing incident involving a student in an educational institution to the VPSD or other appropriate official of the institution is immune from liability, civil or criminal, that might otherwise be incurred or imposed as a result of the report. A person reporting in bad faith or with malice is not protected.

5. Definition
   "Hazing" means any intentional, knowing, or reckless act, occurring on or off the campus of an educational institution, by one person alone or acting with others, directed against a student that endangers the mental or physical health or safety of a student for the purpose of pledging, being initiated into, affiliating with, holding office in, or maintaining membership in any organization whose members are or include students at an educational institution. The term includes but is not limited to:
   a. any type of physical brutality, such as whipping, beating, striking, branding, electronic shocking, placing of a harmful substance on the body, or similar activity;
   b. any type of physical activity, such as sleep deprivation, exposure to the elements, confinement in a small place, calisthenics, or any other activity that subjects the student to an unreasonable risk of harm or that adversely affects the mental or physical health or safety of the student.
   c. any activity involving consumption of a food, liquid, alcoholic beverage, liquor, drug, or any other substance which subjects the student to an unreasonable risk of harm or which adversely affects the mental or physical health or safety of the student.
   d. any activity that intimidates or threatens the student with ostracism, that subjects the student to extreme mental stress, shame, or humiliation, or that adversely affects the mental health or dignity of the student or discourages the student from entering or remaining registered in an educational institution, or that may reasonably be expected to cause a student to leave the organization or the institution rather than submit to acts described in the subsection.
   e. any activity that induces, causes, or requires the student to perform a duty or task which involves a violation of the Penal Code.

**Student Grievance Procedure**

1. Definition
   Student grievance is a college-related internal problem or condition which a student believes to be unfair, inequitable, discriminatory, or a hindrance to the educational process. This includes sexual harassment that a student may suffer from another student or employee of the district.

2. Scope
   This student grievance procedure is not intended to supplant the Student Code of Conduct, which allows the student procedural due process in disciplinary proceedings initiated by the college. This student grievance procedure is designed to provide the student with the opportunity to question conditions which the student believes impede his or her education or instruction. This student grievance procedure is not designed to include changes in policy nor does it apply to grading practices. Recommendations for initiating new policy or changing established policy are handled through normal administrative channels. Problems with grades will be dealt with first by the instructor, then by the division chair, and so forth to the President if necessary.

3. Limitations
   The Student Grievance Procedure is not intended to supplant campus administrative procedures that address matters of policy or student grades.

4. Procedures
   Students who believe that they have a college-related grievance:
   a. Should discuss it with the college employee most directly responsible for the condition which brought about the alleged grievance.
   b. If discussion does not resolve the matter to the student's satisfaction, the student may appeal to the next level of authority. The student may consult with the Administrative Office to determine the next level of authority.
   c. If an appeal does not resolve the grievance, the student may proceed to the appropriate Vice President with a written presentation of the grievance.
   d. If the Vice Presidential level of appeal does not prove satisfactory to the student, the student may appeal the grievance to an appeal committee.

5. Exception To Procedures
   Sexual Harassment:
   All students and employees shall report complaints of sexual
6. Appeal Committee

Procedures:

a. A student who wishes a grievance to be heard must submit a request in writing to the VPSD.

b. The VPSD will convene and chair the Appeal Committee.

c. The appeal must be heard by the committee within ten (10) class days of the request unless extended with the agreement of both the student and the VPSD.

d. The committee will be ad hoc and will consist of two (2) students, two (2) faculty members, and one (1) staff member who is either an administrator or non-contractual employee. It is the responsibility of the President or the President’s designee to appoint all committee members.

e. The Appeal Committee will make its recommendation directly to the President. The decision of the President shall be final.

CAMPUS PARKING AND DRIVING REGULATIONS


a. Authority for Regulations: The Board of Trustees, for the benefit of its colleges, is authorized by state law (Sec. 51.202, Education Code) to promulgate and enforce rules and regulations for the safety and welfare of students, employees, and property and other rules and regulations it may deem necessary to govern the institution, including rules for the operation and parking of vehicles on the college campuses and any other property under institutional control.

b. Authority of Campus Peace Officers: Pursuant to the provisions of Sec. 51.2203, Education Code, campus peace officers are commissioned peace officers of the State of Texas, and as such have full authority to enforce all parking regulations, and other regulations and laws within areas under the control and jurisdiction of the District. In addition, campus peace officers may enforce all traffic laws on public streets and highways which are in proximity to areas under District control. Campus peace officers may issue citations to violators or take other action consistent with the law.

c. Permits:

Vehicle: In accordance with Sec. 51.207, Education Code, each college may issue and require use of a suitable vehicle identification decal as permits to park and drive on college property. Permits may be suspended for violations of applicable state law or parking and driving regulations. Each person who is required to have a vehicle identification decal shall apply to the Department of Campus Security for the decal. No fee is charged for the decal which must be placed on the rear window of the driver’s side of a motor vehicle and on the gas tank of the motorcycle or motorbike.

Handicap: All authorized decals for handicap parking areas must be displayed prior to parking in such areas.

d. Posting of Signs: Under the direction of the college president, the Department of Campus Safety shall post proper traffic and parking signs.

e. Applicability of Regulations: The rules and regulations in this Chapter apply to motor vehicles, motorbikes and bicycles on college campuses or other District property, and are enforceable against students, employees of the District and visitors.

2. Prohibited Acts: The following acts shall constitute violations of these regulations:

a. Speeding: The operation of a vehicle at a speed greater than is reasonable and prudent under existing conditions. The prima facie maximum reasonable and prudent speed on campus streets is twenty (20) miles per hour, and ten (10) miles per hour in parking areas, unless the street or area is otherwise posted.

b. Double parking, or otherwise parking, standing or stopping so as to impede the flow of traffic.

c. Driving the wrong way on a one-way street or lane.

d. Driving on the wrong side of the roadway.

e. Improper parking, so that any portion of a vehicle is outside the marked limits of a parking space.

f. Parking in unauthorized areas, as illustrated by, but not limited to those areas posted as visitor parking, no parking, handicapped parking or loading zones, designated crosswalks, motorcycle areas, or other unauthorized areas as designated by sign.

g. Parking trailers or boats on campus.

h. Parking or driving in areas other than those designated for vehicular traffic, as illustrated by, but not limited to courtyards, sidewalks, lawns, or curb areas.

i. Failure to display a parking permit.

j. Collision with another vehicle, a person, sign or immovable object.

k. Reckless driving.

l. Failure to yield the right-of-way to pedestrians in designated crosswalks.

m. Violation of any state law regulating vehicular traffic.

3. Tow-away Areas: A vehicle may be towed if parked without authority in the following areas:

a. Handicapped parking.

b. Fire lanes.

c. Courtyards.

d. "No Parking" zones.

e. Areas other than those designated for vehicular traffic.

f. Other unauthorized areas as designated by sign.

4. Citations:

a. Types: Citations shall be of two types:

(1) Campus Citations: A campus citation is a notice that the alleged violator’s parking and driving privilege or permit has been suspended pending appeal or disposition.

(2) Court Citations: A court citation is a notice of alleged violation of the type used by the Texas Highway Patrol, as authorized by Education Code, Sec. 51.206. Generally, such citations shall be used for violations by visitors, other persons holding no college permit, and employees of the District for excessive violations. However, such citations may be used for the enforcement of any provisions of these regulations.

b. Disposition

(1) Campus Citation: A campus citation is returnable to the Department of Campus Safety, and a permit or driving privilege may be reinstated by the payment of a five dollar ($5.00) service charge per citation at the college
business office.

(2) Court Citation: A court citation is returnable to the justice or municipal court in which the case is filed. Disposition of the citation may be made in the same manner as any other criminal case within the jurisdiction of such court.

5. Suspension Review: A person receiving a campus citation shall have the right to appeal the suspension of rights by submitting to the college safety committee, within ten (10) days after the date of violation, notice of appeal in writing, which shall state the reasons for such appeal.

6. Safety Committee: The safety committee shall consist of not less than three (3) persons appointed by the President, none of whom shall be a campus peace officer. The committee shall meet as needed, but not less than five (5) business days after receipt of notice of appeal. Notice of such meetings shall be given to an appellant not less than twenty-four (24) hours prior thereto.

7. Penalties
   a. Impoundment: Failure to pay the service charge within ten (10) days after receipt thereof, or, if appealed, within ten (10) days after denial of appeal, shall result in impoundment of the vehicle, denial of re-admission to any District college, and withholding of any transcript or degree. If a vehicle is impounded, the owner is liable for any wrecker charges and storage fees in addition to the service charge.
   b. Multiple Citations: Receipt of four (4) citations during the period from August 15 of a year to August 14 of the year following will result in suspension of the parking and driving permit or driving privilege for the balance of such year.
   c. Court Citations: Penalties for convictions in municipal or justice court are as prescribed by state law, not to exceed $200 per conviction.

8. Miscellaneous: The District nor any of its colleges or employees are responsible for damage to or theft of a vehicle or its contents while on the college campus.
RECIPROCAL TUITION AGREEMENT
DCCCD PROGRAMS
The following programs offered by the Dallas County Community College District may be taken by Tarrant County residents at in-county tuition rates:

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**DALLAS COUNTY COMMUNITY COLLEGE DISTRICT**  
1989-90 Technical/Occupational Programs Offered On Our Campuses

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</table>

*North Lake College will offer this pending Coordinating Board approval.
ACCOUNTING ASSOCIATE

Offered at all seven campuses

( 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 66 credit hours as outlined below. Students desiring a less comprehensive program that includes some bookkeeping procedures and practices should consider the General Office Certificate. The General Office Certificate is available in the Office Careers Program.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
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Minimum Hours Required ................................... 66

+ Elective—must be selected from the following:

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<thead>
<tr>
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<th>Title</th>
<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>ANT 100</td>
<td>Introduction to Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>GVT 201</td>
<td>American Government</td>
<td>3</td>
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<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>
<td>3</td>
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<tr>
<td>HST 102</td>
<td>History of the United States</td>
<td>3</td>
</tr>
<tr>
<td>HD 105</td>
<td>Basic Processes of Interpersonal Relationships</td>
<td>3</td>
</tr>
<tr>
<td>HD 106</td>
<td>Personal and Social Growth</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 103</td>
<td>Human Sexuality</td>
<td>3</td>
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<tr>
<td>PSY 131</td>
<td>Applied Psychology and Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>SCC 101</td>
<td>Introduction to Sociology</td>
<td>3</td>
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<tr>
<td>SCC 102</td>
<td>Social Problems</td>
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++ + Elective—must be selected from the following:

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
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<tbody>
<tr>
<td>ART 104</td>
<td>Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>ENG 201</td>
<td>British Literature</td>
<td>3</td>
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<tr>
<td>ENG 202</td>
<td>British Literature</td>
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<tr>
<td>ENG 203</td>
<td>World Literature</td>
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<td>ENG 204</td>
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<tr>
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<tr>
<td>ENG 206</td>
<td>American Literature</td>
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</tr>
<tr>
<td>HUM 101</td>
<td>Introduction to the Humanities</td>
<td>3</td>
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<tr>
<td>MUS 104</td>
<td>Music Appreciation</td>
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</tr>
<tr>
<td>PHI 102</td>
<td>Introduction to Philosophy</td>
<td>3</td>
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</table>

+ + + Electives—may be selected from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 104</td>
<td>Art Appreciation</td>
<td>3</td>
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<tr>
<td>ENG 201</td>
<td>British Literature</td>
<td>3</td>
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<tr>
<td>ENG 202</td>
<td>British Literature</td>
<td>3</td>
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<tr>
<td>ENG 203</td>
<td>World Literature</td>
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<tr>
<td>ENG 204</td>
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<td>ENG 205</td>
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<td>HUM 101</td>
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<td>MUS 104</td>
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<tr>
<td>PHI 102</td>
<td>Introduction to Philosophy</td>
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</tbody>
</table>

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

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

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
AIR CONDITIONING AND REFRIGERATION--RESIDENTIAL

Cedar Valley, Eastfield, and North Lake only

(Associate Degree)

This program is designed to train students to meet employment requirements in the field of residential air conditioning. This will include the installation, repair and maintenance of residential air conditioning equipment. Included in this program is the study of residential air conditioners, heat pumps, gas and electric furnaces, humidifiers, and the design of residential air conditioning systems. Throughout the entire program an emphasis is placed on current techniques used by service technicians.

CREDIT HOURS

<table>
<thead>
<tr>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>ACR 120</td>
<td>Principles of Refrigeration or 6</td>
</tr>
<tr>
<td>ACR 121</td>
<td>Principles of Refrigeration I and (3)</td>
</tr>
<tr>
<td>ACR 122</td>
<td>Principles of Refrigeration II ...... (3)</td>
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<tr>
<td>ACR 125</td>
<td>Principles of Electricity or 6</td>
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<td>ACR 126</td>
<td>Principles of Electricity I and (3)</td>
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<td>ACR 127</td>
<td>Principles of Electricity II .......... (3)</td>
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<td>MTH 195</td>
<td>Technical Mathematics I or</td>
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<table>
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<tbody>
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<td>ACR 130</td>
<td>Residential Cooling Systems or 6</td>
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<tr>
<td>ACR 131</td>
<td>Residential Cooling Systems I and (3)</td>
</tr>
<tr>
<td>ACR 132</td>
<td>Residential Cooling Systems II ...... (3)</td>
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<td>ACR 140</td>
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<td>ACR 141</td>
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<td>ACR 200</td>
<td>Contractor Estimating or 6</td>
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<tr>
<td>ACR 209</td>
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<td>ACR 210</td>
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<td>ACR 213</td>
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<td>ENG 101</td>
<td>Composition I ..................... 3</td>
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<tbody>
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<td>SC 101</td>
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<td>PSY 131</td>
<td>Applied Psychology and Human Relations ............. 3</td>
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<td>Electives</td>
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Minimum Hours Required ................. 60

+ Electives—must be selected from the following:

Any ACR (Air Conditioning and Refrigeration) course
ACR 109  Contemporary Topics I .................. 2
ACR 110  Contemporary Topics II ................ 3
ACR 221  Refrigeration Loads ................... 3
ACR 222  Advanced Systems .................... 3
ACR 223  Medium Temperature Refrigeration Systems .... 3
ACR 224  System Testing and Balancing .......... 3
ACR 227  Low Temperature Refrigeration Systems .... 3
ACR 228  Air Conditioning System Equipment Selection .. 3
ACR 229  Refrigeration Equipment Selection ...... 3
ACR 230  Energy Conservation .................. 3
ACR 703  Cooperative Work Experience .......... 3
ACR 704  Cooperative Work Experience .......... 4
ACR 713  Cooperative Work Experience .......... 3
ACR 714  Cooperative Work Experience .......... 4
ACC 131  Bookkeeping I ................... 3
BPR 177  Blueprint Reading .................. 2
BUS 105  Introduction to Business .......... 3
CIS 103  Introduction to Computer Information Systems .. 3
DFT 182  Technician Drafting ................ 2
MG 153  Small Business Management .......... 3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
AIR CONDITIONING AND REFRIGERATION--RESIDENTIAL

Certificate

This program is designed to train students to meet entry level requirements in the field of air conditioning. This will include the installation, repair and maintenance of residential air conditioning equipment. Included in this program is the study of residential air conditioners, humidifiers, heat pumps, gas and electric furnaces. Throughout the entire program an emphasis is placed on current techniques used by service technicians.

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<td>SEMESTER I</td>
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Minimum Hours Required .......... 30

+ Elective--must be selected from the following:

| ACC 131 | Bookkeeping I  | 3 |
| ART 104 | Art Appreciation | 3 |
| BUS 105 | Introduction to Business | 3 |
| CIS 103 | Introduction to Computer Information Systems | 3 |
| HUM 101 | Introduction to the Humanities | 3 |
| MGT 136 | Principles of Management | 3 |
| MGT 153 | Small Business Management | 3 |
| PHY 131 | Applied Physics | 4 |
| SPA 101 | Beginning Spanish | 4 |
COMPUTER INFORMATION SYSTEMS -- BUSINESS COMPUTER INFORMATION SYSTEMS

Offered at all seven campuses

(Associate Degree)

This option is designed to develop entry-level skills and knowledge in computer information systems. The option includes several business courses found in university degree programs as well as CIS courses which will prepare students for CIS course work at a university. A touch typing speed of 20 words per minute is suggested for most CIS courses with a lab component. Students are advised to develop this proficiency.

### CREDIT HOURS

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<th>SEMESTER I</th>
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<td>BUS 105</td>
<td>Introduction to Business or Principles of Management</td>
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<td>MTH 111</td>
<td>Mathematics for Business and Economics I</td>
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<td>Mathematics for Business and Economics II</td>
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<td>Introduction to Speech Communication</td>
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<tr>
<td>CIS 150</td>
<td>Computer Program Logic and Design</td>
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<td>ACC 201</td>
<td>Principles of Accounting I*</td>
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<td>ECO 201</td>
<td>Principles of Economics I</td>
<td>3</td>
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<td>ACC 202</td>
<td>Principles of Accounting II</td>
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<td>3</td>
</tr>
<tr>
<td>+++ Elective</td>
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<thead>
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<tr>
<td>CIS 210</td>
<td>Assembly Language I</td>
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<tr>
<td>ECO 202</td>
<td>Principles of Economics II</td>
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<tr>
<td>Any CIS/CS or Accounting course</td>
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<td>3</td>
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<td>++++ Elective</td>
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<td>3-4</td>
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<td><strong>13-14</strong></td>
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Minimum Hours Required: 60

+Elective must be selected from the following:

- HST 101 History of the United States 3
- GVT 201 American Government 3
- PSY 101 Introduction to Psychology 3
- SOC 101 Introduction to Sociology 3

++ Elective must be selected from the following:

- ENG 102 Composition II 3
- HUM 101 Introduction to the Humanities 3

++++ Recommended Electives

- Any CIS or CS course (including CIS 701, 703, 704, 713 or 714)

Any 200 level accounting course not listed.

+++++ Electives must be selected from the following:

- CIS 108 PC Software Applications 4
- CIS 114 Problem Solving With the Computer 4
- CIS 118 Text Processing Applications 3
- CIS 167 C Programming 4
- CIS 169 4th Generation Languages 4
- CIS 170 RPG Programming 3
- CIS 172 BASIC Programming 3
- CIS 173 PASCAL Programming for Business 3
- CIS 218 Spreadsheet Applications 4

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

- CIS 172 or CS 122
- CIS 210 or CS 211
- CIS 103 or CS 111
- CIS 173 or CS 112

*ACC 131 and ACC 132 may be substituted for ACC 201.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
COMPUTER INFORMATION SYSTEMS
-- BUSINESS COMPUTER PROGRAMMER

Offered at all seven campuses
(Associate Degree)

This option 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 direct entry into the work environment. It is intended to provide a sufficient foundation so the graduate with experience and continued learning may advance in career paths appropriate to their own particular interests and abilities. Touch typing speed of 20 words per minute is suggested for most CIS courses with a lab component. Students are advised to develop this proficiency.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
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<td>CIS 103</td>
</tr>
<tr>
<td>BUS 105</td>
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<td>MGT 136</td>
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<td>MTH 115</td>
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<td>ENG 101</td>
</tr>
<tr>
<td>PSY 131</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

| SEMESTER II   |
| CIS 150       | Computer Program Logic and Design                             | 3 |
| CIS 160       | Data Communications                                           | 3 |
| CIS 162       | COBOL Programming I                                           | 4 |
| ACC 201       | Principles of Accounting ***                                  | 3 |
| SC 101        | Introduction to Speech Communication                         | 3 |
|               | **Total**                                                    | 16 |

| SEMESTER III  |
| CIS 164       | COBOL Programming II                                          | 4 |
| CIS 205       | JCL and Operating Systems                                     | 4 |
| ACC 202       | Principles of Accounting II                                   | 3 |
| + Elective    | **Total**                                                    | 3-4 |

| SEMESTER IV   |
| CIS 210       | Assembly Language I                                           | 4 |
| CIS 225       | Systems Analysis and Design                                    | 4 |
| CIS 258       | On-Line Applications or On-Line Applications or Data Base Systems | 4 |
| +++ Elective  | **Total**                                                    | 3-4 |
|               | **Total**                                                    | 15-16 |

Minimum Hours Required ........................................... 63

+ Electives—must be selected from the following:

Any CIS or CS course (including CIS 701, 703, 704, 713 or 714).

ACC 204 Managerial Accounting .................................... 3
ACC 238 Cost Accounting .............................................. 3
ACC 250 Microcomputer-Based Accounting Applications .......... 3

++ Electives—must be selected from the following:

ENG 102 Composition II ................................................ 3
HUM 101 Introduction to the Humanities ......................... 3
PHI 103 Critical Thinking .......................................... 3

+++ Electives—must be selected from the following:

CIS 108 PC Software Applications ..................................... 4
CIS 114 Problem Solving With the Computer ....................... 4
CIS 118 Text Processing Applications ............................. 3
CIS 167 C Programming ................................................ 4
CIS 169 4th Generation Languages .................................. 4
CIS 170 RPG Programming .............................................. 3
CIS 172 BASIC Programming ........................................... 3
CIS 173 PASCAL Programming for Business ......................... 3
CIS 218 Spreadsheet Applications .................................. 4
Any 200 level CIS course ............................................. 3-4

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

CIS 172 or CS 122
CIS 210 or CS 211
CIS 103 or CS 111
CIS 173 or CS 112

*MTH 111 or MTH 130 may be substituted

**PSY 101 may be substituted

***ACC 131 and ACC 132 may be substituted for ACC 201.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
CONSTRUCTION MANAGEMENT AND TECHNOLOGY

Richland only (To be offered at North Lake pending Coordinating Board approval)

(Associate Degree)

This program prepares the student for employment as a technician in a wide range of construction industry applications. Course content is designed to provide meaningful experiences in the construction industry at the management and site coordination level.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>CMT 121 Construction Materials, Methods and Equipment I .......... 3</td>
</tr>
<tr>
<td>CMT 123 Construction Graphics .................... 4</td>
</tr>
<tr>
<td>CMT 132 Construction Industry .................... 3</td>
</tr>
<tr>
<td>CMT 236 Building Codes and Safety ..................... 4</td>
</tr>
<tr>
<td>MTH 195 Technical Mathematics I* .................... 3</td>
</tr>
<tr>
<td>17</td>
</tr>
<tr>
<td>SEMESTER II</td>
</tr>
<tr>
<td>CMT 122 Construction Materials, Methods and Equipment II .......... 3</td>
</tr>
<tr>
<td>CMT 124 Electrical and Mechanical Equipment for Buildings ............. 4</td>
</tr>
<tr>
<td>CIS 108 PC Software Applications ..................... 4</td>
</tr>
<tr>
<td>COM 131 Applied Communications* .................... 3</td>
</tr>
<tr>
<td>MTH 196 Technical Mathematics II* .................... 3</td>
</tr>
<tr>
<td>17</td>
</tr>
<tr>
<td>SEMESTER III</td>
</tr>
<tr>
<td>CMT 136 Surveying and Measurements .................... 4</td>
</tr>
<tr>
<td>CMT 138 Construction Management I ..................... 4</td>
</tr>
<tr>
<td>CMT 231 Construction Contracts and Specifications ..................... 3</td>
</tr>
<tr>
<td>EGR 289 Mechanics of Structure .................... 3</td>
</tr>
<tr>
<td>SC 101 Introduction to Speech Communication ..................... 3</td>
</tr>
<tr>
<td>17</td>
</tr>
<tr>
<td>SEMESTER IV</td>
</tr>
<tr>
<td>CMT 230 Quality Control and Cost Control ..................... 4</td>
</tr>
<tr>
<td>CMT 234 Estimating ..................... 4</td>
</tr>
<tr>
<td>CMT 237 Soils, Foundations, and Reinforced Concrete ..................... 4</td>
</tr>
<tr>
<td>CMT 238 Construction Management II ..................... 4</td>
</tr>
<tr>
<td>+Elective ..................... 3-4</td>
</tr>
<tr>
<td>19-20</td>
</tr>
</tbody>
</table>

Minimum Hours Required ..................... 70

+Electives—must be selected from the following:

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 100 Introduction to Anthropology ..................... 3</td>
</tr>
<tr>
<td>ART 104 Art Appreciation .................................. 3</td>
</tr>
<tr>
<td>GVT 201 American Government .............................. 3</td>
</tr>
<tr>
<td>HST 101 History of the United States or HST 102 History of the United States ..................... 3</td>
</tr>
<tr>
<td>HST 105 Western Civilization or HST 106 Western Civilization ..................... 3</td>
</tr>
<tr>
<td>HUM 101 Introduction to the Humanities .................. 3</td>
</tr>
<tr>
<td>PHI 102 Introduction to Philosophy .................... 3</td>
</tr>
<tr>
<td>SPA 101 Beginning Spanish .............................. 4</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>(Or any higher level Spanish course)</td>
</tr>
</tbody>
</table>

* The following substitutions for required courses are permitted:

<table>
<thead>
<tr>
<th>ENG 101 for COM 131</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH 101 and MTH 102 for MTH 195 and MTH 196</td>
</tr>
</tbody>
</table>

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
CONSTRUCTION TECHNOLOGY

North Lake only
( Associate Degree)

This program is designed to develop the skills and knowledge necessary so that a graduate may advance in career paths appropriate to a person’s own particular interests and abilities, in either the field of residential or commercial building or contracting. In addition to the specific technical skills and knowledge required to build buildings and supervise employees on a construction job, the graduate will have covered skills in other areas such as planning and organization, problem solving and decision making, related communication, and business and human relations.

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

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CT 110 Construction I - Systems and Materials</td>
<td>3</td>
</tr>
<tr>
<td>CT 115 Blueprint Reading/Specifications</td>
<td>3</td>
</tr>
<tr>
<td>CT 117 Construction Safety</td>
<td>1</td>
</tr>
<tr>
<td>MTH 195 Technical Mathematics I or MTH 130 Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>SC 101 Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>+ Electives</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CT 111 Construction II - Mechanical, Electrical, and Plumbing Systems</td>
<td>3</td>
</tr>
<tr>
<td>COM 101 Communications or ENG 101 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>PSY 131 Applied Psychology and Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>+ Electives</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEMESTER III</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CT 135 Engineering Principles and Practices</td>
<td>3</td>
</tr>
<tr>
<td>+ Electives</td>
<td>9-10</td>
</tr>
<tr>
<td>++ Electives</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>15-16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEMESTER IV</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CT 118 Codes/Inspection I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105 Introduction to Business or Electives</td>
<td>3</td>
</tr>
<tr>
<td>+ Electives</td>
<td>9-10</td>
</tr>
<tr>
<td></td>
<td>15-16</td>
</tr>
</tbody>
</table>

Minimum Hours Required 61

+ Electives must be selected from the following:

Any CT course (including CT 700 level Cooperative Work Experience*)

+ + Electives—must be selected from the following:

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 136 Principles of Management</td>
</tr>
<tr>
<td>BUS 234 Business Law</td>
</tr>
<tr>
<td>CIS 103 Introduction to Computer Information Systems</td>
</tr>
<tr>
<td>ECO 201 Principles of Economics</td>
</tr>
<tr>
<td>ACC 201 Principles of Accounting</td>
</tr>
<tr>
<td>RE 130 Real Estate Principles</td>
</tr>
<tr>
<td>SPA 101 Beginning Spanish</td>
</tr>
</tbody>
</table>

*Cooperative Work Experience may only be taken in Semester II, III, or IV.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
CONSTRUCTION TECHNOLOGY

North Lake only

(Certificate)

This is a one-year certificate that provides the student with the technical knowledge and hands-on skills required to work in one of two areas: residential or commercial carpentry. In addition, the student will cover job planning and materials estimating, human-relation skills and the economics of the construction industry. After completion of the program, students will be qualified to enter the construction field as a carpenter.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT 110 Construction I - Systems and Materials</td>
<td>3</td>
</tr>
<tr>
<td>CT 115 Blueprint Reading/Specifications</td>
<td>3</td>
</tr>
<tr>
<td>CT 117 Construction Safety</td>
<td>1</td>
</tr>
<tr>
<td>CT 120 Foundations I</td>
<td>3</td>
</tr>
<tr>
<td>MTH 139 Applied Math</td>
<td>3</td>
</tr>
<tr>
<td>PSY 131 Applied Psychology and Human Relations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT 111 Construction II - Mechanical, Electrical, and Plumbing Systems or Commercial Systems, Materials and Equipment</td>
<td>3</td>
</tr>
<tr>
<td>CT 212</td>
<td>3</td>
</tr>
<tr>
<td>CT 125 Building Construction I</td>
<td>3</td>
</tr>
<tr>
<td>CT 220 Foundations II or Building Construction II</td>
<td>3</td>
</tr>
<tr>
<td>CT 130 Finish Systems I or Finish Systems II</td>
<td>3-4</td>
</tr>
<tr>
<td>+ Electives</td>
<td>15-16</td>
</tr>
<tr>
<td>Minimum Hours Required</td>
<td>31</td>
</tr>
</tbody>
</table>

+ Electives must be selected from the following:

Any CT course (including CT 700 level Cooperative Work Experience*).

*Cooperative Work Experience may only be taken in Semester II, III, or IV.
DIESEL MECHANICS

North Lake only

(Associate Degree)

This program is designed to prepare the student for entry level employment in the diesel mechanics industry. The student will develop the skills and knowledge necessary for the maintenance, repair and rebuilding of various diesel engines and diesel powered equipment.

Some diesel mechanics courses are completely individualized. This allows students to progress at their own pace in order to fully comprehend theory and develop the necessary skills. The individualized, self-paced instruction also allows the students to take a portion of a course (module) without taking the complete course if some specific knowledge or skill is desired. Credit for prior experience or training may be given by placement testing arranged through the instructor. Students may elect to receive a certificate or may apply the certificate courses required in this program toward an Associate in Applied Arts and Sciences Degree.

Courses required for an Associate in Applied Arts and Sciences Degree with a major in Diesel Mechanics are listed below. The courses may be taken in any order providing the prerequisites have been met and after consultation with the instructor.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>DME 104 Caterpillar Diesel Engine .......... 5</td>
</tr>
<tr>
<td>DME 105 Cummins Diesel Engine ............... 5</td>
</tr>
<tr>
<td>DME 127 Shop Practices ..................... 2</td>
</tr>
<tr>
<td>MTH 139 Applied Mathematics ................ 3</td>
</tr>
<tr>
<td>Elective .................. 1-3</td>
</tr>
<tr>
<td>16-18</td>
</tr>
<tr>
<td>SEMESTER II</td>
</tr>
<tr>
<td>DME 106 Detroit Diesel Engine ............. 5</td>
</tr>
<tr>
<td>DME 126 Heavy Truck Air Conditioning ....... 2</td>
</tr>
<tr>
<td>DME 147 Heavy Truck Electrical Systems ...... 3</td>
</tr>
<tr>
<td>DME 148 Diesel Engine Air Induction, Cooling and Lubrication Systems ... 2</td>
</tr>
<tr>
<td>PHY 131 Applied Physics .................... 4</td>
</tr>
<tr>
<td>16</td>
</tr>
<tr>
<td>SEMESTER III</td>
</tr>
<tr>
<td>DME 123 Air Brake Systems .................. 2</td>
</tr>
<tr>
<td>DME 125 Automatic Transmissions ............. 2</td>
</tr>
<tr>
<td>DME 128 Standard Transmissions and Heavy Duty Clutches .............. 3</td>
</tr>
<tr>
<td>DME 129 Chassis, Differentials and Drive Lines .................. 3</td>
</tr>
<tr>
<td>DME 704 Cooperative Work Experience .......... 4</td>
</tr>
<tr>
<td>SC 101 Introduction to Speech Communication .......... 3</td>
</tr>
<tr>
<td>17</td>
</tr>
<tr>
<td>SEMESTER IV</td>
</tr>
<tr>
<td>DME 137 Oxygen/Acetylene and Arc Welding .... 3</td>
</tr>
<tr>
<td>DME 141 Caterpillar Diesel Engine Tune-Up and Fuel System ................. 2</td>
</tr>
<tr>
<td>DME 142 Cummins Diesel Engine Tune-Up and Fuel System ................. 2</td>
</tr>
<tr>
<td>DME 143 Detroit Diesel Engine Tune-Up and Fuel System ................. 2</td>
</tr>
<tr>
<td>ENG 101 Composition I or</td>
</tr>
<tr>
<td>COM 131 Applied Communciations ........... 3</td>
</tr>
<tr>
<td>BUS 105 Introduction to Business or</td>
</tr>
<tr>
<td>ACC 131 Bookkeeping I or</td>
</tr>
<tr>
<td>HST 102 History of the United States ........ 3</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>Minimum Hours Required ..................... 64</td>
</tr>
</tbody>
</table>

+Elective: This elective course must receive approval of the Division Chair.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
# DIESEL MECHANICS

*North Lake only*

(Certificate)

Completion of the following courses qualifies a student for a certificate in diesel mechanics. The courses may be taken in any order desired after consultation with the instructor.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I</strong></td>
<td>DME 104</td>
<td>Caterpillar Diesel Engine</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>DME 105</td>
<td>Cummins Diesel Engine</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>DME 127</td>
<td>Shop Practices</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td><strong>II</strong></td>
<td>DME 123</td>
<td>Air Brake Systems</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DME 125</td>
<td>Automatic Transmissions</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DME 128</td>
<td>Standard Transmissions and Heavy Duty Clutches</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DME 129</td>
<td>Chassis, Differentials and Drive Lines</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DME 137</td>
<td>Fundamentals of Oxygen/Acetylene and Arc Welding</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>13</strong></td>
</tr>
<tr>
<td><strong>III</strong></td>
<td>DME 126</td>
<td>Heavy Duty Truck Air Conditioning</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DME 141</td>
<td>Caterpillar Diesel Engine Tune-Up and Fuel Systems</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DME 142</td>
<td>Cummins Diesel Engine Tune-Up and Fuel Systems</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DME 143</td>
<td>Detroit Diesel Engine Tune-Up and Fuel Systems</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DME 147</td>
<td>Heavy Truck Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DME 148</td>
<td>Diesel Engine Air Induction Cooling and Lubrication Systems</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>13</strong></td>
</tr>
<tr>
<td><strong>IV</strong></td>
<td>DME 106</td>
<td>Detroit Diesel Engine Overhaul</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>DME 703</td>
<td>Cooperative Work Experience</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MTH 139</td>
<td>Applied Mathematics</td>
<td>3</td>
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<tr>
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<td></td>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

Minimum Hours Required ........................................... **49**
ELECTRICAL TECHNOLOGY

North Lake only

(Associate Degree)

The Electrical Technology program prepares the student for career opportunities by developing technical knowledge and practical skills necessary to enter or advance in the electrical technology field.

Students wishing to earn an Associate in Applied Arts and Sciences Degree with a major in Electrical Technology must complete all of the courses listed below.

<table>
<thead>
<tr>
<th>CREDIT</th>
<th>SEMESTER I</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOURS</td>
<td></td>
</tr>
<tr>
<td>ELE 106</td>
<td>Fundamentals of Electricity</td>
</tr>
<tr>
<td>ELE 107</td>
<td>Electrical Transformers</td>
</tr>
<tr>
<td>ELE 108</td>
<td>General Electrical Codes</td>
</tr>
<tr>
<td>MTH 195</td>
<td>Technical Mathematics I</td>
</tr>
<tr>
<td>SC 101</td>
<td>Introduction to Speech Communication</td>
</tr>
<tr>
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<td></td>
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</table>

<table>
<thead>
<tr>
<th>SEMESTER II</th>
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</thead>
<tbody>
<tr>
<td>ELE 115</td>
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<tr>
<td>ELE 116</td>
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<tr>
<td>ELE 117</td>
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<tr>
<td>ELE 118</td>
</tr>
<tr>
<td>COM 131</td>
</tr>
<tr>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEMESTER III</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE 205</td>
</tr>
<tr>
<td>ELE 206</td>
</tr>
<tr>
<td>ELE 207</td>
</tr>
<tr>
<td>ELE 208</td>
</tr>
<tr>
<td>ELE 703</td>
</tr>
<tr>
<td>ELE 704</td>
</tr>
<tr>
<td>CIS 103</td>
</tr>
<tr>
<td></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>SEMESTER IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE 213</td>
</tr>
<tr>
<td>ELE 214</td>
</tr>
<tr>
<td>ELE 216</td>
</tr>
<tr>
<td>ELE 218</td>
</tr>
<tr>
<td>PSY 131</td>
</tr>
<tr>
<td>ELE 713</td>
</tr>
<tr>
<td>ELE 714</td>
</tr>
<tr>
<td>Elective</td>
</tr>
</tbody>
</table>

Minimum Hours Required .................................. 65

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
ELECTRONIC TELECOMMUNICATIONS

Eastfield, Mountain View, and North Lake only
(Associate Degree)

This program is designed to prepare students to work as hardware technicians in the field of telecommunications. The student will be trained to test, interface, troubleshoot, and repair equipment for the telecommunications industry. The student will learn schematic interpretation, test equipment usage, and technical communications.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 190</td>
<td>DC Circuits and Electrical Measurements          4</td>
</tr>
<tr>
<td>ET 191</td>
<td>AC Circuits                                         4</td>
</tr>
<tr>
<td>ENG 101</td>
<td>Composition I                                       3</td>
</tr>
<tr>
<td>MTH 195</td>
<td>Technical Mathematics I*                          3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Introduction to Psychology or                      3</td>
</tr>
<tr>
<td>PSY 131</td>
<td>Applied Psychology and Human Relations              3</td>
</tr>
<tr>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 102</td>
<td>Introduction to Telecommunications                     3</td>
</tr>
<tr>
<td>ET 103</td>
<td>Introduction to Telecommunications Laboratory         1</td>
</tr>
<tr>
<td>ET 192</td>
<td>Digital Computer Principles                            3</td>
</tr>
<tr>
<td>ET 193</td>
<td>Active Devices                                         4</td>
</tr>
<tr>
<td>SC 101</td>
<td>Introduction to Speech Communication                   3</td>
</tr>
<tr>
<td>MTH 196</td>
<td>Technical Mathematics II                               3</td>
</tr>
<tr>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEMESTER III</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>ET 290</td>
<td>Advanced Electronic Devices or                        4</td>
</tr>
<tr>
<td>ET 290</td>
<td>Sinusoidal Circuits                                    4</td>
</tr>
<tr>
<td>ET 291</td>
<td>Linear Integrated Circuit or                           4</td>
</tr>
<tr>
<td>ET 238</td>
<td>Linear Integrated Circuits                             4</td>
</tr>
<tr>
<td>ET 292</td>
<td>Telephony Switching Systems                            4</td>
</tr>
<tr>
<td>ET 293</td>
<td>Basic Radio Circuitry                                  4</td>
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<tbody>
<tr>
<td>ET 294</td>
<td>High Frequency Transmission Systems                    4</td>
</tr>
<tr>
<td>ET 295</td>
<td>Telecommunication Signaling                            4</td>
</tr>
<tr>
<td>ET 297</td>
<td>System Installation and Testing                         4</td>
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<tr>
<td>Elective</td>
<td>3</td>
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MINIMUM HOURS REQUIRED 65

+ Electives—must be chosen from the following:

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<thead>
<tr>
<th>Course</th>
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<tr>
<td>ACC 131</td>
<td>Bookkeeping I</td>
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</tr>
<tr>
<td>ART 104</td>
<td>Art Appreciation</td>
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<tr>
<td>BUS 105</td>
<td>Introduction to Business</td>
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<tr>
<td>BUS 143</td>
<td>Personal Finance</td>
<td>3</td>
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<tr>
<td>CIS 103</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
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<tr>
<td>HUM 101</td>
<td>Introduction to the Humanities</td>
<td>3</td>
</tr>
<tr>
<td>MGT 136</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 153</td>
<td>Small Business Management</td>
<td>3</td>
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<tr>
<td>MUS 104</td>
<td>Music Appreciation</td>
<td>3</td>
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<tr>
<td>OFC 172</td>
<td>Beginning Typing</td>
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<tr>
<td>PHY 131</td>
<td>Applied Physics</td>
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</tr>
<tr>
<td>SPA 101</td>
<td>Beginning Spanish</td>
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</table>

*MTH 101 or 102 or equivalent may be substituted for Technical Mathematics.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
# ELECTRONICS TECHNOLOGY

**Mountain View and North Lake only**

(Associate Degree)

This program prepares students for work as electronics technicians by familiarizing them with most electronic testing equipment, training them in technical communications and providing them with electronic theory and skills.

### CREDIT HOURS

#### SEMESTER I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 190</td>
<td>DC Circuits and Electrical Measurements or</td>
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</tr>
<tr>
<td>ET 135</td>
<td>DC-AC Theory and Circuit Analysis</td>
<td>6</td>
</tr>
<tr>
<td>COM 131</td>
<td>Applied Communications or</td>
<td></td>
</tr>
<tr>
<td>ENG 101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>DFT 182</td>
<td>Technician Drafting or</td>
<td>2</td>
</tr>
<tr>
<td>DFT 183</td>
<td>Basic Drafting or</td>
<td>4</td>
</tr>
<tr>
<td>DFT 231</td>
<td>Electronic Drafting</td>
<td>3</td>
</tr>
<tr>
<td>MTH 195</td>
<td>Technical Mathematics I or</td>
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<tr>
<td>MTH 101</td>
<td>College Algebra</td>
<td>3</td>
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#### SEMESTER II

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<tr>
<td>ET 191</td>
<td>AC Circuits (Unless ET 135 Completed)</td>
<td>4</td>
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<tr>
<td>ET 193</td>
<td>Active Devices</td>
<td>4</td>
</tr>
<tr>
<td>ET 194</td>
<td>Instrumentation</td>
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<td>SC 101</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
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<tr>
<td>MTH 196</td>
<td>Technical Mathematics II or</td>
<td></td>
</tr>
<tr>
<td>MTH 102</td>
<td>Plane Trigonometry</td>
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#### SEMESTER III

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<tbody>
<tr>
<td>ET 231</td>
<td>Special Circuits with Communications Applications</td>
<td>4</td>
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<tr>
<td>ET 232</td>
<td>Analysis of Electronics Logic and Switching Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ET 238</td>
<td>Linear Integrated Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ET 240</td>
<td>Electronic Theory and Application of Digital Computers</td>
<td>4</td>
</tr>
<tr>
<td>PHY 131</td>
<td>Applied Physics or</td>
<td></td>
</tr>
<tr>
<td>PHY 117</td>
<td>Concepts in Physics</td>
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#### SEMESTER IV

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<th>Title</th>
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<tbody>
<tr>
<td>ET 234</td>
<td>Electronic Circuits &amp; Systems</td>
<td>3</td>
</tr>
<tr>
<td>ET 237</td>
<td>Modular Memories &amp; Microprocessors</td>
<td>4</td>
</tr>
<tr>
<td>ET 239</td>
<td>Microwave Theory</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>17-18</strong></td>
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</table>

Minimum Hours Required: 65

---

Electives—must be selected from the following:

+ GVT 201 American Government 3
+ GVT 202 American Government 3
+ HST 101 History of the United States 3
+ HST 102 History of the United States 3
+ HD 104 Educational and Career Planning 3
+ HD 105 Basic Processes of Interpersonal Relationships 3
+ PSY 101 Introduction to Psychology 3
+ PSY 131 Applied Psychology and Human Relations 3

++ Electives—must be selected from the following:

+ ET 210 Basic CRT Display 4
+ ET 268 Microprocessor Troubleshooting and Interface 4
+ ET 704 Cooperative Work Experience 4
+ EGT 243 Robotics I 3

**NOTE:** Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
MANAGEMENT CAREERS--ADMINISTRATIVE MANAGEMENT OPTION

Offered at all seven campuses

(Associate Degree)

The Administrative Management Option is designed for students seeking a broad program of study in all phases of business practices. This option focuses not only at the core of management (principles of management, organizational behavior, and personnel administration) but also encompasses the critical areas of business operations (principles of marketing, accounting, and business law).

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
<td></td>
<td></td>
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<tr>
<td>MGT 136 Principles of Management</td>
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<tr>
<td>BUS 105 Introduction to Business</td>
<td>3</td>
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<tr>
<td>ENG 101 Composition I</td>
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<tr>
<td>MTH 111 Mathematics for Business and Economics I or MTH 130 Business Mathematics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>+ Elective</td>
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<tr>
<td>SEMESTER II</td>
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<tr>
<td>MKT 206 Principles of Marketing</td>
<td>3</td>
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<td>ACC 201 Principles of Accounting I</td>
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<td>ENG 102 Composition II</td>
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<td>ACC 202 Principles of Accounting II</td>
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<td>BUS 234 Business Law</td>
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<tr>
<td>ECO 201 Principles of Economics I</td>
<td>3</td>
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<tr>
<td>PSY 131 Applied Psychology and Human Relations</td>
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<tr>
<td>SC 101 Introduction to Speech Communication</td>
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<td>15</td>
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<tr>
<td>SEMESTER IV</td>
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<tr>
<td>MGT 242 Personnel Administration</td>
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<td>MGT 237 Organizational Behavior</td>
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<tr>
<td>ECO 202 Principles of Economics II</td>
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<td></td>
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<tr>
<td>OFC 231 Business Communications</td>
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</tr>
<tr>
<td>++ Elective</td>
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<tr>
<td>18</td>
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</table>

Minimum Hours Required: 63

+ Elective—must be selected from the following:

| ART 104 Art Appreciation | 3 |
| HUM 101 Introduction to the Humanities | 3 |
| ENG 201 British Literature | 3 |
| ENG 202 British Literature | 3 |
| ENG 203 World Literature | 3 |
| ENG 204 World Literature | 3 |
| ENG 205 American Literature | 3 |
| ENG 206 American Literature | 3 |
| MUS 104 Music Appreciation | 3 |
| PHI 102 Introduction to Philosophy | 3 |
| THE 101 Introduction to the Theatre | 3 |

Foreign Language

+ + Electives—may be selected from the following:

| GVT 153 Small Business Management | 3 |
| GVT 171 Introduction to Supervision | 3 |
| GVT 212 Special Problems in Business | 1 |
| GVT 704 Cooperative Work Experience | 4 |
| MKT 137 Principles of Retailing | 3 |
| MKT 230 Salesmanship | 3 |
| MKT 233 Advertising and Sales Promotion | 3 |
| OFC 160 Office Calculating Machines | 3 |
| OFC 172 Beginning Typing | 3 |

+ + + Elective—must be selected from the following:

| GVT 201 American Government | 3 |
| GVT 202 American Government | 3 |
| HST 101 History of the United States | 3 |
| HST 102 History of the United States | 3 |
| SOC 101 Introduction to Sociology | 3 |
| SOC 102 Social Problems | 3 |
| HD 105 Basic Processes of Interpersonal Relationships | 3 |
| HD 106 Personal and Social Growth | 3 |
| ANT 100 Introduction to Anthropology | 3 |
| PSY 101 Introduction to Psychology | 3 |
| PSY 103 Human Sexuality | 3 |

*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.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
MANAGEMENT CAREERS--
MID-MANAGEMENT OPTION

Offered at all seven campuses

( Associate Degree)

The Mid-Management Program provides an opportunity for students to acquire knowledge in the management field and at the same time update and sharpen personal management skills. In addition to learning about supervision, personnel management, human relations psychology, problem-solving, decision-making, and other related business topics, students also participate in an on-the-job management training course with their present employers. These management training courses at work allow students to apply what is learned in the classroom environment and obtain the valuable practical experience necessary to become competent business managers. The Mid-Management Program allows students the opportunity to bridge the gap between theory and practice as professional managers.

CREDIT HOURS

SEMESTER I
MGT 136 Principles of Management ........... 3
MGT 171 Introduction to Supervision .......... 3
MGT 704 Cooperative Work Experience ....... 4
BUS 105 Introduction to Business ........... 3
ENG 101 Composition I ..................... 3
SC 101 Introduction to Speech Communication .. 3

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SEMESTER II
MGT 242 Human Resource Management ........ 3
MGT 714 Cooperative Work Experience ....... 4
CIS 103 Introduction to Computer Information Systems ................ 3
MTH 111 Mathematics for Business and Economics I or
MTH 130 Business Mathematics .............. 3
ENG 102 Composition II ....................... 3

16

SEMESTER III
MGT 237 Organizational Behavior ............ 3
MGT 804 Cooperative Work Experience ....... 4
ACC 201 Principles of Accounting I* .......... 3
ECO 201 Principles of Economics I ........... 3

13

SEMESTER IV
MGT 244 Problem Solving and Decision Making ................... 3
MGT 814 Cooperative Work Experience ....... 4
Elective ..................................... 3
Elective ..................................... 3

13

Minimum Hours Required: ...................... 61

+ Elective—must be selected from the following:

ART 104 Art Appreciation ........................................ 3
HUM 101 Introduction to the Humanities ........... 3
ENG 201 British Literature ..................................... 3
ENG 202 British Literature ..................................... 3
ENG 203 World Literature ..................................... 3
ENG 204 World Literature ..................................... 3
ENG 205 American Literature ......................... 3
ENG 206 American Literature ......................... 3
MUS 104 Music Appreciation ............................. 3
PHI 102 Introduction to Philosophy ................. 3
THE 101 Introduction to the Theatre ............... 3
Foreign Language

++ Elective—must be selected from the following:

ANT 100 Introduction to Anthropology ........... 3
AST 101 Descriptive Anatomy .......................... 3
BIO 115 Biological Science ............................ 4
CHM 115 Chemical Science ............................. 4
GEO 101 Physical Geology ............................. 4
GVT 201 American Government ....................... 3
HST 101 History of the United States ............... 3
HD 105 Basic Processes of Interpersonal Relationships ....... 3
PSC 118 Physical Science ............................... 4
PHY 117 Concepts in Physics ........................... 4
PSY 101 Introduction to Psychology ............... 3
SOC 101 Introduction to Sociology ................. 3

*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.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
OFFICE CAREERS

Offered at all seven campuses

The Office Careers freshman student is provided a core study related to working in an office environment. After completing this core, the sophomore student will begin the specialized program tracks of Administrative Assistant or Legal Secretary.

CREDIT HOURS

CORE CURRICULUM

(For all first year students in Office Careers)

SEMESTER I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MTH 130</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>OFC 150</td>
<td>Automated Filing Procedures</td>
<td>3</td>
</tr>
<tr>
<td>OFC 160</td>
<td>Office Calculating Machines</td>
<td>3</td>
</tr>
<tr>
<td>OFC 172</td>
<td>Beginning Typing*</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105</td>
<td>Introduction to Business</td>
<td>3</td>
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SEMESTER II

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<td>Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>OFC 173</td>
<td>Intermediate Typing*</td>
<td>3</td>
</tr>
<tr>
<td>ACC 131</td>
<td>Bookkeeping I or</td>
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<tr>
<td>ACC 201</td>
<td>Principles of Accounting</td>
<td>3</td>
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<tr>
<td>CIS 103</td>
<td>Introduction to Computer Information Systems</td>
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<tr>
<td>OFC 179</td>
<td>Office Information Systems Concepts</td>
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<tr>
<td>OFC 182</td>
<td>Introduction to Word Processing Equipment</td>
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</table>

Minimum Hours Required: **36**

* Students may be placed in typing courses based on proficiency level determined by previous training, experience and/or placement tests. If a student places out, any OFC course may be taken to supplement the minimum hours required.

**NOTE: **OFC 172 Equivalent to 176, 177 and 178

OFC 160 Equivalent to 192, 193 and 194

OFC 190 Equivalent to 179, 182 and 185

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

OFFICE CAREERS--ADMINISTRATIVE ASSISTANT OPTION

Offered at all seven campuses

(For students planning to enter the Administrative Assistant track of Office Careers)

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 or private firms and agencies. Emphasis in this program is on the development of organizational and management skills in addition to basic office skills.

CREDIT HOURS

SEMESTERS I and II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>HOURS</th>
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<tr>
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<td>Core Curriculum</td>
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SEMESTER III

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>HOURS</th>
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<tbody>
<tr>
<td>OFC 231</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>SC 101</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
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<tr>
<td>PSY 131</td>
<td>Applied Psychology and Human Relations</td>
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<tr>
<td>HD 105</td>
<td>Basic Processes of Interpersonal Relationships</td>
<td>3</td>
</tr>
<tr>
<td>OFC 185</td>
<td>Basic Machine Transcription</td>
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</tr>
<tr>
<td>OFC 282</td>
<td>Word Processing Applications</td>
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</tr>
<tr>
<td>OFC 273</td>
<td>Advanced Typing Applications</td>
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<tr>
<td>OFC 159</td>
<td>Beginning Shorthand</td>
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<tr>
<td>OFC 103</td>
<td>Speedwriting</td>
<td><strong>4</strong></td>
</tr>
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SEMESTER IV

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>HOURS</th>
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<tbody>
<tr>
<td>HUM 101</td>
<td>Introduction to the Humanities</td>
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<tr>
<td>OFC 283</td>
<td>Specialized Software</td>
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<td>MGT 136</td>
<td>Principles of Management or</td>
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</tr>
<tr>
<td>MGT 237</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>OFC 166</td>
<td>Intermediate Shorthand</td>
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</tr>
<tr>
<td>OFC 106</td>
<td>Speedwriting Dictation and Transcription</td>
<td>4</td>
</tr>
<tr>
<td>OFC 703</td>
<td>Cooperative Work Experience</td>
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<tr>
<td>OFC 704</td>
<td>Cooperative Work Experience</td>
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Minimum Hours Required: **67**

* Students may be placed in typing courses based on proficiency level determined by previous training, experience and/or placement tests. If a student places out, any OFC course may be taken to supplement the minimum hours required.

**NOTE: **OFC 190 Equivalent to 179, 182 and 185

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
OFFICE CAREERS--LEGAL SECRETARY OPTION

Offered at all seven campuses

(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.

CREDIT HOURS

SEMESTERS I and II
Core Curriculum ........................................... 36

SEMESTER III
OFC 231 Business Communications ................ 3
SC 101 Introduction to Speech Communication 3
PSY 131 Applied Psychology and Human Relations or
HD 105 Basic Processes of Interpersonal Relationships .......... 3
OFC 185 Basic Machine Transcription ............... 1
OFC 282 Word Processing Applications ............. 1
OFC 273 Advanced Typing Applications ............. 2
HUM 101 Introduction to the Humanities .......... 3

SEMESTER IV
BUS 234 Business Law .................................... 3
OFC 167 Legal Terminology and Transcription .. 3
OFC 274 Legal Secretarial Procedures .............. 3
OFC 285 Applied Machine Transcription ............ 1
OFC 703 Cooperative Work Experience or (3)
OFC 704 Cooperative Work Experience .......... 4

Minimum Hours Required: .............................. 65

*Students may be placed in typing courses based on proficiency level determined by previous training, experience and/or placement tests. If a student places out, any OFC course may be taken to supplement the minimum hours required.

**NOTE: OFC 172 Equivalent to 176, 177 and 178
OFC 160 Equivalent to 192, 193 and 194
OFC 190 Equivalent to 179, 182 and 185

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
OFFICE INFORMATION SYSTEMS
SPECIALIST

Offered at all seven campuses

(Associate Degree)

This program introduces the skills for operators, supervisors, and managers in automated office environments. Office Information Systems involves the use of automated equipment and techniques that include speed gathering, processing, storing, and distributing printed materials.

This program develops the skills to work with a group of principals as a part of a team under the direction of an administrative support supervisor/information systems manager. The specialist handles transcription and manipulation of data using a variety of software applications and provides special secretarial services.

CREDIT HOURS

SEMESTER I
ENG 101 Composition I .................................. 3
MTH 130 Business Mathematics .............................. 3
OFC 160 Office Calculating Machines ..................... 3
OFC 173 Intermediate Typing ................................ 3
OFC 179 Office Information Systems Concepts ............. 2
OFC 182 Introduction to Word Processing Equipment .... 1

15

SEMESTER II
ENG 102 Composition II .................................. 3
OFC 162 Office Procedures .................................. 3
OFC 185 Basic Machine Transcription ...................... 1
OFC 273 Advanced Typing Applications ..................... 2
OFC 282 Word Processing Applications ..................... 1
CIS 103 Introduction to Computer Information Systems . 3
ACC 131 Bookkeeping I or
ACC 201 Principles of Accounting .......................... 3

16

SEMESTER III
SC 101 Introduction to Speech Communication .......... 3
PSY 131 Applied Psychology and Human Relations or
HD 105 Basic Processes of Interpersonal Relationships .. 3
OFC 150 Automated Filing Procedures ..................... 3
OFC 231 Business Communications .......................... 3
OFC 283 Specialized Software ................................ 1
OFC 285 Applied Machine Transcription .................. 1
Elective .................................................................. 3

17

SEMESTER IV
OFC 256 Office Management .................................. 3
CIS 160 Data Communications .................................. 3
OFC 703 Cooperative Work Experience or
OFC 704 Cooperative Work Experience or
Elective(s) ................................................................ 3-4
Electives ......................................................... 3
Electives ......................................................... 3

15-16

Minimum Hours Required: .................................. 63

+ Electives—must be selected from the following:
OFC 143 Contemporary Topics in Office Careers .......... 1
OFC 182 Introduction to Word Processing Equipment*** .. 1
OFC 282 Word Processing Applications*** ................. 1
OFC 283 Specialized Software*** ......................... 1

++ Electives—must be selected from the following:
BUS 105 Introduction to Business ............................. 3
BUS 234 Business Law ........................................... 3
MGT 136 Principles of Management ......................... 3

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

**Note: OFC 160 Equivalent to 192, 193, and 194
OFC 172 Equivalent to 175, 177 and 178
OFC 190 Equivalent to 179, 182 and 185

***Must be repeated for credit two additional times using different emphasis/equipment/software.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
This program prepares students for employment in the physical fitness industry. Students in this program acquire skills in conducting physical fitness and health risk assessments, prescribing exercise and lifestyle change programs, and instructing individuals and groups in physical fitness and health promotion activities. Areas studied include health risk appraisal, nutrition and weight control, smoking cessation, stress management, body composition analysis, and the development of joint flexibility, muscular strength and endurance, and aerobic capacity. The students acquire the knowledge and skills to supervise the use of physical fitness facilities and to provide exercise leadership and programming.

Upon successful completion of the program, the student will receive an Associate in Applied Arts and Sciences Degree and will be prepared to sit for national certification examinations.

| SEMESTER I | ENG 101  Composition I | 3 |
| | BIO 120  Introduction to Human Anatomy and Physiology | 4 |
| | PEH 115  Physical Fitness | 1 |
| | PFT 110  Aerobic Training Theory and Application | 4 |
| | TOTAL | 15 |

| SEMESTER II | SC 101  Introduction to Speech Communication | 3 |
| | BIO 121  Introduction to Human Anatomy and Physiology | 4 |
| | PFT Activity* | 1 |
| | PFT 120  Fitness and Exercise Testing I | 4 |
| | PFT 111  Strength Training Theory and Application | 4 |
| | TOTAL | 16 |

| SEMESTER III | PEH Activity* | 1 |
| | PEH 257  Advanced First Aid and Emergency Care | 3 |
| | PFT 200  Instruction in Lifestyle Change | 3 |
| | PFT 290  Practical Application in Physical Fitness Technology I | 1 |
| | + Elective | 3-4 |
| | Mathematics Requirement** | 3 |
| | TOTAL | 14-15 |

| SEMESTER IV | PSY 131  Applied Psychology and Human Relations | 3 |
| | PEH Activity* | 1 |
| | PFT 210  Exercise Leadership and Programming | 4 |
| | PFT 240  Practical Aspects of the Fitness Industry | 3 |
| | PFT 291  Practical Application in Physical Fitness Technology II | 1 |
| | ++ Elective | 3-4 |
| | TOTAL | 15-16 |

Minimum Hours Required: 60

*PEH Activity - One physical education activity is chosen in consultation with program advisor from each of the following three clusters: Aerobic Activities, Strength Activities, and Recreational/Sport Activities.

**Mathematics Requirement - Any 100 level Mathematics course.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
PHYSICAL FITNESS TECHNOLOGY

North Lake only

(Certificate)

This certificate program in physical fitness technology prepares students to make physical fitness assessments, prescribe exercise programs, and instruct individuals and groups in physical fitness activities. This one-year program is particularly appropriate for those who want to expand or upgrade their skills, e.g. those who already have a degree and/or are employed in a physical fitness or related field. Students completing the certificate program have the option to continue their study toward the completion of the Associate Degree.

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<tr>
<th>CREDIT HOURS</th>
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<tr>
<td>SEMESTER I</td>
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<tr>
<td>BIO 120</td>
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<td>PFT 101</td>
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<td>PFT 110</td>
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<tr>
<td>SEMESTER II</td>
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<td>BIO 121</td>
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<td>PFT 111</td>
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<td>PFT 120</td>
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<tr>
<td>Elective</td>
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</table>

Minimum Hours Required | 30

*Elective—must be selected from PEH 101 or any PFT course except PFT 290 and PFT 714.*
REAL ESTATE

Cedar Valley, North Lake and Richland only

(Associate Degree)

The program in real estate is designed to develop the fundamental skills, attitudes and experiences which enable the student to function in decision-making positions in the real estate profession. Successful completion of the program leads to the Associate in Applied Arts and Sciences Degree and may be applied toward licensing requirements as determined by the Texas Real Estate Commission.

CREDIT

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<tr>
<th>SEMESTER</th>
<th>COURSE</th>
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<tbody>
<tr>
<td>I</td>
<td>RE 130 Real Estate Principles</td>
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<td>RE 131 Real Estate Finance</td>
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<tr>
<td></td>
<td>BUS 105 Introduction to Business</td>
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<tr>
<td></td>
<td>ENG 101 Composition I</td>
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<tr>
<td></td>
<td>MTH 130 Business Mathematics or</td>
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<td></td>
<td>MTH 111 Mathematics for Business and</td>
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<td>Economics I</td>
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<tbody>
<tr>
<td>II</td>
<td>RE 133 Real Estate Marketing</td>
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<td>RE 135 Real Estate Appraisal</td>
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<td>RE 136 Real Estate Law</td>
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<td>SC 101 Introduction to Speech Communication</td>
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<tr>
<td>III</td>
<td>RE 138 Real Estate Law Contracts</td>
<td>3</td>
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<tr>
<td></td>
<td>ECO 201 Principles of Economics I or</td>
<td>3</td>
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<tr>
<td></td>
<td>ECO 105 Economics of Contemporary Social Issues</td>
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<td>RE 704 Cooperative Work Experience I</td>
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<td>CIS 103 Introduction to Computer Information Systems</td>
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<td>Elective</td>
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<tr>
<th>SEMESTER</th>
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<th>CREDITS</th>
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<tr>
<td>IV</td>
<td>ACC 201 Principles of Accounting I</td>
<td>3</td>
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<tr>
<td></td>
<td>GVT 201 American Government</td>
<td>3</td>
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<tr>
<td></td>
<td>Elective</td>
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Minimum Hours Required: 61

+ Elective --must be selected from the following:

| ART 104 | Art Appreciation | 3 |
| ENG 102 | Composition     | 3 |
| ENG 201 | British Literature | 3 |
| ENG 202 | British Literature | 3 |
| ENG 203 | World Literature | 3 |
| ENG 204 | World Literature | 3 |
| ENG 205 | American Literature | 3 |
| ENG 206 | American Literature | 3 |
| ENG 210 | Technical Writing | 3 |
| HST 101 | History of the United States | 3 |
| HST 102 | History of the United States | 3 |
| HUM 101 | Introduction to the Humanities | 3 |
| MUS 104 | Music Appreciation | 3 |
| PHI 102 | Introduction to Philosophy | 3 |
| THE 101 | Introduction to the Theatre | 3 |
| Foreign Language | ++ Recommended Electives |
| ACC 202 | Principles of Accounting II | 3 |
| ECO 202 | Principles of Economics II | 3 |
| RE 230 | Real Estate Office Management Brokerage | 3 |
| RE 233 | Commercial and Investment Real Estate | 3 |
| RE 235 | Property Management | 3 |
| RE 240 | Special Problems in Real Estate  | 1 |
| RE 241 | Special Problems in Real Estate  | 3 |
| RE 714 | Cooperative Work Experience II | 4 |
| SC 105 | Fundamentals of Public Speaking | 3 |

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
VIDEO TECHNOLOGY

North Lake only
(Associate Degree)

The Video Technology program is designed to prepare students for entry level or advanced employment in the video industry. Opportunities in medicine, entertainment, advertising, industry, broadcast, cable, education, military, government, and business are among the career options. Students will develop skills and knowledge necessary to plan, budget, produce, and perform post production of various video projects.

Students wishing to earn an Associate in Applied Arts and Sciences Degree with a major in Video Technology must complete the following courses:

<table>
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<tr>
<th>CREDIT HOURS</th>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td></td>
<td>VFT 101 Introduction to Video Technology 3</td>
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<tr>
<td></td>
<td>VFT 103 Television Lighting 3</td>
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<td></td>
<td>VFT 106 Video Production I 4</td>
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<tr>
<td></td>
<td>ENG 101 Composition I 3</td>
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<tr>
<td></td>
<td>MTH 101 College Algebra or</td>
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<td></td>
<td>MTH 195 Technical Mathematics I 3</td>
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<tr>
<th>SEMESTER II</th>
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<tbody>
<tr>
<td>VFT 110 Video Production II 4</td>
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<tr>
<td>VFT 112 Video Editing and Post Production I 4</td>
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<tr>
<td>VFT 115 Audio Production 3</td>
</tr>
<tr>
<td>SC 101 Introduction to Speech Communication 3</td>
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<tr>
<th>SEMESTER III</th>
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<tbody>
<tr>
<td>VFT 203 Video Production III 4</td>
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<tr>
<td>VFT 205 Broadcast Engineering I 3</td>
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<tr>
<td>PHY 131 Applied Physics 4</td>
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<tr>
<td>HUM 101 Introduction to the Humanities or</td>
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<td>ART 104 Art Appreciation or</td>
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<td>MUS 104 Music Appreciation 3</td>
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<tr>
<th>SEMESTER IV</th>
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<tr>
<td>VFT 213 Video Editing and Post Production II 4</td>
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<tr>
<td>VFT 214 Business Aspects of Video Management 3</td>
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<tr>
<td>VFT 703 Cooperative Work Experience or (3)</td>
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<tr>
<td>VFT 704 Cooperative Work Experience 4</td>
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<tr>
<td>CIS 103 Introduction to Computer Information Systems 3</td>
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<tr>
<td>+Elective 3</td>
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Minimum Hours Required: 60

+Electives—Must be selected from the following:

<table>
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<tr>
<th>+Electives</th>
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<tbody>
<tr>
<td>VFT 215 Broadcast Engineering II 3</td>
</tr>
<tr>
<td>VFT 210 Video Production IV 4</td>
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<tr>
<td>VFT 218 Scriptwriting and Property Management 3</td>
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<tr>
<td>VFT 220 Computer Applications to Video Production 3</td>
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<tr>
<td>VFT 225 Music Video Production 3</td>
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<tr>
<td>VFT 232 Broadcast, Cable, and Satellite Technology 3</td>
</tr>
<tr>
<td>VFT 713 Cooperative Work Experience or (3)</td>
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<tr>
<td>VFT 714 Cooperative Work Experience 4</td>
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</tbody>
</table>

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
Course Descriptions
Including General Education and Career Program Courses

- All courses listed in the District catalog are not available at every college. The District catalog contains descriptions of both General Education courses and Technical/Occupational courses offered collectively by the seven colleges of the Dallas County Community College District. The listing is alphabetical by course subject title.
- Each campus within the District publishes a catalog which reflects courses and programs that are offered on that campus.
- All courses listed in this catalog may not be offered during the current year. It is suggested that students plan their schedules with the help of a college counselor well in advance of registration.

Understanding The Course Descriptions

Abbreviation on the general program area name (in this case, "Biology").

| Course Number | Name of the Course | Credit Hours - When you complete a course, you are awarded a certain number of credit hours. If you are in a degree program, a specified number of credit hours is required for graduation. Counselors are available to help you determine your course and credit hour requirements.

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

(BIO) 221 Anatomy And Physiology I (4)
Prerequisite: Biology 102 or demonstrated competence approved by the instructor. This course examines cell structure and function, tissues, and the skeletal, muscular, and nervous systems. Emphasis is on structure, function, and the interrelationships of the human systems. Laboratory fee. (3 Lec., 3 Lab.)

Laboratory Fee - A charge for equipment or services in addition to tuition.

Lecture/Lab - The number of hours that you will spend in a classroom (Lecture) and/or Laboratory each week during the semester. In this example, you would spend three hours in the classroom and three hours in the lab each week. Some course descriptions show the total number of "contact hours" for the entire semester. Contact hours are the number of hours you are in contact with the instructor or on-the-job supervisor during the entire semester.

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 be waived only by the appropriate division chairperson.
ACCOUNTING

(ACC) 131 Bookkeeping I (3)
The fundamental principles of double-entry bookkeeping are presented and applied to practical business situations. Emphasis is on financial statements, trial balances, work sheets, special journals, and adjusting and closing entries. A practice set covering the entire business cycle is completed. (3 Lec.)

(ACC) 132 Bookkeeping II (3)
Prerequisite: Accounting 131. This course covers accruals, bad debts, taxes, depreciation, controlling accounts, and business vouchers. Bookkeeping for partnerships and corporations is introduced. (3 Lec.)

(ACC) 201 Principles Of Accounting I (3)
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.) (3 Lec.)

(ACC) 202 Principles Of Accounting II (3)
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. (3 Lec.)

(ACC) 203 Intermediate Accounting I (3)
Prerequisite: Accounting 202. This course is an intensive study of the concepts, principles, and practice of modern financial accounting. Included are the purposes and procedures underlying financial statements. (3 Lec.)

(ACC) 204 Managerial Accounting (3)
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. (3 Lec.)

(ACC) 207 Intermediate Accounting II (3)
This course continues Accounting 203. Principles and problems in fixed liabilities and capital stock are examined. Equities, business combinations, and the analysis and interpretation of supplementary statements are also included. (3 Lec.)

(ACC) 238 Cost Accounting (3)
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-product costing are also included. (3 Lec.)

(ACC) 239 Income Tax Accounting (3)
Prerequisite: Accounting 202 or demonstrated competence approved by the instructor. This course examines basic income tax laws which apply to individuals and sole proprietorships. Topics include personal exemptions, gross income, business expenses, non-business deductions, capital gains, and losses. Emphasis is on common problems. (3 Lec.)

(ACC) 250 Microcomputer-Based Accounting Applications (3)
Prerequisites: Accounting 202 and Computer Information Systems 103. This course is designed to provide students with an overview of microcomputer-based accounting systems for small businesses. Actual "hands-on" experience will be provided utilizing systems for general ledger, accounts receivable, accounts payable, and payroll. Additional study may be devoted to financial planning and budgeting applications using electronic worksheet programs. Laboratory fee. (2 Lec., 2 Lab.)

(ACC) 703 Cooperative Work Experience (3)
Prerequisites: Completion of Accounting 201 and 202 or instructor approval. This course combines work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Each student must complete three objectives and work a minimum of 15 hours per week for a total of three credit hours. Seminar topics include an orientation session, setting and writing job objectives, career planning, interpersonal skills, and an exit session. (1 Lec., 15 Lab.)

(ACC) 704 Cooperative Work Experience (4)
Prerequisites: Completion of Accounting 201 and 202 or instructor approval. This course combines work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Each student must complete four objectives and work a minimum of 20 hours per week for a total of four credit hours. Seminar topics include an orientation session, setting and writing job objectives, career planning, interpersonal skills, and an exit session. (1 Lec., 20 Lab.)
(ACC) 713 Cooperative Work Experience (3)
Prerequisite: Completion of Accounting 703 or 704. This course combines work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Each student must complete three new objectives and work a minimum of 15 hours per week for a total of three credit hours. Seminar topics include an orientation session, setting and writing job objectives, and additional independent study of business topics. The independent study topics in this course must be different from those included in the previous cooperative education course. (1 Lec., 15 Lab.)

(ACC) 714 Cooperative Work Experience (4)
Prerequisite: Completion of Accounting 703 or 704. This course combines work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Each student must complete four new objectives and work a minimum of 20 hours per week for a total of four credit hours. Seminar topics include an orientation session, setting and writing job objectives, and additional independent study of business topics. The independent study topics in this course must be different from those included in the previous cooperative education course. (1 Lec., 20 Lab.)

AIR CONDITIONING AND REFRIGERATION

(ACR) 109 Contemporary Topics I (2)
Topics studied in this course will vary based on areas of special interest and recent developments in the air conditioning and refrigeration service industry. Topics covered in this course will be annotated in the class schedule. This course may be repeated for credit when topics vary. Laboratory fee. (1 Lec., 2 Lab.)

(ACR) 110 Contemporary Topics II (3)
Topics studied in this course will vary based on areas of special interest and recent developments in the air conditioning and refrigeration service industry. Topics covered in this course will be annotated in the class schedule. This course may be repeated for credit when topics vary. Laboratory fee. (2 Lec., 2 Lab.)

(ACR) 120 Principles Of Refrigeration (6)
This course is a comprehensive course that includes Air Conditioning 121 and 122. Students may register in the comprehensive course or the inclusive courses. The physical principles applied to refrigeration systems are studied including thermodynamics, gas laws, heat transfer, refrigerants, pressure-enthalpy diagrams, vapor compression systems, safety procedures and the proper safe use of handtools. Laboratory fee. (4 Lec., 5 Lab.)

(ACR) 121 Principles Of Refrigeration I (3)
The physical principles applying to refrigeration systems including thermodynamics, gas laws and heat transfer are covered by this course. The proper use of handtools and safety procedures followed in the industry are presented. Laboratory fee. (2 Lec., 2 Lab.)

(ACR) 122 Principles Of Refrigeration II (3)
Prerequisite: Air Conditioning and Refrigeration 121. This course is a continued study of the physical principles related to refrigeration systems including basic properties of refrigerants and the construction of pressure-enthalpy diagrams. The operation of vapor compression systems are studied in detail. (2 Lec., 3 Lab.)

(ACR) 125 Principles Of Electricity (6)
This course is a comprehensive course that includes Air Conditioning 126 and 127. Students may register in the comprehensive course or the inclusive courses. The electrical principles applied to the air conditioning and refrigeration systems are studied including simple circuits, circuits, basic electrical units, test instruments, construction and diagnosis of complex electrical circuits, alternating current motors and electrical safety procedures. Laboratory fee. (4 Lec., 5 Lab.)

(ACR) 126 Principles Of Electricity I (3)
This course is a study of the principles of electricity as applied in the air conditioning and refrigeration service field. Simple circuits, circuit components, basic electrical units and test instruments are covered. Laboratory fee. (2 Lec., 3 Lab.)

(ACR) 127 Principles Of Electricity II (3)
Prerequisite: Air Conditioning and Refrigeration 126. This course continues the study of electricity applied to air conditioning and refrigeration. Emphasis is placed on the construction and diagnosis of complex electrical circuits and alternating current motors used in the air conditioning and refrigeration service industry. Laboratory fee. (2 Lec., 2 Lab.)
(ACR) 130 Residential Cooling Systems (6)
Prerequisites: Air Conditioning and Refrigeration 120 and 125. This course is a comprehensive course that includes Air Conditioning 131 and 132. Students may register in the comprehensive course or the inclusive courses. This course covers compressors, condensers, evaporators, metering devices, pipe sizing, piping practices, seasonal maintenance, electrical systems, system troubleshooting and system installation. Laboratory fee. (4 Lec., 5 Lab.)

(ACR) 131 Residential Cooling Systems I (3)
Prerequisites: Air Conditioning and Refrigeration 122 and 127. The principles of refrigeration and electricity are applied to residential cooling systems. Emphasis is placed on compressors, condensers, evaporators, metering devices and electrical components function and relationships. Laboratory fee. (2 Lec., 2 Lab.)

(ACR) 132 Residential Cooling Systems II (3)
Prerequisite: Air Conditioning and Refrigeration 131. This course includes pipe sizing, piping practices, seasonal maintenance, system troubleshooting and system installation. Laboratory fee. (2 Lec., 3 Lab.)

(ACR) 140 Residential Heating Systems (6)
Prerequisites: Air Conditioning and Refrigeration 120 and 125. This course is a comprehensive course that includes Air Conditioning 141 and 142. Students may register in the comprehensive course or the inclusive courses. The servicing of residential heating systems is studied. Topics include gas-fired furnaces, electric furnaces, heat pumps, control circuits and other related topics. Laboratory fee. (4 Lec., 5 Lab.)

(ACR) 141 Residential Heating Systems I (3)
Prerequisites: Air Conditioning and Refrigeration 122 and 127. This course is a study of the procedures and principles used in servicing residential heating systems including gas-fired and electric furnaces. Laboratory fee. (2 Lec., 3 Lab.)

(ACR) 142 Residential Heating Systems II (3)
Prerequisite: Air Conditioning and Refrigeration 141. Heat pumps, heating system control circuits and other topics related to residential heating systems are covered in this course. Laboratory fee. (2 Lec., 2 Lab.)

(ACR) 200 Contractor Estimating (6)
This course is a comprehensive course that includes Air Conditioning 209 and 210. Students may register in the comprehensive course or the inclusive courses. The study of load calculations, air duct design, building plans, construction codes, state and local licenses, job estimating and job scheduling are covered in this course. Laboratory fee. (4 Lec., 5 Lab.)

(ACR) 209 Contractor Estimating I (3)
This course is a study of load calculations, air duct design and building plans used in the industry by service contractors. Laboratory fee. (2 Lec., 3 Lab.)

(ACR) 210 Contractor Estimating II (3)
Prerequisite: Air Conditioning and Refrigeration 209. This course continues the study of contractor estimating including construction codes, state and local licenses, job estimating elements, and job scheduling. Laboratory fee. (2 Lec., 2 Lab.)

(ACR) 212 System Servicing (6)
Prerequisites: Air Conditioning and Refrigeration 130 and 140. This course is a comprehensive course that includes Air Conditioning 213 and 214. Students may register in the comprehensive course or the inclusive courses. This course includes psychrometric air properties, system balancing, the service of humidifiers and electronic air cleaners, advanced system troubleshooting, and system installation. Laboratory fee. (4 Lec., 5 Lab.)

(ACR) 213 System Servicing I (3)
Prerequisites: Air Conditioning and Refrigeration 132 and 142. The topics of psychrometric air properties, system balancing, the service of humidifiers and electronic air cleaners are covered in this course. Laboratory fee. (2 Lec., 2 Lab.)

(ACR) 214 System Servicing II (3)
Prerequisite: Air Conditioning and Refrigeration 213. This course is a continuation of system servicing with emphasis on advanced system troubleshooting and system installation. Laboratory fee. (2 Lec., 3 Lab.)

(ACR) 221 Refrigeration Loads (3)
Prerequisites: Air Conditioning and Refrigeration 130 and 140. 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. (2 Lec., 2 Lab.)

(ACR) 222 Advanced Systems (3)
Prerequisite: Air Conditioning and Refrigeration 221. 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. (2 Lec., 3 Lab.)

(ACR) 223 Medium Temperature Refrigeration Systems (3)
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. (2 Lec., 3 Lab.)
(ACR) 224 System Testing And Balancing (3)
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. (2 Lec., 2 Lab.)

(ACR) 227 Low Temperature Refrigeration Systems (3)
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. (2 Lec., 3 Lab.)

(ACR) 228 Air Conditioning System Equipment Selection (3)
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. (2 Lec., 3 Lab.)

(ACR) 229 Refrigeration Equipment Selection (3)
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 continuity control, balancing, and efficiency. Laboratory fee. (2 Lec., 2 Lab.)

(ACR) 230 Energy Conservation (3)
Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 229. 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. (2 Lec., 2 Lab.)

(ACR) 233 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Air Conditioning/Refrigeration program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 15 Lab.)

(ACR) 234 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Air Conditioning program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 20 Lab.)

(ACR) 703 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Air Conditioning/Refrigeration program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 15 Lab.)
ART

(ART) 104 Art Appreciation (3)
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. (3 Lec.)

(ART) 105 Survey Of Art History (3)
This course covers the history of art from prehistoric time through the Renaissance. It explores the cultural, geophysical, and personal influences on art styles. (3 Lec.)

(ART) 106 Survey Of Art History (3)
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. (3 Lec.)

(ART) 110 Design I (3)
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. (2 Lec., 4 Lab.)

(ART) 111 Design II (3)
Basic concepts of design with three-dimensional materials are explored. The use of mass, space, movement, and texture is considered. Laboratory fee. (2 Lec., 4 Lab.)

(ART) 114 Drawing I (3)
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. (2 Lec., 4 Lab.)

(ART) 115 Drawing II (3)
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. (2 Lec., 4 Lab.)

(ART) 116 Jewelry Design And Construction (3)
This course explores the uses of metal in design, basic fabrication techniques in metal, bezel setting of stones, and simple casting. Emphasis is on original design. Laboratory fee. (2 Lec., 4 Lab.)

(ART) 117 Advanced Jewelry Design And Construction (3)
Prerequisite: Art 116. This course continues Art 116. Advanced fabrication, lost wax casting, setting of faceted stones, and forging and shaping of metal, including repoussé and chasing are presented. Emphasis is on original design. Laboratory fee. (2 Lec., 4 Lab.)

(ART) 118 Creative Photography For The Artist I (3)
Prerequisites: Art 110, Art 114, or demonstrated competence approved by the instructor. Creative use of the camera is studied. Photosensitive materials are examined as a means of making expressive graphic images. Emphasis is on black and white processing and printing techniques. Laboratory fee. (2 Lec., 4 Lab.)

(ART) 119 Creative Photography For The Artist II (3)
Prerequisite: Art 118 or demonstrated competence approved by the instructor. This course is a continuation of Art 118. Emphasis is on individual expression. Laboratory fee. (2 Lec., 4 Lab.)

(ART) 165 Fundamental Design Studio I (4)
Prerequisites: Interior Design program acceptance (major) and concurrent enrollment in Interior Design 171. Basic concepts of design limited to black and white values are studied including form, scale, space, proportion, rhythm, theme, variety, accent, unity, texture, and pattern as applied to two-dimensional and three-dimensional abstract projects. This course is intended for students enrolled in applied arts programs. Laboratory fee. (2 Lec., 5 Lab.)

(ART) 199 Problems In Contemporary Art (1)
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. (1 Lec.)

(ART) 201 Drawing III (3)
Prerequisites: Art 110, Art 111, Art 115, sophomore standing, or demonstrated competence approved by the instructor. This course covers the analytic and expressive drawing of the human figure. Movement and volume are stressed. Laboratory fee. (2 Lec., 4 Lab.)

(ART) 202 Drawing IV (3)
Prerequisites: Art 201, sophomore standing, or demonstrated competence approved by the instructor. This course continues Art 201. Emphasis is on individual expression. Laboratory fee. (2 Lec., 4 Lab.)

(ART) 203 Art History (3)
Prerequisites: Art 105 and 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. (3 Lec.)

(ART) 204 Art History (3)
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. (3 Lec.)
(ART) 205 Painting I (3)
Prerequisites: Art 110, Art 111, Art 115, or demonstrated competence approved by the instructor. This studio course stresses fundamental concepts of painting with acrylics and oils. Emphasis is on painting from still life, models, and the imagination. (2 Lec., 4 Lab.)

(ART) 206 Painting II (3)
Prerequisite: Art 205. This course continues Art 205. Emphasis is on individual expression. (2 Lec., 4 Lab.)

(ART) 208 Sculpture I (3)
Prerequisites: Art 110, Art 111, Art 115, or demonstrated competence approved by the instructor. Various sculptural approaches are explored. Different media and techniques are used. Laboratory fee. (2 Lec., 4 Lab.)

(ART) 209 Sculpture II (3)
Prerequisite: Art 208. This course continues Art 208. Emphasis is on individual expression. Laboratory fee. (2 Lec., 4 Lab.)

(ART) 210 Commercial Art I (3)
Prerequisites: Art 110, Art 111, Art 115 or demonstrated competence approved by the instructor. The working world of commercial art is introduced. Typical commercial assignments are used to develop professional attitudes and basic studio skills. Laboratory fee. (2 Lec., 4 Lab.)

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

(ART) 216 Ceramics II (3)
Prerequisite: Art 215 or demonstrated competence approved by the instructor. Glaze technology is studied. Advanced problems in the creation of artistic and practical ceramic ware. Laboratory fee. (2 Lec., 4 Lab.)

(ART) 217 Watercolor I (3)
Prerequisites: Art 110, Art 111, and Art 115 or demonstrated competence approved by the instructor. This course explores studio techniques in water base media. Emphasis is placed on exploration of a variety of modes and techniques as a means to original expression. (2 Lec., 4 Lab.)

(ART) 218 Watercolor II (3)
Prerequisite: Art 217. This course continues the development of skills in water base media. (2 Lec., 4 Lab.)

(ART) 220 Printmaking I (3)
Prerequisites: Art 110, Art 111, Art 115, or demonstrated competence approved by the instructor. Basic printmaking processes are introduced. Included are planographic, intaglio, stencil and relief processes. Laboratory fee. (2 Lec., 4 Lab.)

(ART) 222 Printmaking II (3)
Prerequisite: Art 220. This course is a continuation of Printmaking I. Laboratory fee. (2 Lec., 4 Lab.)

(ART) 227 Design III (3)
Prerequisites: Art 110, 111, 114, and 115. This course is a development of two- and three-dimensional projects in a variety of materials. Emphasis is on Individual expression. Laboratory fee. (2 Lec., 4 Lab.)

(ART) 229 Design IV (3)
Prerequisite: Art 227. This course is a continued investigation into the problems of two- and three-dimensional concepts. Emphasis is on Individual expression. Laboratory fee. (2 Lec., 4 Lab.)

(ART) 232 Fibers I (3)
Prerequisites: Art 110, 111, 114, and 115. This course explores the problems of design, construction, and form utilizing basic fiber techniques. (2 Lec., 4 Lab.)

(ART) 233 Fibers II (3)
Prerequisite: Art 232. This course is a continuation of Art 232. It further explores fiber techniques and processes. (2 Lec., 4 Lab.)

ASTRONOMY

(AST) 101 Descriptive Astronomy (3)
This course surveys the fundamentals of astronomy. Emphasis is on the solar system. Included is the study of the celestial sphere, the earth's motions, the moon, planets, asteroids, comets, meteors, and meteorites. (3 Lec.)

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

(AVT) 110 Introduction To Aviation (3)
This course introduces various aspects of the aviation industry. It covers the history, development, and advances in aircraft from balloon flight to the supersonic transport. The industry's economic and sociological effects on people and communities are also included. Special emphasis is on the origin and growth of airlines and the aviation industry. (3 Lec.)

BIOLOGY

(BIO) 101 General Biology (4)
This course is intended for students majoring and minoring in biology and related disciplines. It is a prerequisite for all higher level biology courses. Topics include the scientific method, fundamental general and biological chemistry, cell structure and function including membrane transport, cell reproduction, cell energetics and homeostatic mechanisms. Laboratory fee. (3 Lec., 3 Lab.)

(BIO) 102 General Biology (4)
This course is a continuation of Biology 101 and is intended for students majoring and minoring in biology and related disciplines. Topics include Mendelian and molecular genetics, developmental biology, evolution and the diversity of life, and ecology. Laboratory fee. (3 Lec., 3 Lab.)

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

(BIO) 115 Biological Science (4)
Selected topics in biological science are presented to students not majoring in the sciences to promote their understanding of biological concepts and to enable them to use these concepts in their daily lives. Topics include chemistry and biochemistry, the cell, respiration, photosynthesis, cell reproduction, genetics, and reproduction and development. Laboratory fee. (3 Lec., 3 Lab.)

(BIO) 116 Biological Science (4)
Selected topics in biological science are presented to students not majoring in the sciences to promote their understanding of biological concepts and to enable them to use these concepts in their daily lives. Topics include plant and animal systems, diversity of life and population dynamics, taxonomy, evolution, and ecology. Laboratory fee. (3 Lec., 3 Lab.)

(BIO) 120 Introduction To Human Anatomy And Physiology (4)
Prerequisite: Prior enrollment in Biology 115 is recommended for those with no previous high school biology. Major topics include cell structure and function, tissues, organization of the human body, and the following organ systems: skeletal, muscular, nervous, and endocrine. This course is a foundation course for specialization in Associate Degree Nursing and allied health disciplines. Other students interested in the study of structure and function of the human body should consult a counselor. Emphasis is on homeostasis. Laboratory fee. (3 Lec., 3 Lab.)

(BIO) 121 Introduction To Human Anatomy And Physiology (4)
Prerequisite: Biology 120. This course is a continuation of Biology 120. Major topics include the following organ systems: digestive, circulatory, respiratory, urinary, and reproductive. Emphasis is on homeostasis. Laboratory fee. (3 Lec., 3 Lab.)

(BIO) 123 Applied Anatomy And Physiology (4)
This course surveys human anatomy and physiology. The various body systems are studied and examined. This course is suggested for students of the health occupations in accordance with their program requirements. It is open to other students. This course will apply toward meeting the science requirement for non-science majors. No previous science background is presumed. Laboratory fee. (3 Lec., 2 Lab.)

(BIO) 203 Intermediate Botany (4)
Prerequisites: Biology 101 and 102. The major plant groups are surveyed. Emphasis is on morphology, physiology, classification, and life cycles. Evolutionary relationships of plants to each other and their economic importance to humans are also covered. (3 Lec., 3 Lab.)

(BIO) 211 Invertebrate Zoology (4)
Prerequisite: Eight hours of biological science. This course surveys the major groups of animals below the level of chordates. Consideration is given to phylogeny, taxonomy, morphology, physiology, and biology of the various groups. Relationships and importance to higher animals and humans are stressed. Laboratory fee. (3 Lec., 3 Lab.)

(BIO) 216 General Microbiology (4)
Prerequisite: Biology 102 or 121 or demonstrated competence approved by the instructor. Topics include growth, reproduction, nutrition, genetics, and ecology of micro-organisms, as well as aspects of microbial disease, immunology and chemotherapy. Laboratory activities constitute a major part of the course. Laboratory fee. (3 Lec., 4 Lab.)
(BIO) 218 Field Biology (3)
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. (2 Lec., 4 Lab.)

(BIO) 221 Anatomy And Physiology I (4)
Prerequisite: Biology 102 or demonstrated competence
approved by the instructor. This course examines cell
structure and function, tissues, and the skeletal, muscular,
and nervous systems. Emphasis is on structure, function,
and the interrelationships of the human systems. Laboratory fee. (3 Lec., 3 Lab.)

(BIO) 222 Anatomy And Physiology II (4)
Prerequisite: Biology 221 or demonstrated competence
approved by the instructor. This is the second course of a
two course sequence. Structure and function as related to
the human circulatory, respiratory, urinary, digestive,
reproductive, and endocrine systems are studied. Emphasis is placed on the interrelationships of these systems. Laboratory fee. (3 Lec., 3 Lab.)

(BIO) 223 Environmental Biology (3)
The principles of aquatic and terrestrial communities are
presented. Emphasis is on the relationship of these principles
to the problems facing people in a modern
technological society. Laboratory fee. (3 Lec., 3 Lab.)

(BIO) 226 Genetics (4)
This course focuses on genetics. Topics include Men-
delian inheritance, recombination genetics, the
biochemical theory of genetic material, and mutation
theory. Plant and animal materials are used to study
population genetics, linkage, gene structure and function,
and other concepts of heredity. Laboratory fee. (3 Lec., 3 Lab.)

(BIO) 230 Mammalian Physiology (4)
Prerequisite: Twelve hours of biology, eight hours of inor-
ganic chemistry or concurrent registration in organic
chemistry and demonstrated competence approved by the
instructor. This course is a study of the function of various
mammalian systems. Emphasis is on interrelationships.
Instruments are used to measure various physiological
features. Laboratory fee. (3 Lec., 3 Lab.)

(BIO) 235 Comparative Anatomy Of The
Vertebrates (4)
Prerequisites: Biology 101 and 102. For science majors
and pre-medical and pre-dental students. Major groups of
vertebrates are studied. Emphasis is on morphology and
evolutionary relationships. Laboratory fee. (3 Lec., 4 Lab.)

BLUEPRINT READING
(BPR) 177 Blueprint Reading (2)
Engineering drawings are described and explained. Topics include multiview projection, sections, auxiliaries,
bill of materials, symbols, notes, conventions, and standards. The skills of visualization, dimensioning, and
sketching of machine parts are covered. (1 Lec., 3 Lab.)

(BPR) 178 Blueprint Reading (2)
Prerequisite: Blueprint Reading 177. The different types of prints are read. More complex prints are included. Types
of prints include machine, piping, architectural, civil, structural, electrical, electronic, numerical control documents,
and aircraft. Calculations required in blueprint reading are
emphasized. (1 Lec., 3 Lab.)

BUSINESS
(BUS) 105 Introduction To Business (3)
This course provides an introduction to business opera-
tions. Topics include: the business system, legal forms of
business, organization and management, business func-
tions (production, marketing, finance, risk management,
information systems, accounting) and the environments
affecting business (the economy, labor, government
regulation, social responsibility, law, international busi-
ness, and technology). (This course is offered on
Campus and may be offered via television.)

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

(BUS) 234 Business Law (3)
This course presents the legal principles affecting business
decisions. The law of contracts, agency, sales, negotiable
instruments, and secured transactions are specifically
covered. (3 Lec.)

CHEMISTRY
(CHM) 101 General Chemistry (4)
Prerequisites: Developmental Mathematics 093 or
equivalent and any one of the following: high school
chemistry, Chemistry 115, or the equivalent. This course
is for science and science-related majors. Fundamental
concepts of chemistry are presented including states and
properties of matter, the periodic table, chemical reaction
types and energy relationships, chemical bonding, atomic
and molecular structure, stoichiometry, gas laws and solu-
tions. Laboratory fee. (3 Lec., 3 Lab.)
(CHM) 102 General Chemistry (4)
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 reaction kinetics and chemical equilibrium, acids, bases, salts and buffers, thermodynamics, colligative properties of solutions, electrochemistry, transition-metal chemistry, nuclear chemistry, qualitative inorganic analysis and an introduction to organic chemistry. Laboratory fee. (3 Lec., 3 Lab.)

(CHM) 115 Chemical Science (4)
Prerequisite: Developmental Mathematics 091 or the equivalent. This course is for non-science majors. Fundamental concepts are presented in lecture and laboratory including the periodic table, atomic structure, chemical bonding, reactions, stoichiometry, states of matter, properties of metals, nonmetals and compounds, acid-base theory, oxidation-reduction, solutions and nuclear chemistry. Descriptive chemistry is emphasized. Laboratory fee. (3 Lec., 3 Lab.)

(CHM) 116 Chemical Science (4)
Prerequisite: Chemistry 115 or demonstrated competence approved by the instructor. This course is for non-science majors. It surveys organic chemistry and biochemistry. The reactions, syntheses, nomenclature, uses, purposes and properties of the important classes of organic and biochemical compounds are studied. Laboratory fee. (3 Lec., 3 Lab.)

(CHM) 170 Chemistry Of Flammable Materials (3)
Prerequisite: Chemistry 116. Characteristics and behavior of various materials that burn or react violently are studied. Flammable liquids, combustible solids, and gases are included. Storage, transportation, and handling are covered. Emphasis is on emergency situations and methods of control. (3 Lec.)

(CHM) 201 Organic Chemistry I (4)
Prerequisite: Chemistry 102. This course is for science and science-related majors. It introduces the fundamental classes of organic (carbon) compounds and studies aliphatic and aromatic hydrocarbons in detail. It includes occurrence, structure, stereo-chemistry, nomenclature, and reactions and mechanisms of synthesis. Lab includes: synthesis, purification by distillation, recrystallization, extraction and chromatography, and identification by spectroscopic, physical and chemical methods. Laboratory fee. (3 Lec., 4 Lab.)

(CHM) 202 Organic Chemistry II (4)
Prerequisite: Chemistry 201. This course is for science and science-related majors. It is a continuation of Chemistry 201. Topics studied include properties and syntheses of aliphatic and aromatic systems of aldehydes, ketones, carboxylic acids, esters, ethers, amines, alcohols and amides. Further topics include polyfunctional and heterocyclic compounds, amino acids, proteins, lipids and carbohydrates. Laboratory includes qualitative organic analysis. Laboratory fee. (3 Lec., 4 Lab.)

(CHM) 203 Quantitative Analysis (4)
Prerequisite: Chemistry 102, Mathematics 101. A survey of methods used in analytical chemistry: gravimetric and volumetric methods based on equilibria, oxidation-reduction, and acid-base theory, spectrophotometry, chromatography and electroanalytical chemistry. (2 Lec., 6 Lab.)

(CHM) 205 Chemical Calculations (2)
Prerequisite: Chemistry 102. Chemical calculations are reviewed. Emphasis is on stoichiometry and chemical equilibrium. (2 Lec.)

(CHM) 234 Instrumental Analysis (4)
Prerequisite: Chemistry 203 or demonstrated competence approved by the instructor. The role of modern electronic instrumentation in analysis is explored. Topics include infrared and ultraviolet spectroscopy, gas chromatography, potentiometric titration, electrochemistry, continuous flow analysis, scintillation counting, electrophoresis, flame photometry, and atomic absorption spectrophotometry as analytical tools. Laboratory fee. (2 Lec., 6 Lab.)

COLLEGE LEARNING SKILLS

(CLS) 100 College Learning Skills (1)
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. (1 Lec.)

COMMUNICATIONS

(COM) 131 Applied Communications (3)
This course focuses on student writing. It emphasizes reading and analytical thinking skills and introduces research skills. Students practice writing for a variety of audiences and purposes, primarily job-related. (3 Lec.)
(CIS) 103 Introduction To Computer Information Systems (3)
This course presents an overview of computer information systems with an emphasis on business applications. Topics include terminology, systems and procedures, and the role of computers and their evolution in an information-oriented society. The fundamentals of computer problem solving are applied through the use of the BASIC programming language and application software packages. Laboratory fee. (This course is offered on campus and may be offered via television.) (3 Lee., 1 Lab.)

(CIS) 108 PC Software Applications (4)
This course surveys the use of the microcomputer in conducting professional activities and solving business problems. Topics include the study of hardware and software components of a microcomputer, the function of operating systems and the study and use of contemporary software application packages. Laboratory fee. (3 Lee., 4 Lab.)

(CIS) 111 Data Entry Applications And Concepts (3)
Prerequisite: Office Careers 176 or one year typing in high school or demonstrated competence approved by the instructor. This course provides hands on experience using a personal computer for data entry applications. Students will learn to use a data entry utility program to create, change, and modify data sets, as well as enter variable data. Speed and accuracy will be stressed. Laboratory fee. (2 Lee., 4 Lab.)

(CIS) 114 Problem Solving With The Computer (4)
Prerequisites: Business 105 or Management 136 and Computer Information Systems 103 or Computer Information Systems 108, or demonstrated proficiency approved by Instructor. This course explores methods of solving business problems with the use of a microcomputer. Analysis and design methods are studied and applied to practical situations involving various business functions. Data security and privacy issues are also considered. (3 Lee., 2 Lab.)

(CIS) 118 Text Processing Applications (3)
Prerequisite: Computer Information Systems 103 or 108 or demonstrated competence approved by the instructor. The course covers the use of microcomputers in preparing and editing documents. Topics include entry and editing, reformatting, search and replace, cut-and-paste, file and print operations, utilities including spelling checkers, outliners, and office productivity tools. Office automation concepts including desktop publishing, facsimile and networking are covered. Students will learn to use commercially available text processors. Laboratory fee. (2 Lee., 3 Lab.)

(CIS) 150 Computer Program Logic And Design (3)
Prerequisite: Computer Information Systems 103 or demonstrated competence approved by the instructor. This course presents basic logic needed for problem solving with the computer. Topics include structured design tools and their application to general business problems. (3 Lec.)

(CIS) 160 Data Communications (3)
Prerequisite: Computer Information Systems 103 or 108. This course provides an introduction to data communications vocabulary, concepts, and uses. Topics include data communications hardware, software, networks, and protocols. (3 Lec.)

(CIS) 162 COBOL Programming I (4)
Prerequisites: Computer Information Systems 103, credit or concurrent enrollment in Computer Information Systems 150, or demonstrated competence approved by the instructor. This course develops structured programming skills using the COBOL language. Topics include input/output, comparisons, control breaks, introductory table concepts, and report formats. Skills in problem analysis, using design tools, coding, testing, and documentation are also developed. Laboratory fee. (3 Lec., 4 Lab.)

(CIS) 164 COBOL Programming II (4)
Prerequisites: Computer Information Systems 150 and 162 or demonstrated competence approved by the Instructor. This course continues the development of programming skills using the COBOL language. Topics include advanced table concepts, sort techniques, disk file organizations and maintenance, debugging techniques, copy techniques, and subprograms. Laboratory fee. (3 Lec., 4 Lab.)

(CIS) 167 C Programming (4)
Prerequisite: Six credit hours in programming language courses or demonstrated competence approved by the instructor. This course covers the fundamentals of the C Programming language. Topics include structured programming and problem solving techniques. Laboratory fee. (3 Lec., 4 Lab.)

(CIS) 169 4th Generation Languages (4)
Prerequisite: Three credit hours in a programming language course or demonstrated competence approved by the instructor. This course presents an introduction to 4th generation languages and their relationship to software productivity. Topics include survey and definition of available products and their uses, current functions, evaluation standards, selection and implementation. Laboratory fee. (3 Lec., 4 Lab.)
(CIS) 170 RPG Programming (3)
Prerequisite: Three credit hours in a programming language course or demonstrated competence approved by the instructor. This course introduces programming skills using the RPG II language. Topics include basic listings with levels of control, multi-record input, exception reporting, look-ahead feature, and multi-file processing. Laboratory fee. (2 Lec., 2 Lab.)

(CIS) 172 BASIC Programming (3)
Prerequisite: Computer Information Systems 103 or demonstrated competence approved by the instructor. This course covers the fundamentals of the BASIC programming language. Topics include structured program development, Input/Output operations, interactive concepts and techniques, selection and iteration, arrays, functions, string handling, and file processing. Laboratory fee. (2 Lec., 2 Lab.)

(CIS) 173 Pascal Programming For Business (3)
Prerequisite: Three credit hours in a programming language course or demonstrated competence approved by the instructor. This course is an introduction to the Pascal programming language. Topics will include structured programming and problem-solving techniques as they apply to business applications. Laboratory fee. (2 Lec., 2 Lab.)

(CIS) 205 JCL And Operating Systems (4)
Prerequisite: Computer Information Systems 162 or 116 or demonstrated competence approved by the instructor. This course introduces mainframe operating system concepts, terminology, job control language, and utilities. Laboratory fee. (3 Lec., 4 Lab.)

(CIS) 210 Assembly Language I (4)
Prerequisite: Computer Information Systems 164 or demonstrated competence approved by the instructor. This course focuses on basic concepts and instructions using a current mainframe assembler language and structured programming techniques. Topics include decimal features, fixed point operations using registers, selected macro instructions, introductory table concepts, editing printed output, and reading memory dumps. Laboratory fee. (3 Lec., 4 Lab.)

(CIS) 215 Micro Assembly Language (4)
Prerequisite: Six credit hours in programming language courses or demonstrated competence approved by the instructor. The basic elements of the assembler language are introduced and structured programming and top-down design techniques are applied. Topics include architecture and machine definition, data description and other assembler pseudo-ops, logic and shift, arithmetic processing, table concepts, printing, string and screen processing, macro definition, and disk processing. Laboratory fee. (3 Lec., 4 Lab.)

(CIS) 218 Spreadsheet Applications (4)
Prerequisites: Computer Information Systems 108 and 114 or demonstrated competence approved by the instructor. The course covers the theory and uses of electronic spreadsheets using commercially available packages. Topics include formula creation, template design, formatting features, statistical, mathematical and financial functions, file operations, report generation, graphics, and macro programming. Laboratory fee. (3 Lec., 4 Lab.)

(CIS) 220 Assembly Language II (4)
Prerequisite: Computer Information Systems 210 or demonstrated competence approved by the instructor. Advanced programming skills will be developed using a current mainframe assembler language. Topics include advanced fixed point operations, indexing, disk file organization and maintenance, advanced table concepts, data and bit manipulation techniques, macro writing, subprogram linkages, advanced problem analysis, debugging techniques, and introduction to floating point operations. Laboratory fee. (3 Lec., 4 Lab.)

(CIS) 221 PC Operating Systems And Utilities (4)
Prerequisites: Computer Information Systems 108 and 160. This course covers operation of PC hardware and the organization of components and devices into architectural configurations. Students will learn how to prepare and evaluate system specifications, troubleshoot minor hardware problems, and prepare and modify short assembler language programs. Laboratory fee. (3 Lec., 3 Lab.)

(CIS) 223 PC Hardware (3)
Prerequisite: Credit or concurrent enrollment in Computer Information Systems 221. This course presents a function systems-level review of PC hardware and the organization of components and devices into architectural configurations. Students will learn how to prepare and evaluate system specifications, troubleshoot minor hardware problems, and prepare and modify short assembler language programs. Laboratory fee. (2 Lec., 2 Lab.)

(CIS) 225 Systems Analysis And Design (4)
Prerequisite: Computer Information Systems 164 or demonstrated competence approved by the instructor. This course introduces and develops skills to analyze existing business systems, to design new systems using structured methodology, and to prepare documentation. Emphasis is on a case study involving all facets of systems analysis and design. (3 Lec., 4 Lab.)

(CIS) 228 Database Applications (4)
Prerequisites: Computer Information Systems 108 and 114 or demonstrated competence approved by the instructor. This course covers microcomputer database management concepts using commercially available software. Topics include terminology, organizing data and designing files, report and menu generation, indexing, selection/queries, browsing, file operations, and program development. Laboratory fee. (3 Lec., 4 Lab.)
(CIS) 239 User Documentation And Training (3)
Prerequisites: Speech Communication 101, Office Careers 231, and Computer Information Systems 118 or comparable word processing course or demonstrated competence approved by the instructor. This course covers the practical application of adult learning theory, product documentation, creating user guides and reference manuals, using tutorials, evaluating and using training materials, effective training experiences, concepts of desktop publishing, and presentation graphics. (3 Lec.)

(CIS) 254 Data Base Systems (4)
Prerequisite: Computer Information Systems 164 or demonstrated competence approved by the instructor. This course is an introduction to applications program development in a data base environment with emphasis on loading, modifying, and querying a data base. Topics include discussion and application of data structures, indexed and direct file organizations, data analysis, design, implementation, and data management. Laboratory fee. (3 Lec., 4 Lab.)

(CIS) 258 On-Line Applications (4)
Prerequisites: Computer Information Systems 160 and 164 or demonstrated competence approved by the instructor. This course covers teleprocessing monitors and introduces the concepts required to program on-line applications. Topics include on-line applications design, the functions of a teleprocessing monitor, program coding techniques, testing methods, and file handling. The CICS Command Level interface to the COBOL language will be used. Laboratory fee. (3 Lec., 4 Lab.)

(CIS) 260 Contemporary Topics In Computer Information Systems (1)
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. May be repeated when topics vary. (1 Lec.)

(CIS) 262 Contemporary Topics In Computer Information Systems (3)
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. May be repeated when topics vary. (3 Lec.)

(CIS) 263 Special Topics In Computer Information Systems (3)
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 information systems are studied. May be repeated when topics vary. Laboratory fee. (2 Lec., 2 Lab.)

(CIS) 265 Special Topics In Computer Information Systems (4)
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 information systems are studied. May be repeated as topics vary. Laboratory fee. (3 Lec., 4 Lab.)

(CIS) 272 Advanced BASIC Techniques (3)
Prerequisite: Computer Information Systems 172 or demonstrated competence approved by the instructor. This course continues the development of programming skills using the BASIC language and its application to typical business problems. Laboratory fee. (2 Lec., 2 Lab.)

(CIS) 280 Applied Studies (3)
Prerequisites: Computer Information Systems 223 and twelve additional credit hours from this option or demonstrated competence approved by instructor. This course applies PC analyst skills to real world situations. Topics include planning and implementing solutions to business-related problems, incorporating student knowledge of hardware, software, applications packages, training, documentation, communication skills, and problem solving skills. (3 Lec.)
(CIS) 701 Cooperative Work Experience (1)
Prerequisite: Completion of two courses in the Computer Information Systems program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Student must develop new learning objectives each semester. The seminar consists of topics which include job interview and application techniques, job site interpersonal relations, preparation of resumes, building self-esteem, setting and writing job objectives, time and stress management techniques, career interest/aptitude test, evaluation and planning, vendor presentation and professional development. (1 Lec., 5 Lab.)

(CIS) 703 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Computer Information Systems program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Student must develop new learning objectives each semester. The seminar consists of topics which include job interview and application techniques, job site interpersonal relations, preparation of resumes, building self-esteem, setting and writing job objectives, time and stress management techniques, career interest/aptitude test, evaluation and planning, vendor presentation and professional development. (1 Lec., 15 Lab.)

(CIS) 704 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Computer Information Systems program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Student must develop new learning objectives each semester. The seminar consists of topics which include job interview and application techniques, job site interpersonal relations, preparation of resumes, building self-esteem, setting and writing job objectives, time and stress management techniques, career interest/aptitude test, evaluation and planning, vendor presentation and professional development. (1 Lec., 20 Lab.)

(CIS) 713 Cooperative Work Experience (3)
Prerequisite: Completion of one course in Computer Information Systems 701, 703 or 704. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Student must develop new learning objectives each semester. The seminar consists of topics which include setting and writing job objectives and directed independent studies of computer-related topics such as expert systems, new vendor products or presentation graphics. (1 Lec., 15 Lab.)

(CIS) 714 Cooperative Work Experience (4)
Prerequisite: Completion of one course in Computer Information Systems 701, 703 or 704. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Student must develop new learning objectives each semester. The seminar consists of topics which include setting and writing job objectives and directed independent studies of computer-related topics such as expert systems, new vendor products or presentation graphics. (1 Lec., 20 Lab.)

COMPUTER SCIENCE

(CS) 111 Computing Science I (3)
Prerequisite: Two years of high school algebra or Developmental Math 093 or demonstrated competence approved by the instructor. This introductory course is designed to meet the requirements for a four-year degree with a major or minor in computer science, mathematics, or a scientific field. Topics covered include computer organization and storage, number systems, and problem-solving using structured programming in Pascal. Laboratory fee. (3 Lec.)

(CS) 112 Computing Science II (3)
Prerequisites: Computer Science 111 and Math 101 or demonstrated competence approved by the instructor. This course is a continuation of Computer Science 111 and is designed to meet the requirements for a degree in computer science or a related field. Topics include a continuation of Pascal programming, structured problem-solving, elementary data structures including arrays, records, files, and the use of pointer variables. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 121 Introduction To FORTRAN Programming (3)
Prerequisite: Math 102 or demonstrated competence approved by the instructor. This course is intended primarily for students pursuing a degree in an engineering, science, or related field which requires a one-semester course in FORTRAN programming. Emphasis is on the use of the FORTRAN language in technical applications. Topics include input/output, structures, and formatting. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 122 Introduction To BASIC Programming (3)
Prerequisite: Developmental Math 093 or demonstrated competence approved by the instructor. This course is an introduction to the BASIC programming language. Topics include input/output, looping, decision structures, functions, arrays, disk files, and formatting. Emphasis is placed on structured programming techniques and algorithm development. Laboratory fee. (2 Lec., 2 Lab.)
(CS) 123 Introduction To PL/I Programming (3)
Prerequisites: Developmental Math 093 and Computer Science 111 or Computer Information Systems 103 or demonstrated competence approved by the instructor.
This course is an Introduction to the PL/I programming language. Emphasis is placed upon the structured approach to program design using both mathematical and business applications. Topics include string processing, simple data structures, internal search/sort techniques, and sequential file processing. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 211 Assembly Language (3)
Prerequisite: Computer Science 112 or demonstrated competence approved by the instructor. This course is designed to meet the requirements for a degree in computer science or a related field. Topics covered include a study of assembly language programming, machine representation of data and instructions, and addressing techniques. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 221 Introduction To Computer Organization (3)
Prerequisite: Computer Science 112 or demonstrated competence approved by the instructor. This course introduces the organization and structuring of the major hardware components of computers, the mechanics of information transfer and control within a digital computer system, and the fundamentals of logic design. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 222 Introduction To File Processing (3)
Prerequisite: Computer Science 112 or demonstrated competence approved by the instructor. This course introduces the concepts and techniques of structuring data. Experience is provided in the use of secondary storage devices and applications of data structures and file processing techniques. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 213 Introduction To PUI Programming (3)
Prerequisites: Developmental Math 093 and Computer Science 111 or Computer Information Systems 103 or demonstrated competence approved by the instructor.
This course is an Introduction to the PUI programming language. Emphasis is placed upon the structured approach to program design using both mathematical and business applications. Topics include string processing, simple data structures, internal search/sort techniques, and sequential file processing. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 211 Assembly Language (3)
Prerequisite: Computer Science 112 or demonstrated competence approved by the instructor. This course is designed to meet the requirements for a degree in computer science or a related field. Topics covered include a study of assembly language programming, machine representation of data and instructions, and addressing techniques. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 221 Introduction To Computer Organization (3)
Prerequisite: Computer Science 112 or demonstrated competence approved by the instructor. This course introduces the organization and structuring of the major hardware components of computers, the mechanics of information transfer and control within a digital computer system, and the fundamentals of logic design. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 222 Introduction To File Processing (3)
Prerequisite: Computer Science 112 or demonstrated competence approved by the instructor. This course introduces the concepts and techniques of structuring data. Experience is provided in the use of secondary storage devices and applications of data structures and file processing techniques. Laboratory fee. (2 Lec., 2 Lab.)

CONSTRUCTION TECHNOLOGY

(CT) 110 Construction I-Systems And Materials (3)
This course is a study of the different types of building systems and materials used in the design and construction of residential and commercial buildings. Different structural building systems will be studied, and wood-related products, concrete and concrete masonry, brick, stone, and steel units are included. (3 Lec.)

(CT) 111 Construction II-Mechanical, Electrical, And Plumbing Systems (3)
Prerequisite: Construction Technology 110 or demonstrated competence approved by the instructor. This course is a study of the mechanical and electrical systems used in modern buildings of today. Topics that will be covered include the basic understanding of how electrical, heating, air conditioning, and plumbing systems work and how they are designed for residential and light commercial buildings. (3 Lec.)

(CT) 115 Blueprint Reading/Specifications (3)
The course covers the theory of projection, architectural symbols, relationship of views and measurements, plan and elevation views, sections and details. Also included are terms, specifications, and abbreviations used in reading residential and light commercial building blueprints. (3 Lec.)

(CT) 116 Commercial Blueprints/Specifications (3)
Prerequisites: Construction Technology 110 and 115 or demonstrated competence approved by the instructor. This course covers commercial building blueprints and specifications. Topics covered include masonry wall, reinforced concrete, prestressed concrete, tilt-up, steel-frame and stairs, and elevators. (3 Lec.)

(CT) 117 Construction Safety (1)
This course covers safety and job site working conditions for the construction industry. Some of the topics include safety planning, safety and health standards, regulations and codes, record keeping and accident documentation, hazardous materials, safety equipment and drug usage on construction jobs. (1 Lec., 1 Lab.)

(CT) 118 Codes and Inspections I (3)
Prerequisite: Construction Technology 110 or demonstrated competence approved by the instructor. This course considers inspection procedures and codes. Topics covered include basic code requirements, use of standards in developing codes, model codes, role of the federal government, office and field operations, and building permits. Using the Uniform and Southern Building Codes as enforcement guides, the course reviews residential and light commercial building and minimum property standards. (3 Lec.)
Prerequisites: Construction Technology. This course is a comprehensive course that includes Construction Technology 121, 122, and 123. Students may register in the comprehensive course or the inclusive courses. This course covers the construction of foundations for residential and light commercial buildings. Topics studied are builder's level and rod, site preparation for forms on grade, footings, piers and low wall foundations, flat work, curbing and low steps. Laboratory fee. (30 Contact Hours)

Prerequisites: Construction Technology. This course will cover slabs on grade for residential and light commercial buildings. Topics covered include study of soils, construction of building slabs, curb and gutter, and edge forms. Laboratory fee. (30 Contact Hours)

Prerequisites: Construction Technology. This course will cover low wall and low step forming. Topics covered include low form wall construction, basements, low stair forms and job planning with emphasis on job safety. Laboratory fee. (30 Contact Hours)

Prerequisites: Construction Technology. This course is a comprehensive course that includes Construction Technology 126 and 127. Students may register in the comprehensive course or the inclusive courses. This course covers the basics of rough framing for residential and light commercial buildings. Topics include safety, equipment required, job planning, floor, wall, ceiling and roof framing systems. Laboratory fee. (90 Contact Hours)

Prerequisites: Construction Technology 110, 115 and 117 or demonstrated competence approved by the instructor. This course focuses on the basics of rough framing for residential and light commercial buildings. The topics covered include planning, layout and installation of rough framing members for floors, walls, partitions, and basic components of a roof system. Laboratory fee. (60 Contact Hours)
This course is a comprehensive course that includes Construction Technology 136 and 137. Students may register in the comprehensive course or the inclusive courses. This course is an overall study in the correct use of structural materials. Special emphasis is placed on the use of specification tables, technical manuals, and load tables for building systems and materials. Topics covered are structural mechanics, steel, wood, reinforced concrete, and roof trusses. Residential and both light and heavy commercial building structures will be studied. Laboratory fee. (2 Lec., 2 Lab.)

(CT) 136 Engineering Principles (1)
Prerequisites: Construction Technology 110 and Math 195 or demonstrated competence approved by the instructor. This course covers the basic principles of building engineering design. Topics include forces and stress, moments and reactions, shear and bending moments, and theory of bending and properties of sections. (1 Lec.)

(CT) 137 Engineering Practices (2)
Prerequisites: Construction Technology 110 and 136 and Math 195 or demonstrated competence approved by instructor. This course covers the basic engineering most commonly used in planning residential and light commercial buildings. Topics include soils, concrete, steel, wood, and trusses. Emphasis will be placed on using charts and tables to determine loads and sizing of various materials. Laboratory fee. (1 Lec., 2 Lab.)

(CT) 138 Job Site Foreman-Supervision (3)
This course introduces job site techniques which are important to good supervision. Topics covered include supervisor's role, leadership, motivation, communications, training for production, planning, and organizing. This course was developed as a comprehensive training program for job site foremen. Laboratory fee. (2 Lec., 1 Lab.)

(CT) 140 Estimating I (3)
Prerequisites: Construction Technology 110 and 115 or demonstrated competence approved by the instructor. This course is a comprehensive course that includes Construction Technology 141 and 142. This course is designed to train the construction worker in the preparation of cost estimates for residential and light commercial structures. Topics include mathematics, construction techniques, estimating cycle, data sources and use, checklists, and detailed and unit quantity estimating methods. The emphasis in this course will be on establishing material requirements using residential and light commercial blueprints. Laboratory fee. (3 Lec., 1 Lab.)

(CT) 141 Basic Estimating (2)
Prerequisites: Construction Technology 110 and 115 or demonstrated competence approved by the instructor. This course focuses on the basics of cost estimating. Topics include essential mathematics, estimating cycle, data sources, checklists, blueprints and specifications, estimating formats and bids, contracts, bonds, insurance, overhead and contingencies, labor and equipment checklists. (2 Lec.)

(CT) 142 Residential Estimating (1)
Prerequisites: Construction Technology 110, 115 and 141 and Math 195 or demonstrated competence approved by the instructor. This course develops a bid package for a residential and/or light commercial building using skills developed in Construction Technology 141. Topics include construction techniques, residential estimating cycle, residential data sources and use, checklists, and detailed and unit quantity estimating methods. The emphasis in this course will be on developing a bid package for a residential and/or light commercial building. Laboratory fee. (1 Lec., 1 Lab.)

(CT) 143 Building Design (3)
Prerequisites: Construction Technology 110 and 115 or demonstrated competence approved by the instructor. This course introduces basic design principles as applied to building construction, architectural style, land, and site planning. Topics covered include plan analysis, modular design, restrictions and legal aspects of the lot, site layout, architectural styles and basic components, technological advances in new material and methods, and choosing the most appropriate basic structure. (3 Lec.)

(CT) 145 Field Surveying (3)
Prerequisites: Construction Technology 110 and 115 and Math 195 or demonstrated competence approved by the instructor. This course is a comprehensive course that includes Construction Technology 146 and 147. Students may register in the comprehensive course or the inclusive courses. This course covers proper methods of measuring distances, the builder's level and rod, and building layout using the transit. Topics covered include taping, builder's level and rod, cut and fill, differential leveling, use of various types of transits and methods of building layout, turning angles, and establishing control points using construction blueprints. Laboratory fee. (2 Lec., 3 Lab.)

(CT) 146 Leveling And The Builder's Level (1)
Prerequisites: Construction Technology 115 and 117 or demonstrated competence approved by the instructor. This course focuses on measuring distances and the practical uses of the builder's level used in the construction of a building. Topics covered include measuring horizontal and vertical distances, errors and accuracy in measuring, leveling equipment and field set up, differential leveling, cut and fill, contours and slopes, drainage and grading, establishing grades for formwork, and piers and inserts. Use of drawings and leveling equipment will be covered. Laboratory fee. (1 Lec., 1 Lab.)
(CT) 147 Field Layout And The Transit (2)
Prerequisites: Construction Technology 110, 115 and 146
or demonstrated competence approved by the instructor. This course covers the use of the transit in
building layout. Topics covered include a study of various
types of transits and their care and use, measuring and
turning angles, using land surveys, field notes, setting line
and grade, establishing control points, setting curves, and
establishing building points. Laboratory fee. (1 Lec.,
2 Lab.)

(CT) 212 Commercial Systems, Materials, And
Equipment (3)
Prerequisites: Construction Technology 110, 115 and 116
or demonstrated competence as approved by the instruc-
tor. This course focuses on systems and materials used in
commercial buildings. Topics covered are heavy masonry,
prestressed and precast concrete, structural steel, glass
curtain walls, elevators, and interior and exterior finish
materials. (3 Lec.)

(CT) Codes And Inspections II (3)
Prerequisites: Construction Technology 110, 115, 116
118 and 212 or demonstrated competence approved by
the instructor. This course continues the study of build-
ing codes and inspections centering on commercial
building. Topics include local building codes, enforce-
ment, testing labs, job site testing and inspections by
private testing companies. (3 Lec.)

(CT) 215 Reinforced Concrete And Steel-Frame
Structures (3)
Prerequisites: Construction Technology 116, 136 and 212
and Math 195 or demonstrated competence approved by
the instructor. This course applies Construction Technol-
y 136 skills in an in-depth study of reinforced concrete
and steel frame construction. Topics include soils, rein-
forging steel, properties of concrete and steel, limitations,
design methods, codes, flexure and shear in concrete and
steel beams, anchorage and connectors, and columns and
piers, with the emphasis placed on commercial structures.
Laboratory fee. (2 Lec., 2 Lab.)

(CT) 216 Building And Contracting (3)
Prerequisites: Construction Technology 110 and 115 and
Business 105. This course covers the basic process of
organizing and operating a building or contracting busi-
ness. Topics covered include establishing goals,
organization, directing, staffing, coordinating and control-
ling, and budgeting required to operate and make a profit
in a construction business. (3 Lec.)

(CT) 217 Estimating II (4)
Prerequisites: Construction Technology 110, 115 and 140
or demonstrated competence approved by the instructor.
This course is a comprehensive course that includes Con-
struction Technology 218 and 219. This course covers
computerized estimating principles and applications for the
construction industry and focuses on a commercial es-
imate. Topics covered include DOS commands, spreadsheets, job tracking, commercial software pack-
ages, commercial estimating techniques and organization,
labors and cost control, overhead cost control, cost
comparisons, and development of a bid package. Labora-
tory fee. (3 Lec., 3 Lab.)

(CT) 218 Computerized Estimating (3)
Prerequisites: Construction Technology 110, 140 and
Math 195 or demonstrated competence approved by the
instructor. This course covers computerized estimating
principles and applications for the construction industry.
Topics covered include DOS commands, applications to
estimating and bid analysis, spreadsheets, job tracking,
commercial software packages. A cost estimate will be
developed during course to demonstrate varied con-
cepts. Laboratory fee. (2 Lec., 2 Lab.)

(CT) 219 Commercial Estimating (1)
Prerequisites: Construction Technology 110, 115 and 140
or demonstrated competence approved by the instructor.
This course will cover the estimating process and focus
on commercial bidding. Topics included are estimating
techniques, organization, completion of bid forms, cost
analysis, cost control, overhead cost control, cost com-
parisons, and bidding using commercial blueprints. Labora-
tory fee. (1 Lec., 1 Lab.)

(CT) 220 Foundations II (3)
Prerequisites: Construction Technology 110, 115 and 117
or demonstrated competence approved by the instructor.
This course is a comprehensive course that includes Con-
struction Technology 221, 222 and 223. Students may
register in the comprehensive course or the inclusive cour-
ses. This course covers commercial foundation layout and
forming systems. Topics covered include scaffolding and
shoring, low and high wall forms, vertical piers and
columns, horizontal beam forms, suspended slabs, stair
forms, lift-up, pre-cast construction and flying forms.
Laboratory fee. (90 Contact Hours)

(CT) 221 Walls And Columns (1)
Prerequisites: Construction Technology 110, 115 and 117
or demonstrated competence approved by the instructor.
This course covers construction of formwork for high walls,
vertical pier and column forms and scaffolding. Labora-
tory fee. (30 Contact Hours)
(CT) 222  Suspended Slabs And Beams  (1)
Prerequisites: Construction Technology 110, 115 and 117 or demonstrated competence approved by the instructor. This course covers construction of horizontal beam and suspended slab forming systems. Also included are topics on job planning, material selection and storage, and scaffolding with an emphasis on safety. Laboratory fee. (30 Contact Hours)

(CT) 223  Specialty Forms And Stairs  (1)
Prerequisites: Construction Technology 110, 115 and 117 or demonstrated competence approved by the instructor. This course will cover tilt-up and pre-cast building, flying forms and stair forms. Other topics covered are planning, materials selection and storage, and scaffolding with an emphasis on safety. Laboratory fee. (30 Contact Hours)

(CT) 225  Building Construction II  (3)
Prerequisites: Construction Technology 110, 115 and 117 or demonstrated competence approved by the instructor. This course is a comprehensive course that includes Construction Technology 226, 227 and 228. Students may register in the comprehensive course or the inclusive courses. This course will continue wood framing with advanced concepts in the construction of various types of roofs and exterior wall and roof finish systems. Topics include selection and installation of exterior doors and windows and trim. Exterior finish systems such as wall coverings, roofing, and cornice will be applied to the various styles of buildings and roof styles. Laboratory fee. (90 Contact Hours)

(CT) 226  Advanced Roof Systems  (1)
Prerequisites: Construction Technology 115, 117 and 127 or demonstrated competence approved by the instructor. This course will continue the study of roof systems already begun in Construction Technology 127. Topics covered include unequal span intersecting roofs, hip roofs, dormers, skylights and structural timber framing. Emphasis will be placed on job planning and safety. Laboratory fee. (30 Contact Hours)

(CT) 227  Exterior Finish I  (1)
Prerequisites: Construction Technology 110, 115 and 117 or demonstrated competence approved by the instructor. This course introduces completion of the exterior trim work. Topics covered include roof trim and cornice work, exterior doors and windows. Laboratory fee. (30 Contact Hours)

(CT) 228  Exterior Finish II  (1)
Prerequisites: Construction Technology 110, 117 and 227 or demonstrated competence approved by the instructor. This course focuses on completion of the exterior wall and roof finish work. Topics covered include roof covering and methods, masonry, stucco and wood wall finish systems, and job planning. Laboratory fee. (30 Contact Hours)

(CT) 230  Finish Systems II  (3)
Prerequisites: Construction Technology 110, 115 and 117 or demonstrated competence approved by the instructor. This course is a comprehensive course that includes Construction Technology 231, 232 and 233. Students may register in the comprehensive course or the inclusive courses. This course covers interior finish of commercial buildings. Included are store fronts, metal stud framing, wall finish systems, movable partitions, dropped and suspended ceiling systems, specialty fixtures and hardware, and stair construction. Laboratory fee. (90 Contact Hours)

(CT) 231  Metal Studs And Suspended Ceilings  (1)
Prerequisites: Construction Technology 110, 115 and 117 or demonstrated competence approved by the instructor. This course covers metal stud framing and wall finish treatments for commercial buildings. Topics include metal stud framing, factory built partitions, and suspended ceiling systems. Laboratory fee. (30 Contact Hours)

(CT) 232  Commercial Doors And Hardware  (1)
Prerequisites: Construction Technology 110, 115 and 117 or demonstrated competence approved by the instructor. This course covers commercial doors, hardware and specialty fixtures. Topics include commercial doors and metal jambs, finish hardware, store fixtures, factory-built cabinets and laminates. Laboratory fee. (30 Contact Hours)

(CT) 233  Stair Building  (1)
Prerequisites: Construction Technology 110, 115 and 117 or demonstrated competence approved by the instructor. This course covers the construction and installation of interior stairs. Topics covered include stair types and parts, wood and metal stairs, layout and installation of job and factory-built stairs, building codes, and blueprints. Laboratory fee. (30 Contact Hours)

(CT) 235  Field Supervision I  (3)
This course covers human relations and how to develop motivation on the job site. Topics include written and oral communications, leadership and motivation, problem solving and decision making. Laboratory fee. (90 Contact Hours)

(CT) 240  Field Supervision II  (3)
This course covers areas from contract documents, planning and scheduling, along with cost awareness and production control. Topics covered include document information and construction decisions, peripheral documents, large project CPM, production control, work and cost analysis. Laboratory fee. (90 Contact Hours)
(CT) 245 Field Supervision III (3)
This course covers safety and loss control, project management, construction law, and productivity improvement. Topics covered include project layout start-up, OSHA, reading a construction contract, contract and construction law, and documentation of project activities. Laboratory fee. (90 Contact Hours)

(CT) 250 Contemporary Topics In Construction (1)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's schedule. Recent developments and topics of current interest are studied. May be repeated when topics vary. (1 Lec.)

(CT) 251 Contemporary Topics In Construction (2)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's schedule. Recent developments and topics of current interest are studied. May be repeated when topics vary. Laboratory fee. (1 Lec., 1 Lab.)

(CT) 252 Contemporary Topics In Construction (3)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's schedule. Recent developments and topics of current interest are studied. May be repeated when topics vary. (3 Lec.)

(CT) 253 Special Topics In Construction Technology (3)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's schedule. Current developments in the field of construction are studied. May be repeated when topics vary. Laboratory fee. (2 Lec., 2 Lab.)

(CT) 254 Special Topics In Construction Technology (4)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's schedule. Current developments in the field of construction are studied. May be repeated when topics vary. Laboratory fee. (3 Lec., 3 Lab.)

(CT) 255 Special Projects In Construction Technology (1)
Prerequisite: Will vary based on projects covered and will be annotated in each semester's schedule. Current developments in the field of construction will be developed. May be repeated when topics vary. Laboratory fee. (30 Contact Hours)

(CT) 256 Special Projects In Construction Technology (3)
Prerequisite: Will vary based on project covered and will be annotated in each semester's schedule. Current developments in the field of construction will be developed. May be repeated when topics vary. Laboratory fee. (90 Contact Hours)

(CT) 703 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Construction Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. The seminar consists of topics which include job interview and job application techniques, job site interpersonal relations, and employer expectations of employees. (1 Lec., 15 Lab.)

(CT) 704 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Construction Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. The seminar consists of topics which include job interview and job application techniques, job site interpersonal relations, and employer expectations of employees. (1 Lec., 20 Lab.)

(CT) 713 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Construction Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 15 Lab.)

(CT) 714 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Construction Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 20 Lab.)
DANCE

(DAN) 116 Rehearsal and Performance (1)
This course supplements beginner dance technique classes. Basic concepts of approaching work on the concert stage--stage directions, stage areas, and the craft involved in rehearsing and performing are emphasized. This course may be repeated for credit. (4 Lab.)

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

(DAN) 156 Jazz II (1)
Prerequisite: Dance 155 or demonstrated competence approved by the instructor. Work on skills and style in jazz dance is continued. Technical skills, combinations of steps and skills into dance patterns, and exploration of composition in jazz form are emphasized. Laboratory fee. (3 Lab.)

(DAN) 160 Introduction to Dance History (3)
A history of dance forms is presented. Primitive, classical, and contemporary forms are included. (3 Lec.)

(DAN) 161 Beginning Ballet I (2)
This course explores basic ballet techniques. Included are posture, balance, coordination, rhythm, and flow of physical energy through the art form. Theory, terminology, ballet history, and current attitudes and events in ballet are also studied. Barre exercises and centre floor combinations are given. Laboratory fee. (1 Lec., 3 Lab.)

(DAN) 163 Beginning Ballet II (2)
Prerequisite: Dance 161. This course is a continuation of Dance 161. Emphasis is on expansion of combinations at the barre. Connecting steps learned at centre are added. Jumps and pirouettes are introduced. Laboratory fee. (1 Lec., 3 Lab.)

(DAN) 165 Beginning Contemporary Dance I (2)
This course explores basic contemporary techniques. Emphasis is on technique development, and familiarity with contemporary meters and rhythms. An awareness of major influences on concert dance is developed. Laboratory fee. (1 Lec., 3 Lab.)

(DAN) 166 Beginning Contemporary Dance II (2)
Prerequisite: Dance 165. This course continues and further develops an exploration of Dance 165. Laboratory fee. (1 Lec., 3 Lab.)

(DAN) 200 Rehearsal and Performance (1)
Prerequisite: Dance 116 or demonstrated competence approved by the instructor. This course supplements intermediate dance technique classes. It is a continuation of Dance 116 with emphasis on more advanced concepts as they apply to actual rehearsals and performances. This course may be repeated for credit. (4 Lab.)

(DAN) 252 Coaching and Repertoire (1)
Prerequisite: Demonstrated competence approved by the instructor. Variations (male and female) and pas de deux from standard ballet repertoire are studied and notated. The dancer is given individual coaching, with special attention given to the correction of problems. This course may be repeated for credit. Laboratory fee. (2 Lab.)

(DAN) 253 Improvisation (1)
Prerequisite: Dance 156 or 163. This course consists of creative problem-solving utilizing basic elements of design. This course may be repeated for credit. Laboratory fee. (2 Lab.)

(DAN) 255 Jazz III (1)
Prerequisite: Dance 156. This course consists of the development of proper performance framing. Complex jazz rhythms, turns, jumps, and intricate elements of choreography are introduced. Laboratory fee. (3 Lab.)

(DAN) 256 Jazz IV (1)
Prerequisite: Dance 255. This course is a further exploration of Dance 255. This course may be repeated for credit. Laboratory fee. (3 Lab.)

(DAN) 258 Intermediate Ballet I (2)
Prerequisite: Dance 163. The development of ballet techniques is continued. More complicated exercises at the barre and centre floor are included. Emphasis is on long series of movements, adagio and jumps. Precision of movement is stressed. Laboratory fee. (1 Lec., 3 Lab.)

(DAN) 260 Intermediate Ballet II (2)
Prerequisite: Dance 258. This course begins pointe work for women. Specialized beats and tour are begun for men. Individual proficiency and technical virtuosity are developed. This course may be repeated for credit. Laboratory fee. (1 Lec., 3 Lab.)

(DAN) 265 Intermediate Contemporary Dance I (2)
Prerequisite: Dance 166. This course consists of the development of complex falls, combinations, phrasing, and dramatic emphasis. Laboratory fee. (1 Lec., 3 Lab.)

(DAN) 266 Intermediate Contemporary Dance II (2)
Prerequisite: Dance 265. This course is a further exploration of Dance 265. This course may be repeated for credit. Laboratory fee. (1 Lec., 3 Lab.)

DEVELOPMENTAL COMMUNICATIONS

(DC) 095 Communication Skills (3)
This course focuses on strengthening language communications. Topics include grammar, paragraph structure, reading skills, and oral communication. Emphasis is on individual testing and needs. (3 Lec.)
Communication Skills (3)
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. (2 Lec., 2 Lab.)

DEVELOPMENTAL LEARNING

Learning Skills Improvement (1)
Learning skills are strengthened. Emphasis is on individual needs and personalized programs. This course may be repeated for a maximum of three credits. (2 Lab.)

DEVELOPMENTAL MATHEMATICS


Basic Mathematics I (1)
This course is designed to give an understanding of fundamental operations. Selected topics include whole numbers, decimals, and ratio and proportions. (1 Lec.)

Basic Mathematics II (1)
This course is designed to give an understanding of fractions. Selected topics include primes, factors, least common multiples, percents, and basic operations with fractions. (1 Lec.)

Pre Business (1)
This course is designed to introduce students to business mathematics. Selected topics include discounts and commissions, interest, metric, and English measuring systems, areas, and volumes. (1 Lec.)

Pre Algebra (1)
This course is designed to introduce students to the language of algebra with such topics as integers, metrics, equations, and properties of counting numbers. (1 Lec.)

Mathematics For Nursing I (1)
This course is designed to develop an understanding of the measurements and terminology in medicine and calculations involving conversions of applicable systems of measurement. It is designed primarily for students in all nursing programs. (1 Lec.)

Mathematics For Nursing II (1)
Prerequisite: Developmental Mathematics 064. This course includes medical calculations used in problems dealing with solutions and dosages. It is designed primarily for students in the nursing programs. (1 Lec.)

Elementary Algebra I (1)
Prerequisites: Developmental Mathematics 090, 063, or equivalent. This course is an introduction to algebra and includes selected topics such as basic principles and operations of sets, counting numbers, and integers. (1 Lec.)

Elementary Algebra II (1)
Prerequisite: Developmental Mathematics 070 or equivalent. This course includes selected topics such as rational numbers, algebraic polynomials, factoring, and algebraic fractions. (1 Lec.)

Elementary Algebra III (1)
Prerequisite: Developmental Mathematics 071 or equivalent. This course includes selected topics such as fractional and quadratic equations, quadratic equations with irrational solutions, and systems of equations involving two variables. (1 Lec.)

Introduction To Geometry (1)
This course introduces principles of geometry. Axioms, theorems, axiom systems, models of such systems, and methods of proof are stressed. (1 Lec.)

Intermediate Algebra I (1)
Prerequisites: Developmental Mathematics 071, 091 or equivalent. This course includes selected topics such as systems of rational numbers, real numbers, and complex numbers. (1 Lec.)

Intermediate Algebra II (1)
Prerequisite: Developmental Mathematics 080 or equivalent. This course includes selected topics such as sets, relations, functions, inequalities, and absolute values. (1 Lec.)

Intermediate Algebra III (1)
Prerequisite: Developmental Mathematics 081 or equivalent. This course includes selected topics such as graphing, exponents, and factoring. (1 Lec.)

Pre Algebra Mathematics (3)
This course is designed to develop an understanding of fundamental operations using whole numbers, fractions, decimals, and percentages and to strengthen basic skills in mathematics. The course is planned primarily for students who need to review basic mathematical processes. This is the first three-hour course in the developmental mathematics sequence. (3 Lec.)
(DM) 091 Elementary Algebra (3)
Prerequisite: Developmental Mathematics 090 or an appropriate assessment test score. This is a course in introductory algebra which includes operations on real numbers, polynomials, special products and factoring, rational expressions, and linear equations and inequalities. Also covered are graphs, systems of linear equations, exponents, roots, radicals, and quadratic equations. (3 Lec.)

(DM) 093 Intermediate Algebra (3)
Prerequisite: One year of high school algebra and an appropriate assessment test score or Developmental Mathematics 091. This course includes further development of the terminology of sets, operations on sets, properties of real numbers, polynomials, rational expressions, linear equations and inequalities, the straight line, systems of linear equations, exponents, roots, and radicals. Also covered are products and factoring, quadratic equations and inequalities, absolute value equations and inequalities, relations, functions, and graphs. (3 Lec.)

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 courses that require a considerable amount of college-level reading. See the catalog descriptions in reading for full course content.

(DR) 090 Basic Reading Skills (3)
Development of comprehension and vocabulary skills, based on individual needs, is the focus of this course. Basic study skills are introduced. A score of 12 to 19 on the Descriptive Test of Language Skills Reading Comprehension Test would indicate that a student has the reading skills needed for this course. (3 Lec.)

(DR) 091 Preparation For College Reading (3)
This course emphasizes development of comprehension and vocabulary skills, according to individual needs. Also included are critical reading, rate flexibility, and basic study skills. A score of 20 to 27 on the Descriptive Test of Language Skills Reading Comprehension Test would indicate that a student has the reading skills needed for this course. (3 Lec.)

DEVELOPMENTAL WRITING

Students can improve their writing skills by taking Developmental Writing. These courses are offered for one to three hours of credit.

(DW) 090 Developmental Writing (3)
This course introduces the writing process. Course topics include practice in getting ideas, writing and rewriting, making improvements, and correcting mistakes. A learning lab is available to provide additional assistance. (3 Lec.)

(DW) 091 Developmental Writing (3)
This course focuses on the writing process. Course topics include inventing, drafting, revising, and editing multi-paragraph papers. Building reading skills, using resources, developing thinking skills, and improving attitudes toward writing comprise other course topics. A learning lab is available to provide additional assistance. (3 Lec.)

(DW) 092 Developmental Writing (1)
This course is a writing workshop designed to support students enrolled in English 101 and other courses requiring writing. (3 Lab.)

DIESEL MECHANICS

(DME) 104 Caterpillar Diesel Engine (5)
This course focuses on the complete overhaul of a Caterpillar Diesel Engine including the removal, disassembly, servicing, and assembly of each major component. Laboratory fee. (150 Contact Hours)

(DME) 105 Cummins Diesel Engine (5)
This course focuses on the complete overhaul of a Cummins Diesel Engine including the removal, disassembly, servicing, and assembly of each major component. Laboratory fee. (150 Contact Hours)

(DME) 106 Detroit Diesel Engine (5)
This course focuses on the complete overhaul of a Detroit Diesel Engine including the removal, disassembly, servicing, and assembly of each major component. Laboratory fee. (150 Contact Hours)

(DME) 123 Air Brake Systems (2)
This course focuses on air brake systems used in heavy trucks. The inspection, repair, and adjustment of these systems are covered. Laboratory fee. (60 Contact Hours)

(DME) 125 Automatic Transmissions (2)
Automatic transmissions are studied. Included are removal, inspection, repair, and assembly. Laboratory fee. (60 Contact Hours)
(DME) 126 Heavy Truck Air Conditioning (2)
This course is a study of the theory, principles, operating procedures, troubleshooting and component repair of the automotive air conditioning system found in the heavy trucking industry. Laboratory fee. (60 Contact Hours)

(DME) 127 Shop Practices (2)
This course is designed to acquaint the student with hand and power tools used in the repair of diesel engines and diesel powered equipment. The topics covered include use of hand and power tools; precision measuring tools; pullers; and cleaning equipment. Laboratory fee. (60 Contact Hours)

(DME) 128 Standard Transmissions And Heavy Duty Clutches (3)
Prerequisite: Credit or concurrent enrollment in Physics 131 or demonstrated competence approved by the instructor. Standard transmissions are examined using 5-speed and 10-speed transmissions. Emphasis is placed on theory of operation, removal, disassembly, inspection, assembly and installation. Heavy duty clutches are examined emphasizing removal, repair, and installation. Laboratory fee. (90 Contact Hours)

(DME) 129 Chassis, Differentials And Drive Line (3)
Differentials are studied using removal disassembly, repair, reassembly, and installation. Troubleshooting, failure analysis and appropriate theory of chassis alignment, drive line and universal joint function, and wheel balancing are studied. (90 Contact Hours)

(DME) 137 Fundamentals Of Oxygen/Acetylene And Arc Welding (3)
Two methods of welding are included in this course, oxyacetylene and arc. Topics include the source of heat, application of each method, supplies necessary for a high weld, safety practices, and metals and their properties. Laboratory fee. (90 Contact Hours)

(DME) 141 Caterpillar Diesel Engine Tune-Up And Fuel Systems (2)
This course focuses on diagnosing, locating, and correcting troubles in Caterpillar Diesel Engines. Included are the removal, inspection, testing, adjustment and installation of fuel system components, such as pumps, injectors, filters, lines, and governors. Laboratory fee. (60 Contact Hours)

(DME) 142 Cummins Diesel Engine Tune-Up And Fuel Systems (2)
This course focuses on diagnosing, locating, and correcting troubles in Cummins Diesel Engines. Included are the removal, inspection, testing, calibrating, adjustment, and installation of fuel system components, such as pumps, injectors, filters, lines, and governors. Laboratory fee. (60 Contact Hours)

(DME) 143 Detroit Diesel Engine Tune-Up And Fuel System (2)
This course focuses on diagnosing, locating, and correcting troubles in Detroit Diesel Engines. Included are the removal, inspection, testing, repair, adjustment, and installation of fuel system components, such as injectors, filters, lines and governors. Laboratory fee. (60 Contact Hours)

(DME) 147 Heavy Truck Electrical Systems (3)
The fundamentals of electricity and magnetism are introduced. Starting motors, alternators, regulators, switches, and wiring circuits are examined. Emphasis is on troubleshooting, maintenance and repair. Laboratory fee. (90 Contact Hours)

(DME) 148 Diesel Engine Air Induction Cooling And Lubrication/Systems (2)
The theory of diesel engine operation, including engine air induction, cooling, and lubrication systems is studied. The course emphasizes troubleshooting and servicing techniques. Laboratory fee. (60 Contact Hours)

(DME) 703 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Diesel Mechanics program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include job interview and job application techniques, job site interpersonal relations, and employer expectations of employees. (1 Lec., 15 Lab.)

(DME) 704 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Diesel Mechanics program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include job interview and job application techniques, job site interpersonal relations, and employer expectations of employees. (1 Lec., 20 Lab.)

(DME) 713 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Diesel Mechanics program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 15 Lab.)
(DME) 714 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Diesel Mechanics program or Instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 20 Lab.)

DRAFTING & COMPUTER AIDED DESIGN

(DFT) 135 Reproduction Processes (2)
Equipment and processes used to reproduce technical art are studied. Included are the graphic arts process camera, lithographic offset printing, diazo reproduction, blueprinting, photografting, microfilming, photocopying, silk screen printing, printed circuit board etching, thermography, typographics, xerography, engravings, and others. The rapidly expanding field of computer graphics is also covered. Lab work includes the preparation of flats for offset printing of brochures. Laboratory fee. (1 Lec., 3 Lab.)

(DFT) 182 Technician Drafting (2)
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. (1 Lec., 3 Lab.)

(DFT) 183 Basic Drafting (4)
This course is for students who have had little or no previous experience in drafting. Skill in orthographic, axonometric, and oblique sketching and drawing is developed. Topics include lettering, applied geometry, fasteners, sectioning, tolerancing, and auxiliaries. Experience is provided in using handbooks and other resource materials and in developing design skills. U.S.A.S.I., government, and Industrial standards are used. Emphasis is on both mechanical skills and graphic theory. Laboratory fee. (2 Lec., 6 Lab.)

(DFT) 185 Architectural Drafting (4)
This course begins with architectural lettering and drafting of construction details. Emphasis is on technique and use of appropriate material symbols and conventions. Working drawings are prepared, including plans, elevations, sections, and details. Drawings for buildings using steel, concrete, and timber structural components are covered. Reference materials are used to provide skills in locating data and in using handbooks. Laboratory fee. (2 Lec., 6 Lab.)

(DFT) 232 Technical Illustration (3)
Prerequisite: Drafting 183. The rendering of three-dimensional drawings is covered. Orthographic views and engineers' sketches are developed into isometric, dimetric, perspective, and diagramatic drawings of equipment and their environments. Technical sketching, 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. (2 Lec., 4 Lab.)

(DFT) 245 Computer Aided Design (3)
Prerequisite: Drafting 183 or the equivalent. 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. (2 Lec., 4 Lab.)

(DFT) 250 Sheet Metal Design (3)
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. (2 Lec., 4 Lab.)
EARTH SCIENCE

(ES) 117 Earth Science (4)
This course is for the non-science major. It covers the interaction of the earth sciences and the physical world. Geology, astronomy, meteorology, and space science are included. Selected principles and concepts of the applied sciences are explored. Laboratory fee. (3 Lec., 3 Lab.)

ECOLOGY

(ECY) 291 People And Their Environment II (3)
Environmental awareness and knowledge are emphasized. Topics include pollution, erosion, land use, energy resource depletion, overpopulation, and the effects of un-guided technological development. Proper planning of societal and individual action in order to protect the natural environment is stressed. (3 Lec.)

ECONOMICS

(ECO) 105 Economics Of Contemporary Social Issues (3)
This course is a study of the economics of current social issues and public policy, including such matters as antitrust policy, business deregulation, social security, wage and price controls, budget deficits, economic growth, medical care, nuclear power, farm policy, labor unions, foreign trade, and economic stabilization. This course is not intended for economics or business administration majors. (3 Lec.)

(ECO) 201 Principles Of Economics I (3)
Sophomore standing is recommended. The principles of macroeconomics are presented. Topics include economic organization, national income determination, money and banking, monetary and fiscal policy, macroeconomic applications of inter national trade and finance, economic fluctuations, and growth. (This course is offered on campus and may be offered via television.) (3 Lec.)

(ECO) 202 Principles Of Economics II (3)
Prerequisite: Economics 201 or demonstrated competence approved by the instructor. The principles of microeconomics are presented. Topics include the theory of demand, supply, and price of factors. Income distribution and theory of the firm are also included. Emphasis is given to microeconomic applications of international trade and finance as well as other contemporary microeconomic problems. (This course is offered on campus and may be offered via television.) (3 Lec.)

ELECTRICAL TECHNOLOGY

(ELE) 105 Introduction Of Electrical Technology (2)
This course focuses on the nature of the electrical technology industry and employment opportunities. Safety, materials, and the proper use of tools and common test devices are covered. Laboratory fee. (2 Lec., 1 Lab.)

(ELE) 106 Fundamentals Of Electricity (4)
Electrical theory and basic DC and AC circuits are covered. Voltage, current, resistance, reactance, impedance, phase angle, and power factors are calculated and measured in series, parallel and combination circuits. Laboratory fee. (3 Lec., 3 Lab.)

(ELE) 107 Electrical Transformers (4)
This course focuses on the fundamentals, types and testing procedures of electrical transformers. Power generation, transmission, and distribution systems are presented utilizing both single-phase and three-phase transformers. Laboratory fee. (4 Lec., 2 Lab.)

(ELE) 108 General Electrical Codes (2)
General Electrical Codes as identified in the current National Electric Code are presented. General codes concepts and residential applications are stressed. (2 Lec.)

(ELE) 115 Low Voltage Circuits (3)
This course focuses on types of low voltage electrical circuits. The theory, installation, and testing of low voltage circuits such as bells, chimes, and alarm systems will be presented. Laboratory fee. (2 Lec., 2 Lab.)

(ELE) 116 General Electrical Wiring (3)
This course covers general wiring practices with emphasis on safety and procedures. Topics include materials selection, splicing, switches, receptacles, and lighting circuits for both residential and selected commercial applications. Laboratory fee. (2 Lec., 4 Lab.)

(ELE) 117 General Electrical Planning (4)
This course presents service, feeders, and branch circuit load calculations. Student activities include calculating appliance loads and circuit locations using blueprints, construction drawings and specifications. Laboratory fee. (4 Lec., 2 Lab.)

(ELE) 118 Commercial Codes (2)
This course is an extension of the Basic Electrical Codes to applications frequently encountered in commercial electrical wiring. Information presented is based upon the current National Electrical Code. (2 Lec.)

(ELE) 205 Commercial Wiring (3)
Topics in this course are centered on accepted procedures and practice in wiring for commercial applications. Materials, conduit, and circuit layouts are included. Laboratory fee. (2 Lec., 4 Lab.)
This course stresses applications for service, feeders, and branch circuits for commercial loads. Topics covered include blueprint reading, load calculations, overload protection, and planning for selected commercial environments. Laboratory fee. (4 Lec., 2 Lab.)

This course covers power applications for industrial locations. Topics include high voltage wiring, feeder bus systems, switching, and system protection. Laboratory fee. (2 Lec., 1 Lab.)

This course presents those areas of the current National Electric Code dealing with transformer and welder feeder circuits, motor and branch circuit overload protection. (2 Lec.)

Theory and fundamentals of AC, DC, and three-phase electrical motors are presented. Emphasis is placed on the characteristics, connection, and testing of these machines. Laboratory fee. (2 Lec., 1 Lab.)

Solid state digital logic concepts and applications for motor controls are presented. System diagnostic procedures are covered. Laboratory fee. (2 Lec., 2 Lab.)

This course focuses on the connection and testing of electrical systems used to control single and multiple motor operations. Topics included are control circuit diagrams, magnetic starting, overload protecting, jogging, reversing, and sequencing. Laboratory fee. (3 Lec., 2 Lab.)

This course presents topics pertaining to designing and planning residential and commercial projects. Topics include construction drawings, specifications, load calculations, electrical layout and schedules, materials selection, and cost estimating. Activities are centered on major student projects. Laboratory fee. (2 Lec., 4 Lab.)

Prerequisites: Completion of two courses in the Electrical Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 15 Lab.)

Prerequisites: Completion of two courses in the Electrical Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 20 Lab.)

Prerequisites: Completion of two courses in the Electrical Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 20 Lab.)

Prerequisites: Credit or concurrent enrollment in Mathematics 195 or the equivalent. This is an accelerated course combining DC circuits (ET 190) and AC circuits (ET 191) in one semester for students with previous electronics experience or a good mathematics background. Topics include the analysis of resistive, capacitive, inductive, and combination circuits. Magnetism, resonance, schematic symbols, and sine wave analysis are also included. Series, parallel, and series-parallel circuits are covered. Laboratory fee. (5 Lec., 3 Lab.)

The mathematical theory of direct current circuits is presented in combination with laboratory fundamentals. Emphasis is on elementary principles of magnetism, electric concepts and units, diagrams, and resistance. Electromagnetism, series and parallel circuits, simple meter circuits, conductors, and insulators are also stressed. Laboratory fee. (3 Lec., 3 Lab.)

ELECTRONICS TECHNOLOGY
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 various circuits. Included are laboratory experiments on power factor, sine wave analysis, resonant circuits, capacitance, inductance, Q of coils, magnetism, and resistance. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 192 Digital Computer Principles (3)
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. (2 Lec., 2 Lab.)

(ET) 193 Active Devices (4)
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. (3 Lec., 3 Lab.)

(ET) 194 Instrumentation (3)
Prerequisites: Electronics Technology 190 and credit or concurrent enrollment in Electronics Technology 191 and 193. Electrical devices for measurement and instrumentation are studied and applied to work situations. Included are basic AC and DC measurement meters, impedance bridges, oscilloscopes, signal generators, signal-tracers, and tube and transistor testers. The course concludes with a study of audio frequency test methods and equipment. Laboratory fee. (2 Lec., 3 Lab.)

(ET) 210 Basic CRT Display And Television Theory and Service (4)
Prerequisite: Electronics Technology 190, 191, 193 and 194. This course is designed to introduce CRT display and television theory and to give the student hands on experience in basic servicing of all major sections of modern television receivers and CRT displays for computers. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 231 Special Circuits With Communications Applications (4)
Prerequisites: Electronics Technology 193 and 194. Active devices are applied to circuitry common to most communications equipment. Both the theory of operation and practical applications of the circuits in laboratory experiments are included. Circuits including power supplies, voltage regulators, tuned and untuned amplifiers, filters, oscillators, modulators, and detectors, with application to various types of intelligence transmission and reception are emphasized in the course. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 232 Analysis Of Electronics Logic And Switching Circuits (4)
Prerequisites: Electronics Technology 193 and 194. The course presents circuitry common to electronic control systems and automatic measuring systems. Typical circuit systems functions covered include clamping, gating, switching, and counting. Circuits include voltage discriminators, multi-vibrators, dividers, counters, and gating circuits. Boolean algebra and binary numbers are reviewed. Emphasis is on semiconductor devices. Fluidic switching devices are introduced. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 234 Electronic Circuits And Systems (3)
Prerequisites: Completion of all electronics technology courses up to and including Electronics Technology 231; and may take Electronics Technology 232 and Electronics Technology 231 concurrently with Electronics Technology 234. The design, layout construction, and calibration of an electronics project are covered. Students develop independent project and prepare term papers on functions of components, operating specifications and schematics. Laboratory fee. (6 Lab.)

(ET) 237 Modular Memories And Microprocessors (4)
Prerequisite: Modular Memories Technology 232. Read only memories (ROM's), random access memories (RAM's) and microprocessors are presented. Emphasis is on specifications, applications, and operation. Control buses data basics, addressing, coding, and programming of typical microprocessor units are included. Micro processor system is constructed, tested, coded, and programmed. Laboratory fee. (3 Lec., 3 Lab.)
(ET) 238 Linear Integrated Circuits (4)
Prerequisites: Electronics 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. (3 Lec., 3 Lab.)

(ET) 239 Microwave Technology (3)
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. (3 Lec.)

(ET) 240 Electronics Theory And Application Of Digital Computers (4)
Prerequisites: Mathematics 196 and Electronics Technology 193. The course presents the electronic switching circuits for digital computer systems. Logic symbology, gates, and related Boolean algebra are covered. Computer terminology and number systems are included. An introduction to BASIC language programming for electronic circuit analysis is also included. Laboratory experiments in addition to computer programming include basic logic gate analysis and test procedures. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 267 Microprocessors (4)
Prerequisites: Electronics Technology 192 and 266. This course is a study of microcomputers. Topics include architecture, software, interfacing, microprocessors, and microcomputer systems. Emphasis is on practical applications using in-house microcomputers. Laboratory fee. (3 Lec., 3 Lab.)

ELECTRONIC TELECOMMUNICATIONS

(ET) 102 Introduction To Telecommunications (3)
This course is an introduction to the fundamentals of telecommunications with an emphasis on analog and digital voice transmission techniques and technology. Telecommunications majors are required to take the laboratory course Electronics Technology 103. (3 Lec.)

(ET) 103 Introduction To Telecommunications Laboratory (1)
Prerequisites: Electronics Technology 190, 191 and concurrent enrollment in Electronics Technology 102. This course is designed to support the theories taught in electronics Technology 102 with laboratory experiments. Laboratory fee. (3 Lab.)
(ET) 290 Advanced Electronic Devices (4)
Prerequisites: Electronics Technology 102, 103 and 193. This course continues the study of solid state devices and circuit theory. Emphasis will be on application of these devices in circuitry relevant to the telecommunications systems: power supplies, regulators, amplifiers and oscillators. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 291 Linear Integrated Circuit Applications (4)
Prerequisite: Electronics Technology 290 or concurrent enrollment in Electronics Technology 290. A study of operational amplifiers and their use as basic building blocks of linear integrated circuitry. Topics will include voltage level detectors, comparators, signal generating circuits, signal processing circuits, inverting and non-inverting amplifiers, differential, instrumentation and bridge amplifiers, active filters, I.C. timers, and selected linear integrated circuits. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 292 Telephony Switching Systems (4)
Prerequisite: Electronics Technology 290 or concurrent enrollment in Electronics Technology 290. This course will familiarize the student with the following topics: telephone set, public switched networks, local exchanges, networks, two and four wire systems, tip and ringing requirements, and an introduction to digital transmission techniques. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 293 Basic Radio Circuity (4)
Prerequisite: Electronics Technology 290 or concurrent enrollment in Electronics Technology 290. This course covers the theory and practices of modern communications systems. Topics include amplitude modulation, frequency modulation, single sideband and digital radio characteristics. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 294 High Frequency Transmission Systems (4)
Prerequisites: Electronics Technology 291, 292, and 293. The theory and application of long-haul transmission techniques utilized in the telecommunication industry will be covered. Microwave transmission, fiber optics principles, and satellite communication are major areas of emphasis. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 295 Telecommunication Signaling (4)
Prerequisite: Electronics Technology 294 or concurrent enrollment in Electronics Technology 294. This course covers circuit and system application necessary to implement signaling protocols, conversion systems, formats, and loop starts. Specific signalling topics are SF (single frequency), E & M, DX (duplex), and looping systems. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 297 System Installation And Testing (4)
Prerequisite: Electronics Technology 295 or concurrent enrollment in Electronics Technology 294 or Electronics Technology 295. This course is designed to make the student familiar with the installation of telecommunications switching equipment. The student will become familiar with the theory, operation, and maintenance of switching equipment along with troubleshooting techniques. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 704 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Electronic Telecommunications or Digital Electronics Technology programs or instructor approval. This introductory course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. The seminar consists of an introduction to co-op, orientation to on-the-job learning, writing the learning plan and college degree plan. (1 Lec., 20 Lab)

(ET) 714 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Electronic Telecommunications or Digital Electronics Technology programs or instructor approval. This advanced course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of self-inventory, work values, selling yourself and hints to keep a job. (1 Lec., 20 Lab)

ENGINEERING

(EGR) 101 Engineering Analysis (2)
Prerequisite: Two years of high school algebra or Developmental Mathematics 093 or demonstrated competence approved by the instructor. A mathematical scheme of analysis appropriate in engineering design is presented. Topics include natural quantities, vectors, Newton's laws, work, energy, first law of thermodynamics, information, dimensional analysis, physical modeling, compatibility, continuity, and interpretation of analytic results. Computer programming is taught and used in processing information for analysis. (2 Lec.)

(EGR) 105 Engineering Design Graphics (3)
Graphic fundamentals are presented for engineering communications and engineering design. A rational engineering design procedure is taught and computer aided design is introduced. Graphical topics include geometric construction, geometric modeling, orthographic drawing system, auxiliaries, sections, dimensions and tolerances, graphical analysis, pictorial and working drawings. Laboratory Fee. (2 Lec., 4 Lab.)
ENGLISH

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

(ENG) 101 Composition I (3)
Prerequisite: An appropriate assessment test score (ACT, DCCCD test, or SAT). This course focuses on student writing. It emphasizes reading and analytical thinking and introduces research skills. Students practice writing for a variety of audiences and purposes. (This course is offered on campus and may be offered via television.) (3 Lec.)

(ENG) 102 Composition II (3)
Prerequisite: English 101. In this course students refine the writing, research, and reading skills introduced in English 101. A related goal is the development of critical thinking skills. Writing assignments emphasize argumentation and persuasion. Students will also write a formal research paper. (This course is offered on campus and may be offered via television.) (3 Lec.)

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.

(ENG) 201 British Literature (3)
Prerequisite: English 102. This course includes significant works of British writers from the Old English Period through the 18th century. (3 Lec.)

(ENG) 202 British Literature (3)
Prerequisite: English 102. This course includes significant works of British writers from the Romantic Period to the present. (3 Lec.)

(ENG) 203 World Literature (3)
Prerequisite: English 102. This course includes significant works of Continental Europe and may include works from other cultures. It covers the Ancient World through the Renaissance. (3 Lec.)

(ENG) 204 World Literature (3)
Prerequisite: English 102. This course includes significant works of Continental Europe and may include selected works of other cultures from the Renaissance to the present. (3 Lec.)

(ENG) 205 American Literature (3)
Prerequisite: English 102. This course includes significant works of American writers from the Colonial through the Romantic Period. (3 Lec.)

(ENG) 206 American Literature (3)
Prerequisite: English 102. This course includes significant works of American writers from the Realistic Period to the present. (3 Lec.)

(ENG) 209 Creative Writing (3)
Prerequisite: English 102. The writing of fiction is the focus of this course. Included are the short story, poetry, and short drama. (3 Lec.)

(ENG) 210 Technical Writing (3)
Prerequisites: English 101 and English 102. The technical style of writing is introduced. Emphasis is on the writing of technical papers, reports, proposals, progress reports, and descriptions. (3 Lec.)
ENGLISH AS A SECOND LANGUAGE

The English-as-a-Second Language (ESL) credit curriculum is designed to develop students’ language proficiency in the areas of listening, speaking, reading, and writing. The plan of study consists of thirteen courses divided into three skill areas and four levels (Listening-Conversation, Reading, and Writing). The student enters the program by taking the Michigan Test of English Language Proficiency (MTELP). (The Michigan Test of Aural Comprehension, the MTAC, is used optionally on each campus.) The credit ESL curriculum is designed to interface both with Continuing Education ESL programs and with developmental studies or college level programs on each campus.

(ESL) 031-034 (Listening-Conversation)
These courses prepare students to communicate orally in English. They can (but do not necessarily) precede the Reading (ESL 041-044) and Writing (ESL 051-054, ESL 063) courses.

(ESL) 041-044 (Reading)
These courses prepare a student for reading English in daily life and for reading college textbooks. ESL students needing additional academic preparation should enroll for regular Developmental Reading courses upon completion of the ESL-Reading program.

(ESL) 051-054/(ESL) 063 (Writing-Grammar)
These courses are designed to prepare a student for English 101. There are three courses in syntax (grammar) development (ESL 051, ESL 052, ESL 063) and two courses in principles of composition (ESL 053 and ESL 054). Following these courses, each ESL student will be assessed to determine readiness for other composition courses.
(ESL) 033 ESL Conversation—Listening (3)
This course is designed to improve formal and informal conversation skills including listening comprehension, note-taking, oral reporting, and class discussion techniques. (3 Lec.)

(ESL) 034 ESL Conversation—Listening (3)
This course develops academic, professional, and social aural/oral skills. Emphasis is placed on analysis and critical thinking in English. (3 Lec.)

(ESL) 041 ESL Reading (3)
This course focuses on language development through reading activities. It includes reading comprehension, vocabulary, and word recognition. (3 Lec.)

(ESL) 042 ESL Reading (3)
This course is designed for students needing more practice in the skills and information introduced in ESL 041. Topics include reading comprehension, vocabulary development, word recognition, language and culture. (3 Lec.)

(ESL) 043 ESL Reading (3)
This course covers pre-reading strategy, specific reading comprehension skills, critical reading skills, vocabulary development, idioms, and use of the dictionary and library. (3 Lec.)

(ESL) 044 ESL Reading (3)
This course is designed for students needing more practice in the skills and information introduced in ESL 043. Topics include pre-reading strategies, specific reading comprehension skills, critical reading skills, vocabulary development, idioms, and use of the dictionary and library. (3 Lec.)

(ESL) 051 ESL Writing—Grammar (3)
This course emphasizes correct formation of basic sentences with particular attention to specific grammatical points. These basic sentence structures will also be reinforced in writing exercises. (3 Lec.)

(ESL) 052 ESL Writing—Grammar (3)
This course strengthens English grammar skills introduced in ESL 051. Students will learn to produce compound and complex sentence structures. (3 Lec.)

(ESL) 053 ESL Writing—Grammar (3)
This course introduces principles of composition and emphasizes the processes of paragraph formation. Concurrent enrollment in ESL 063 is recommended. (3 Lec.)

(ESL) 054 ESL Writing—Grammar (3)
This course emphasizes improving skills in expository writing. Particular attention is given to improving unity, coherence, transition, and style as students progress to multi-paragraph compositions. (3 Lec.)

(ESL) 063 ESL Writing—Grammar (3)
This course includes an intensive grammar review of major points covered in ESL 051 and ESL 052 as well as an exploration of the more complex points of English grammar. Concurrent enrollment in ESL 053 is recommended. (3 Lec.)

FRENCH

(FR) 101 Beginning French (4)
The essentials of grammar and easy idiomatic prose are studied. Emphasis on pronunciation, comprehension, and oral expression. Laboratory fee. (3 Lec., 2 Lab.)

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

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

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

(FR) 203 Introduction To French Literature (3)
Prerequisite: French 202 or demonstrated competence approved by the instructor. This course is an introduction to French literature. It includes readings in French literature, history, culture, art, and civilization. (3 Lec.)
(FR) 204 Introduction To French Literature (3)
Prerequisite: French 202 or demonstrated competence approved by the instructor. This course is a continuation of French 203. It includes readings in French literature, history, culture, art, and civilization. (3 Lec.)

GEOGRAPHY

(GPY) 101 Physical Geography (3)
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. (3 Lec.)

(GPY) 102 Economic Geography (3)
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. (3 Lec.)

(GPY) 103 Cultural Geography (3)
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. (3 Lec.)

GEOLOGY

(GEO) 101 Physical Geology (4)
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. (3 Lec., 3 Lab.)

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

(GEO) 103 Introduction To Oceanography (3)
The physical and chemical characteristics of ocean water, its circulation, relationship with the atmosphere, and the effect on the adjacent land are investigated. The geological development of the ocean basins and the sediment in them is also considered. Laboratory fee. (2 Lec., 2 Lab.)

(GEO) 201 Introduction To Rocks And Mineral Identification (4)
Prerequisites: Geology 101 and 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. (3 Lec., 3 Lab.)

(GEO) 205 Field Geology (4)
Prerequisites: Eight credit hours of geology or demonstrated competence approved by the instructor. Geological features, landforms, 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. (3 Lec., 3 Lab.)

(GEO) 207 Geologic Field Methods (4)
Prerequisites: Geology 101 and 102. This course covers basic geologic and topographic mapping, observation of geologic structures, and examination of petrologic systems in an actual field setting. Students will spend a major portion of the course collecting data for and constructing topographic and geologic maps and geologic cross sections and columns. (3 Lec., 3 Lab.)

(GEO) 209 Mineralogy (4)
Prerequisites: Geology 101 and 102 and Chemistry 102. This course covers basic geochemistry; crystal chemistry; crystallography, including symmetry elements, stereographic and gnomonic projections, Miller Indices, crystal systems, and forms; x-ray diffraction; optical properties of minerals; descriptive mineralogy including identification of hand specimens; and phase equilibria. Laboratory fee. (3 Lec., 3 Lab.)

GERMAN

(GER) 101 Beginning German (4)
The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee. (3 Lec., 2 Lab.)

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

(GER) 201 Intermediate German (3)
Prerequisite: German 102 or the equivalent or demonstrated competence approved by the instructor. Reading, composition, and intense oral practice are covered. Grammar is reviewed. (3 Lec.)

(GER) 202 Intermediate German (3)
Prerequisite: German 201 or the equivalent. This course is a continuation of German 201. Contemporary literature and composition are studied. (3 Lec.)
GOVERNMENT

(GVT) 201 American Government (3)
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 governmental relations, local government, parties, politics, and political behavior. (This course is offered on campus and may be offered via television.) (3 Lec.)

(GVT) 202 American Government (3)
Prerequisite: Sophomore standing recommended. The three branches of the United States and Texas government are studied. Topics include the legislative process, the executive and bureaucratic structure, the judicial process, civil rights and liberties, and domestic policies. Other topics include foreign relations and national defense. (This course is offered on campus and may be offered via television.) (3 Lec.)

(GVT) 211 Introduction To Comparative Politics (3)
A comparative examination of governments, politics, problems and policies with illustrative cases drawn from a variety of political systems. (3 Lec.)

HISTORY

(HST) 101 History Of The United States (3)
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.) (3 Lec.)

(HST) 102 History Of The United States (3)
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.) (3 Lec.)

(HST) 103 World Civilizations (3)
This course presents a survey of ancient and medieval history with emphasis on Asian, African, and European cultures. (3 Lec.)

(HST) 104 World Civilizations (3)
This course is a continuation of History 103. The modern history and cultures of Asia, Africa, Europe, and the Americas, including recent developments, are presented. (3 Lec.)

(HST) 105 Western Civilization (3)
The civilization in the West from ancient times 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. (3 Lec.)

(HST) 106 Western Civilization (3)
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. (3 Lec.)

(HST) 110 The Heritage Of Mexico (3)
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. (3 Lec.)

(HST) 112 Latin American History (3)
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. (3 Lec.)

(HST) 120 Afro-American History (3)
The role of the Black in American history is studied. Emphasis is on the political, economic, and sociological factors of the 20th century. (3 Lec.)

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

(HST) 205 Advanced Historical Studies (3)
Prerequisite: Six hours of history. An in-depth study of minority, local, regional, national, or international topics is presented. (3 Lec.)
HUMAN DEVELOPMENT

(HD) 100 Educational Alternatives (1)
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. This course may be repeated for credit. (1 Lec.)

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

(HD) 105 Basic Processes Of Interpersonal Relationships (3)
This course is designed to help the student develop a self-awareness that will enable him/her to relate more effectively to others. Students are made aware of their feelings, values, attitudes, verbal and non-verbal behaviors. The course content, which utilizes an experiential model, also focuses on developing communication and problem-solving skills. (3 Lec.)

(HD) 106 Personal And Social Growth (3)
This course focuses on the interactions between the individual and the social structures in which he lives. Roles, social influences and personal adjustments to the world around us are explored in readings and classroom discussion. Human behavior, the diversity of lifestyles and the components of a healthy personality are studied in an effort to develop a pattern for growth that demonstrates a responsibility to self and society. (3 Lec.)

(HD) 107 Developing Leadership Behavior (3)
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. (3 Lec.)

(HD) 110 Assessment Of Prior Learning (1)
Prerequisite: Limited to students in Technical-Occupational Programs. Demonstrated competence approved by 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. (1 Lec.)

HUMANITIES

(HUM) 101 Introduction To The Humanities (3)
Introduction to the Humanities focuses on the study and appreciation of the fine and performing arts and the ways in which they reflect the values of civilizations. (This course is offered on campus and may be offered via television. Laboratory fee required for television course.) (3 Lec.)

(HUM) 102 Advanced Humanities (3)
Prerequisite: Humanities 101 or demonstrated competence approved by 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. (3 Lec.)
(JN) 101 Introduction To Mass Communications (3)
This course surveys the field of mass communications. Emphasis is on the role of mass media in modern society. (3 Lec.)

(JN) 102 News Gathering And Writing (3)
Prerequisite: Typing ability. This course focuses upon recognizing newsworthy events, gathering information and writing the straight news story. It provides a basis for future study in newspaper and magazine writing, advertising, broadcast journalism and public relations. Students are required to write for the campus newspaper. (2 Lec., 3 Lab.)

(JN) 103 News Gathering And Writing (3)
Prerequisite: Journalism 102 or professional experience approved by the instructor. This course is a continuation of Journalism 102. Students study and practice writing more complex stories, such as features, profiles, follow-up stories, and sidebars. Students are required to write for the campus newspaper. (2 Lec., 3 Lab.)

(JN) 104 Student Publications (1)
Prerequisite: Demonstrated competence approved by 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. (3 Lab.)

(JN) 105 Student Publications (1)
Prerequisite: Demonstrated competence approved by the instructor. This course may not be taken for credit concurrently with Journalism 102 or 103. This course is a continuation of Journalism 104. (3 Lab.)

(JN) 106 Student Publications (1)
Prerequisite: Demonstrated competence approved by the instructor. This course may not be taken for credit concurrently with Journalism 102 or 103. This course is a continuation of Journalism 105. (3 Lab.)

(JN) 202 Principles Of Advertising (3)
Fundamentals of advertising, including advertising appeals, print and broadcast copy writing, and design and selection of media will be covered. Typography as it relates to advertising is stressed. The course will provide students with the concepts they will need to go into the advertising field and into advanced advertising courses. (3 Lec.)

(JN) 203 Survey Of Broadcasting (3)
This course stresses broadcast organization and operations, and includes the theoretical and historical aspects of broadcasting. It introduces students to the social, political, technical, and economic aspects of the broadcasting industry. (3 Lec.)

(JN) 204 News Editing And Copy Reading (3)
Prerequisite: Journalism 102. This course focuses on editing news for newspaper, radio, and television. Emphasis is on writing headlines and laying out pages. (3 Lec.)
(MGT) 136 Principles Of Management (3)
This course emphasizes the managerial functions of planning, organizing, staffing, directing, and controlling. Communication, motivation, leadership, and decision making are included. (This course is offered on campus and may be offered via television.) (3 Lec.)

(MGT) 171 Introduction To Supervision (3)
This course is a study of today's supervisors and their problems. The practical concepts of modern-day, first-line supervision are described. Emphasis is on the supervisor's major functions, such as facilitating relations with others, leading, motivating, communicating, and counseling. (3 Lec.)

(MGT) 212 Special Problems In Business (1)
Each student will participate in the definition and analysis of current business problems. Special emphasis will be placed on 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 credit hours. (1 Lec.)

(MGT) 237 Organizational Behavior (3)
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. (3 Lec.)

(MGT) 242 Human Resources Management (3)
This course presents the fundamentals, theories, principles, and practices 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. (3 Lec.)

(MGT) 244 Problem Solving And Decision-Making (3)
The decision-making process and problem-solving as key components are the focus of this course. Topics include: individual, group, and organizational decision-making; logical and creative problem-solving techniques; and the use of decision aids by managers. Application of theory is provided by experiential activities such as small group discussions, case studies, and simulations. (3 Lec.)

(MGT) 704 Cooperative Work Experience (4)
Prerequisite: Previous credit in or concurrent enrollment in Management Careers 171 or demonstrated competence approved by the instructor. This course is designed to develop the student's managerial skills through the completion of a written competency-based learning plan describing varied student learning objectives and planned work experience. Emphasis is on improving leadership skills and goal-setting. (1 Lec., 20 Lab.)

(MGT) 714 Cooperative Work Experience (4)
Prerequisite: Previous credit in or concurrent enrollment in Management Careers 242 or demonstrated competence approved by the instructor. This course is designed to develop the student's managerial skills through the completion of a written competency-based learning plan describing varied student learning objectives and planned work experience. Emphasis is on the role of managers in job analysis/job descriptions and interviewing techniques. (1 Lec., 20 Lab.)

(MGT) 804 Cooperative Work Experience (4)
Prerequisite: Previous credit in or concurrent enrollment in Management Careers 237 or demonstrated competence approved by the instructor. This course is designed to develop the student's managerial skills through the completion of a written competency-based learning plan describing varied student learning objectives and planned work experience. Emphasis is on improving motivational techniques and communicating. (1 Lec., 20 Lab.)

(MGT) 814 Cooperative Work Experience (4)
Prerequisite: Previous credit in or concurrent enrollment in Management Careers 244 or demonstrated competence approved by the instructor. This course is designed to develop the competency-based learning plan describing varied student learning objectives and planned work experience. Emphasis is on Individual and group decision-making and rational and creative problem solving. (1 Lec., 20 Lab.)
MATHEMATICS

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

(MTH) 101 College Algebra (3)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 093. This course is a study of relations and functions including polynomial, rational, exponential, logarithmic, and special functions. Other topics include variation, complex numbers, systems of equations and inequalities, theory of equations, progressions, the binomial theorem, proofs, and applications. (3 Lec.)

(MTH) 102 Plane Trigonometry (3)
Prerequisite: Mathematics 101 or equivalent. This course is a study of angular measures, functions of angles, identities, solutions of triangles, equations, inverse trigonometric functions, and complex numbers. (3 Lec.)

(MTH) 109 Precalculus Mathematics (4)
Prerequisites: Two years of high school algebra and trigonometry and an appropriate assessment test score. This course consists of the application of algebra and trigonometry to the study of polynomial, rational, exponential, logarithmic and trigonometric functions and their graphs. Conic sections, polar coordinates, and other topics of analytic geometry will be included. (4 Lec.)

(MTH) 111 Mathematics For Business And Economics I (3)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 093. This course includes equations, inequalities, matrices, linear programming; linear, quadratic, polynomial, rational, exponential, and logarithmic functions; and probability. Applications to business and economics problems are emphasized. (3 Lec.)

(MTH) 112 Mathematics For Business And Economics II (3)
Prerequisite: Mathematics 111. This course includes limits, differential calculus, integral calculus, and appropriate applications. (3 Lec.)

(MTH) 115 College Mathematics I (3)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 093. Designed for liberal arts students, this course includes the study of sets, logic, sets of numbers, and mathematical systems. Additional topics will be selected from mathematics of finance, introduction to computers, introduction to statistics, and introduction to matrices. Recreational and historical aspects of selected topics are also included. (3 Lec.)

(MTH) 116 College Mathematics II (3)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 093. Designed for liberal arts students, this course includes the study of algebra, linear programming, permutations, combinations, probability, and geometry. Recreational and historical aspects of selected topics are also included. (3 Lec.)

(MTH) 117 Fundamental Concepts Of Mathematics For Elementary Teachers (3)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 093. This course includes the structure of the real number system and geometry. Emphasis is on the development of mathematical reasoning needed for elementary teachers. (3 Lec.)

(MTH) 121 Analytic Geometry (3)
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. (3 Lec.)

(MTH) 124 Calculus I (5)
Prerequisite: Mathematics 109 or 121 or equivalent. This course is a study of limits, continuity, derivatives, and integrals of algebraic and transcendental functions, with applications. (5 Lec.)

(MTH) 130 Business Mathematics (3)
Prerequisites: One year of high school algebra and an appropriate assessment test score or Developmental Mathematics 091 or the equivalent. This course is intended primarily for students in specialized occupational programs. It is a study of simple and compound interest, bank discount, payrolls, taxes, insurance, mark up and mark down, corporate securities, depreciation, and purchase discounts. (3 Lec.)

(MTH) 139 Applied Mathematics (3)
The course is a study of commercial, technical, and other applied uses of mathematics. Topics vary to fit the needs of the students enrolled in a particular technical/occupational program. The prerequisite will vary accordingly and be determined by the needed skills. (3 Lec.)
(MTH) 195 Technical Mathematics I (3)
Prerequisites: One year of high school algebra and an appropriate assessment test score or Developmental Mathematics 091 or the equivalent. This course is designed for technical students. It covers the basic concepts and fundamental facts of plane and solid geometry, computational techniques and devices, units and dimensions, the terminology and concepts of elementary algebra, functions, coordinate systems, simultaneous equations, and stated problems. (3 Lec.)

(MTH) 196 Technical Mathematics II (3)
Prerequisite: Mathematics 195. This course is designed for technical students. It includes a study of topics in algebra, an introduction to logarithms, and an introduction to trigonometry, trigonometric functions, and the solution of triangles. (3 Lec.)

(MTH) 202 Introductory Statistics (3)
Prerequisite: Two years of high school algebra or demonstrated competence approved by the 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. (3 Lec.)

(MTH) 215 Discrete Mathematics (3)
Prerequisites: Mathematics 124 and an introductory programming course. This course is a study of sets, algebraic structures (relations, functions, groups, and Boolean Algebra), combinatorics, graphs, logic, algorithms, and applications to computing devices. (3 Lec.)

(MTH) 221 Linear Algebra (3)
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 transformations. (3 Lec.)

(MTH) 225 Calculus II (4)
Prerequisite: Mathematics 124 or the equivalent. This course is a study of techniques of integration, polar coordinates, parametric equations, tops in vector calculus, sequences, series, indeterminate forms, and partial differentiation with applications. (4 Lec.)

(MTH) 226 Calculus III (3)
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. (3 Lec.)

(MTH) 230 Differential Equations (3)
Prerequisite: Mathematics 225 or demonstrated competence approved by 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. (3 Lec.)

(MTH) 297 Technical Mathematics III (3)
Prerequisite: Mathematics 196. This course will introduce the concepts and applications of calculus used in the field of Engineering Technology. Included are basic concepts from analytic geometry, differential, and integral calculus. Practical application of the derivative and of integration in technology will be emphasized. (3 Lec.)

MUSIC

(MUS) 103 Guitar Ensemble (1)
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. (3 Lab.)

(MUS) 104 Music Appreciation (3)
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. (3 Lec.)

(MUS) 110 Music Literature (3)
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. (3 Lec.)

(MUS) 111 Music Literature (3)
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. (3 Lec.)

(MUS) 112 Guitar Literature And Materials (3)
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. (3 Lec.)

(MUS) 113 Foundations Of Music I (3)
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. (3 Lec.)

(MUS) 114 Foundations In Music II (3)
Prerequisite: Music 113. This course prepares students with limited music training for Music 145 and increases their general music understanding. Emphasis is on rhythmic and melodic training, chord functions, melody, textures, and basic analysis of music. (3 Lec.)
(MUS) 115 Jazz Improvisation (2)
The art of Improvisation is introduced. Basic materials, aural training, analysis, and common styles are presented. This course may be repeated for credit. (1 Lec., 2 Lab.)

(MUS) 117 Piano Class I (1)
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. (2 Lab.)

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

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

(MUS) 120 Guitar Class II (1)
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. (2 Lab.)

(MUS) 121-143 Applied Music-Minor (1)
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. Private music may be repeated for credit. Laboratory fee required. (1 Lec.)

(MUS) 145 Music Theory I (3)
This course presents the basic elements of music. Emphasis is on notation, cadences, classification of diatonic triads, scales, and modes. (3 Lec.)

(MUS) 146 Music Theory II (3)
Prerequisite: Music 145. This course focuses on part-writing and harmonization with triads and their inversions. Also included is a chord vocabulary expanded to include materials from the common practice period as well as later periods. (3 Lec.)

(MUS) 149 Digital Music Production (3)
Prerequisite: One year of music theory or demonstrated competence approved by the instructor. This course meets the specific needs of experienced songwriters, performers, composers/arrangers, and those people working in or actively interested in music production. (2 Lec., 1 Lab.)

(MUS) 150 Chorus (1)
Prerequisite: Demonstrated competence approved by the 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. (3 Lab.)

(MUS) 151 Voice Class I (1)
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. (2 Lab.)

(MUS) 152 Voice Class II (1)
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. (2 Lab.)

(MUS) 155 Vocal Ensemble (1)
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. (3 Lab.)

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

(MUS) 160 Band (1)
Prerequisite: Demonstrated competence approved by 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. (3 Lab.)

(MUS) 161 Musicianship I (1)
This course relates to topics in Music 145. Aural skills including sight-singing, ear training, and keyboard are developed. (3 Lab.)

(MUS) 162 Musicianship II (1)
Prerequisite: Music 161. This course relates to topics in Music 146. Aural music skills including sight-singing, ear training, and keyboard are further developed. (3 Lab.)

(MUS) 166 History Of Jazz/Rock Music (3)
The study of social and musical influences on Jazz/Rock music and the influence of Jazz/Rock Music on society and the music industry. (3 Lec.)

(MUS) 170 Orchestra (1)
Experience is provided in performing and reading orchestral literature and in participating in the college orchestra. This course may be repeated for credit. (3 Lab.)
(MUS) 203 Composition (3)
Prerequisites: Music 145 and 146 or demonstrated competence approved by the instructor. This course covers composing in small forms for simple media in both traditional styles and styles of the student's choice. This course may be repeated for credit. (3 Lec.)

(MUS) 217 Piano Class III (1)
Prerequisite: Music 118 or the equivalent. This course is a continuation of functional keyboard skills, including harmonization, sight-reading, accompanying styles, improvisation, and technical exercises. It is designed for the music major preparing for the piano proficiency exam, but is also open to any interested student. It is recommended that music majors also study privately. (2 Lab.)

(MUS) 218 Piano Class IV (1)
Prerequisite: Music 217 or the equivalent. This course is a continuation of functional keyboard skills in Music 217 with greater emphasis on advanced harmonization and appropriate technical skills. It is designed as a preparation for the piano proficiency exam for the music major, but is also open to any interested student. It is recommended that music majors also study privately. (2 Lab.)

(MUS) 221-243 Applied Music-Concentration (2)
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. Laboratory fee required. Private music may be repeated for credit. (1 Lec.)

(MUS) 245 Music Theory III (3)
Prerequisite: Music 146. This course is a continuation of the study of music theory. It includes the materials of modulation, larger forms, and thematic development. (3 Lec.)

(MUS) 246 Music Theory IV (3)
Prerequisite: Music 245. This course is a continuation of the topics developed in Music 245. The preceding materials are expanded to include melody, harmony, tonality, and the formal processes of 20th century music. (3 Lec.)

(MUS) 251-270 Applied Music-Major (3)
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. Laboratory fee. (1 Lec.)

(MUS) 271 Musicianship III (1)
Prerequisite: Music 162. This course relates to topics in Music 245. Aural music skills, including sight-singing, ear training, and keyboard are developed. (3 Lab.)

(MUS) 272 Musicianship IV (1)
Prerequisite: Music 271. This course relates to topics in Music 246. Aural music skills, including sight-singing, ear training, and keyboard are developed. (3 Lab.)

(MUS) 171 Woodwind Ensemble (1)
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. (3 Lab.)

(MUS) 172 Brass Ensemble (1)
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. (3 Lab.)

(MUS) 173 Percussion Ensemble (1)
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. (3 Lab.)

(MUS) 174 Keyboard Ensemble (1)
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. (3 Lab.)

(MUS) 175 String Ensemble (1)
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. (3 Lab.)

(MUS) 176 Symphonic Wind Ensemble (1)
In the symphonic wind ensemble, students study and perform stylistic literature of all periods. This course may be repeated for credit. (3 Lab.)

(MUS) 177 Chamber Ensemble (1)
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. (3 Lab.)

(MUS) 185 Stage Band (1)
Prerequisite: Demonstrated competence approved by 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 course may be repeated for credit. (3 Lab.)

(MUS) 195 Introduction To Synthesizer (2)
The elements of electronically produced music are studied. Emphasis is on the musical aspects of synthesized sound. Topics include theory, basic waveforms, frequency and frequency modulation, amplitude modulation, envelope generators, filters, white noise, pink noise, and patch diagramming. (2 Lec.)
OFFICE CAREERS

(OFC) 143 Contemporary Topics In Office Careers (1)
Prerequisites: Demonstrated competence approved by 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. (1 Lee.)

(OFC) 144 Contemporary Topics In Office Careers (2)
Prerequisites: Will vary based on topics covered and will be annotated in each semester's class schedule. Current developments in the rapidly changing field of office careers are studied. (2 Lee.)

(OFC) 145 Contemporary Topics In Office Careers (3)
Prerequisites: Will vary based on topics covered and will be annotated in each semester's class schedule. Current developments in the rapidly changing field of office careers are studied. (3 Lee.)

(OFC) 150 Automated Filing Procedures (3)
This course introduces the basic principles and procedures of records storage and control. Topics include records storage methods; procedures for the operation and control of manual and automated storage systems; rules for indexing; and principles for the selection of records equipment and supplies. (2 Lee., 2 Lab.)

(OFC) 159 Beginning Shorthand (4)
Prerequisite: Credit or concurrent enrollment in Office Careers 172 or demonstrated competence approved by the instructor. 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, speed building, and grammar. Office Careers 159 is equivalent to Office Careers 187, 188, and 189. Laboratory fee. (3 Lee., 2 Lab.)

(OFC) 160 Office Calculating Machines (3)
This course focuses on the development of skills in using electronic calculators. Emphasis is on developing the touch system for both speed and accuracy. Business math and business applications are included. Office Careers 160 is equivalent to Office Careers 192, 193, and 194. Laboratory fee. (3 Lee.)

(OFC) 162 Office Procedures (3)
Prerequisites: Office Careers 173 or concurrent enrollment or demonstrated competence approved by the instructor. This course bridges the gap between the basic skills courses and current office practices. Topics include records management, electronic filing, reprographics, mail, telephone usage, financial transactions, and interpersonal relations. (3 Lec.)

(OFC) 166 Intermediate Shorthand (4)
Prerequisites: Office Careers 159 and Office Careers 172 or demonstrated competence approved by the instructor. 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, speed building, and grammar. Office Careers 166 is equivalent to Office Careers 187, 188, and 189. Laboratory fee. (3 Lec., 2 Lab.)

(OFC) 167 Legal Terminology And Transcription (3)
Prerequisites: Office Careers 173 and Office Careers 185 or concurrent enrollment or demonstrated competence approved by the instructor. Legal terms are the focus of this course. Included are the spelling and use of legal terms and Latin words and phrases. Intensive practice is provided in building speed and accuracy in the transcription of legal terms. Laboratory fee. (3 Lee.)

(OFC) 172 Beginning Typing (3)
This course is for students with no previous training in typing. Fundamental techniques in typing are developed. The skills of typing manuscripts, business letters, and tabulations are introduced. Office Careers 172 is equivalent to Office Careers 176, 177, and 178. Laboratory fee. (2 Lee., 3 Lab.)

(OFC) 173 Intermediate Typing (3)
Prerequisites: Office Careers 172 or demonstrated competence approved by the instructor. Typing techniques are developed further. Emphasis is on problem-solving. Increasing speed and accuracy in typing business forms, correspondence, and manuscripts are also covered. Laboratory fee. (2 Lee., 3 Lab.)

(OFC) 176 Keyboarding (1)
This course is for students with no previous training in typing. The course introduces the typewriter parts. Alphabetic keys, numeric keys, and symbol keys are covered. Fundamental techniques are refined, and speed is developed. Laboratory fee. (1 Lee., 1 Lab.)

(OFC) 177 Beginning Typing II (1)
Prerequisites: Office Careers 176. Practical techniques for business correspondence are developed. Memorandums, personal letters, and business letters are covered. Exercises to increase skill are stressed. Laboratory fee. (1 Lee.)
(OFC) 178 Beginning Typing III (1)
Prerequisites: Office Careers 176. The typing of manuscripts and tables is emphasized. Production typing is included, and proper report typing is developed. Exercises to increase skills are also included. Laboratory fee. (2 Lab.)

(OFC) 179 Office Information Systems Concepts (2)
This course introduces information/word processing and describes its effect on traditional office operations. An understanding of basic information word processing principles, concepts, terminology and advantages of word processing environment system is introduced. This course does not include the operation of a dedicated word processor or microcomputer. (2 Lec.)

(OFC) 182 Introduction to Word Processing Equipment (1)
Prerequisites: Office Careers 173 and Office Careers 179 or concurrent enrollment. This course introduces the fundamental techniques required in the operation of word processing equipment/software. Basic concepts of electronic storage and retrieval involved in creating, printing, centering, and revising documents are introduced. May be repeated for credit using different emphasis/equipment. Laboratory fee. (2 Lab.)

(OFC) 183 Keyboarding For Speed And Accuracy (1)
This course provides intensive practice drills for developing speed and accuracy on one-, three-, and five-minute writings. May be taken concurrently with Intermediate Typing or Advanced Typing Applications. May be repeated for credit. Laboratory fee. (2 Lab.)

(OFC) 185 Basic Machine Transcription (1)
Prerequisites: Office Careers 173 or concurrent enrollment. This course introduces the basic equipment, techniques, and skills required to transcribe recorded business information into mailable documents. Emphasis is placed on grammar, punctuation, and spelling skills required in word processing operations. Automated equipment and audio transcription machines are used. Laboratory fee. (1 Lec., 1 Lab.)

(OFC) 187 Intermediate Shorthand I (2)
Prerequisites: Prior shorthand experience equivalent to Office Careers 159 or one year of shorthand in high school. This course is for students who have a basic knowledge of Gregg Shorthand theory and the ability to take dictation at approximately 50 words per minute. The course is a review of selected shorthand phrases, brief forms, word families, and word beginnings and endings. Included are the proper use of basic punctuation, typing format, and simple business letters. Laboratory fee. (2 Lec.)

(OFC) 188 Intermediate Shorthand II (1)
This course is designed for students who have a sound knowledge of Gregg Shorthand theory and the ability to take dictation at approximately 70-80 words per minute. The course is a review of selected shorthand phrases, brief forms, word families, and word beginnings and endings. The typing of accurate and attractive letters from shorthand notes is emphasized. Laboratory fee. (1 Lec.)

(OFC) 189 Intermediate Shorthand III (1)
This course is designed for students who have a thorough and complete knowledge of Gregg Shorthand theory and are interested in increasing speed. Special attention is on producing mailable letters within certain time periods. The dictation speed is flexible and depends on student abilities. Laboratory fee. (2 Lab.)

(OFC) 190 Principles Of Word Processing (4)
Prerequisites: Office Careers 173 or concurrent enrollment. This course introduces word processing and describes its effect on traditional office operations. An understanding of basic word processing principles and fundamental techniques required in the operation of word processing and transcription equipment are introduced. Emphasis is placed on grammar, punctuation, and spelling skills required in word processing operations. Office Careers 190 is equivalent to Office Careers 179, 182, and 185. Laboratory fee. (3 Lec., 3 Lab.)

(OFC) 192 Office Machines I (1)
Business mathematical skills needed to operate office calculators are reviewed. Speed and accuracy skills using ten-key touch are developed. Laboratory fee. (1 Lec.)

(OFC) 193 Office Machines II (1)
Prerequisites: Office Careers 192. This course offers training on basic office calculators. Speed development and business applications are stressed. Laboratory fee. (1 Lec.)

(OFC) 194 Office Machines III (1)
Prerequisites: Office Careers 193. Extensive training on basic office calculators is continued. Speed development and business applications are stressed. Laboratory fee. (1 Lec.)

(OFC) 231 Business Communications (3)
Prerequisites: Office Careers 172 or demonstrated competence approved by the instructor and 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, proposals, and reports is made. (3 Lec.)
(OFC) 256 Office Management (3)
This course focuses on the organization, design, and control of office activities. Topics include office practice, office services, and wage payment plans. The selection, training, and supervision of employees are covered. Office planning, organizing, and controlling techniques are presented. Responsibilities of the office manager are also included. (3 Lec.)

(OFC) 266 Advanced Shorthand (4)
Prerequisites: Office Careers 166 and Office Careers 173 or demonstrated competence approved by the instructor. Emphasis is on building dictation speed. Producing mailable, typed transcriptions under timed conditions is also stressed. Vocabulary and extensive production work capabilities are developed. Laboratory fee. (3 Lec., 2 Lab.)

(OFC) 273 Advanced Typing Applications (2)
Decision-making and production of all types of business materials under timed conditions are emphasized. A continuation of skill development and a review of typing techniques are also stressed. Accuracy at advanced speeds is demanded. Laboratory fee. (1 Lec., 2 Lab.)

(OFC) 274 Legal Secretarial Procedures (3)
Prerequisite: Office Careers 167. This course focuses on procedures of the legal secretary. Topics include reminder and filing systems, telephone usage, dictation and correspondence, the preparation of legal documents, and the court system. Client contacts, use of law library, research techniques, timekeeping, billing, bookkeeping, and ethics are also covered. Ways to obtain a position as a legal secretary are described. (3 Lec.)

(OFC) 282 Word Processing Applications (1)
Prerequisites: Office Careers 190 or 182 and completion of or concurrent enrollment in Office Careers 185. This course is designed for students who have a basic knowledge of word processing equipment. Advanced word processing concepts and machine functions are developed on a specific keyboard. Special emphasis is placed on producing mailable documents. May be repeated for credit using different emphasis/equipment. Laboratory fee. (2 Lab.)

(OFC) 283 Specialized Software (1)
Prerequisites: Office Careers 282 or demonstrated competence approved by the instructor. Current information/word processing technology is presented. Specialized applications are performed using automated equipment which the student has previously mastered. Applications will include graphics, math functions, spreadsheets, and the use of other software packages. Dedicated word processing equipment or microcomputers will be used in this course. May be repeated for credit using different emphasis/equipment. Laboratory fee. (2 Lab.)

(OFC) 285 Applied Machine Transcription (1)
Prerequisites: Office Careers 173 or 190 and Office Careers 185 or demonstrated competence approved by the instructor. This course is designed for students with basic skills in machine transcription. Emphasis is placed on increasing accuracy and speed in the timed transcription of recorded information. Producing and dictating business communications are introduced. Laboratory fee. (1 Lec., 1 Lab.)

(OFC) 703 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Office Careers program or Instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. Students must complete three objectives and work a minimum of 15 hours per week for a total of three credit hours. This seminar consists of orientation, setting/writing job objectives, interpersonal skills, career interest/aptitude test and evaluation, time management, career planning, and exit seminar. (1 Lec., 15 Lab.)
(OFC) 704 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Office Careers program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must complete four objectives and work a minimum of 20 hours per week for a total of four credit hours. This seminar consists of orientation, setting/writing job objectives, interpersonal skills, career interest/ aptitude test and evaluation, time management, career planning, and exit seminar. (1 Lec., 20 Lab.)

(OFC) 713 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Office Careers program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. Students must complete three objectives and work a minimum of 15 hours per week for a total of three credit hours. This seminar consists of orientation, setting/writing job objectives, stress management, Certified Professional Secretary, communication skills, job search, professional image, and exit seminar. (1 Lec., 15 Lab.)

(OFC) 714 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Office Careers program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. Students must complete four objectives and work a minimum of 20 hours per week for a total of four credit hours. This seminar consists of orientation, setting/writing job objectives, stress management, Certified Professional Secretary, communication skills, job search, professional image, and exit seminar. (1 Lec., 20 Lab.)

(OFC) 803 Cooperative Work Experience (3)
Prerequisites: Completion of previous Office Careers 703 or 704 and 713 or 714. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must complete new learning objectives each semester. Students must complete three objectives and work a minimum of 15 hours per week for a total of three credit hours. This seminar consists of orientation, setting/writing job objectives, and independent study of business topics. (1 Lec., 15 Lab.)

(OFC) 804 Cooperative Work Experience (4)
Prerequisites: Completion of previous Office Careers 703 or 704 and 713 or 714. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must complete new learning objectives each semester. Students must complete four objectives and work a minimum of 20 hours per week for a total of four credit hours. This seminar consists of orientation, setting/writing job objectives, and independent study of business topics. (1 Lec., 20 Lab.)

PHILOSOPHY

(PHI) 102 Introduction To Philosophy (3)
The fundamental problems in philosophy are surveyed. Methods to deal with the problems are discussed. Ancient and modern views are examined as possible solutions. (3 Lec.)

(PHI) 103 Critical Thinking (3)
This course is designed to improve students' critical thinking ability. Students will both analyze and construct arguments. Elementary deductive forms, common fallacies, and inductive reasoning are considered. (3 Lec.)

(PHI) 105 Logic (3)
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. (3 Lec.)

(PHI) 202 Introduction To Social And Political Philosophy (3)
The relationships of philosophical ideas to the community are presented. Emphasis is on concepts of natural rights, justice, education, freedom, and responsibility. (3 Lec.)

(PHI) 203 Ethics (3)
The classical and modern theories of the moral nature of the human are surveyed. Alternative views of responsibilities to self and society are posed. Ethical issues and their metaphysical and epistemological bases are vivified. Emphasis is on applying ethical principles in life. (3 Lec.)
PHI 207 History Of Ancient Philosophy (3)
The history of philosophy from pre-Socratic times to the Renaissance is examined. Connections are made between the pre-Socratics, Plato, and Aristotle; Stoicism, Epicureanism, and Scholasticism are considered. (3 Lec.)

PHI 208 History Of Modern Philosophy (3)
The history of philosophy from the Renaissance through the 19th century is examined. Emphasis is on continental rationalism, British empiricism, Kantian metaphysics and epistemology, and the Hegelian system as it relates to 20th century philosophies. The historical relationship between these schools of thought is explored. (3 Lec.)

PHOTOGRAPHY

PHO 110 Introduction To Photography And Photo-Journalism (3)
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. (2 Lec., 4 Lab.)

PHO 111 Advanced Photography And Photo-Journalism (3)
Techniques learned in Photography 110 are refined. Emphasis is on photographic communication. Laboratory fee. (2 Lec., 4 Lab.)

PHO 122 Commercial Photography I (3)
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. (2 Lec., 4 Lab.)

PHO 123 Commercial Photography II (3)
This course is a continuation of Photography 122. 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. (2 Lec., 4 Lab.)

PHO 207 Photography For Publications (3)
This course is designed for the student who is interested in journalistic editing, 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 journalistic, photography, and graphic arts and be of sophomore standing. Laboratory fee. (2 Lec., 4 Lab.)

PHYSICAL EDUCATION

PEH 100 Lifetime Sports Activities (1)
Beginning level skills in various lifetime sports are presented as well as rules, etiquette, safety, strategy, offensive and defensive elements, and conditioning activities where appropriate. Physical Education 100 may be repeated for credit when students select different activities in subsequent semesters. Laboratory fee. (3 Lab.)

PEH 101 Health For Today (3)
Emphasis is placed on relating course content to lifestyle to foster a better understanding of the major health issues of today. Current issues include, but are not limited to: emotional health, chemical use and abuse, human sexuality, major diseases, physical fitness, nutrition, aging, death and dying. (This course is offered on campus and may be offered via television.) (3 Lec.)

PEH 104 Beginning Soccer (1)
Course content emphasizes the basic playing skills of both indoor and outdoor soccer at the beginner level, as well as rules, strategies, safety, offensive and defensive patterns of play, and competitive activities. Laboratory fee. (3 Lab.)

PEH 108 Social Recreation (3)
The methods and materials for social activities for different age groups are introduced. Planning, organizing, and conducting the activities are included. (3 Lec.)

PEH 109 Outdoor Recreation (3)
Outdoor recreation and organized camping are studied. Both the development of these activities and present trends are covered. (3 Lec.)

PEH 110 Community Recreation (3)
This course is primarily for students majoring or minoring in health, physical education, or recreation. The principles, organization, and function of recreation in American society are covered. (3 Lec.)

PEH 111 Beginning Wrestling (1)
The fundamentals, techniques, rules, and strategy of wrestling are presented. Emphasis is also on spectator appreciation. A uniform is required. Laboratory fee. (3 Lab.)
(PEH) 112 Beginning Softball (1)
Course content includes the basic playing skills of softball at the beginner level, as well as rules, strategies, safety, offensive and defensive elements, and competitive activities. These common elements will be applied to fast pitch, slow pitch, and coed softball. Laboratory fee. (3 Lab.)

(PEH) 113 Beginning Handball And Racquetball (1)
Basic handball and racquetball skills, rules, and strategies are taught and class tournaments are conducted. 24 class hours are devoted to each activity. Laboratory fee. (3 Lab.)

(PEH) 114 Beginning Badminton (1)
Course content emphasizes the basic playing skills of badminton at the beginner level, as well as rules, strategies, safety, offensive and defensive elements, and competitive activities. Each of the above elements will be applied to the singles, doubles, and mixed-double games. Laboratory fee. (3 Lab.)

(PEH) 115 Physical Fitness (1)
Students are introduced to fitness related activities to gain the knowledge and skills necessary to evaluate personal fitness level and to develop a personal lifelong fitness program. Activities include, but are not limited to: aerobics, circuit training, flexibility and agility exercises, and weight training. Physical Education 115 may be repeated for credit. Laboratory fee. (3 Lab.)

(PEH) 116 Intramural Athletics (1)
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. (3 Lab.)

(PEH) 117 Beginning Archery (1)
The beginning level skills of target shooting, bow hunting, clout shooting, and wand and trap shooting are emphasized, as well as history, rules of competition, preparation and care of all archery equipment, and safety. Laboratory fee. (3 Lab.)

(PEH) 118 Beginning Golf (1)
Course content emphasizes the basic skills involved in club selection, golf course analysis, shot selection and execution of the golf swing. Rules, scoring, handicapping, and etiquette are included. Equipment is furnished. Laboratory fee. (3 Lab.)

(PEH) 119 Beginning Tennis (1)
This course emphasizes the acquisition of beginning level skills in the execution of forehand strokes, backhand strokes, the serve, and the volley. Rules, strategies of the singles and doubles games, etiquette, safety, and competitive activities are included. Laboratory fee. (3 Lab.)

(PEH) 120 Beginning Bowling (1)
Basic bowling skills at the beginner level are emphasized as well as rules, strategies, safety, scoring, and competitive activities. All classes are conducted at an off-campus bowling lane. Laboratory fee. Lane fee. (3 Lab.)

(PEH) 121 Folk Dance (1)
Participation is provided in a variety of folk dances from other lands. The study of cultural backgrounds and costumes is included. Laboratory fee. (3 Lab.)

(PEH) 122 Beginning Gymnastics (1)
Beginning level skills in both men's and women's all-around gymnastic events are emphasized. Men's events include horizontal bar, pommel horse, rings, vaulting, floor exercise, and parallel bars. Women's events include floor exercise, vaulting, balance beam, and uneven parallel bars. Basic tumbling skills are also included. All appropriate events will be incorporated into a beginner's level routine. Laboratory fee. (3 Lab.)

(PEH) 123 Beginning Swimming (1)
This course is designed to teach a non-swimmer or a shallow water swimmer only to become a safe and efficient deep water swimmer. After the development of sufficient skill to perform a modified crawl stroke, the elementary back stroke, survival floating and jumping into deep water, leveling off and changing directions, swimmers will be able to swim in deep water. Laboratory fee. (3 Lab.)

(PEH) 124 Social Dance (1)
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 two-step, cotton-eyed Joe, square dance, and other dances. Laboratory fee. (3 Lab.)

(PEH) 125 Conditioning Exercise (1)
This course focuses on understanding exercise and its effect on the body. Physical fitness is improved through a variety of conditioning activities. A uniform is required. Laboratory fee. (3 Lab.)

(PEH) 126 Aerobics (1)
This course emphasizes the development of cardiovascular endurance by utilizing choreographed routines which may combine basic dance patterns with walking, jogging, and jumping, etc. Depending on the physical fitness level of the student, each routine can be performed at different intensities. This course may be repeated for credit. Laboratory fee. (3 Lab.)

(PEH) 127 Beginning Basketball And Volleyball (1)
Basic basketball and volleyball rules, skills, and strategies are taught, and class tournaments are conducted. Sections using men's rules and women's rules may be offered separately. 24 class hours will be devoted to each sport. Laboratory fee. (3 Lab.)
(PEH) 128 Social And Folk Dance (1)
Social and folk dance are introduced. Laboratory fee. (3 Lab.)

(PEH) 129 Modern Dance (1)
This beginning course is designed to emphasize basic dance technique, including body alignment and placement, floor work, locomotor patterns, and creative movements. A uniform is required. Laboratory fee. (3 Lab.)

(PEH) 130 Beginning Tumbling And Trampoline (1)
Basic skills and techniques involved in tumbling and trampoline are taught. 24 class hours will be devoted to each activity. Laboratory fee. (3 Lab.)

(PEH) 131 Weight Training And Conditioning (1)
Instruction and training in weight training and conditioning techniques are offered. A uniform is required. This course may be repeated for credit. Laboratory fee. (3 Lab.)

(PEH) 132 Self-Defense (1)
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. (3 Lab.)

(PEH) 133 Outdoor Education (1)
Knowledge and skills in outdoor education and camping are presented. Planned and incidental experiences take place, including a week-end camp-out. Laboratory fee. (3 Lab.)

(PEH) 134 Walking For Fitness (1)
This course is designed for the student who desires cardiovascular fitness by means of low impact method. Maximum physical fitness is achieved by vigorous walking. The heart rate is elevated to the appropriate target zone for peak conditioning. An extensive warm-up and cool down increases joint and muscle flexibility. (3 Lab.)

(PEH) 135 Introduction To Physical Education (3)
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. (3 Lec.)

(PEH) 136 Sports Officiating I (3)
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. (2 Lec., 2 Lab.)

(PEH) 137 Sports Officiating II (3)
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. (2 Lec., 2 Lab.)

(PEH) 140 Lifetime Sports Activities II (1)
This course is a continuation of Physical Education 100. Students participate in selected activities. Instruction is at the intermediate and intermediate/advanced levels. This course may be repeated for credit. Laboratory fee. (3 Lab.)

(PEH) 148 Intermediate Archery (1)
Prerequisite: Successful completion of Physical Education 117 or approval of instructor. Archery activities and skills presented in Physical Education 117 are reviewed with emphasis placed on competitive target shooting and field archery. Laboratory fee. (3 Lab.)

(PEH) 149 Intermediate Tennis (1)
Prerequisite: Successful completion of Physical Education 118 or approval of instructor. Skills and techniques presented in Physical Education 118 are refined beyond the beginner level. Analysis and practice of the golf swing, swing theory and methods, strategy, and actual course playing are emphasized. Laboratory fee. Green fees. (3 Lab.)

(PEH) 222 Intermediate Gymnastics (1)
Prerequisite: Successful completion of Physical Education 122 or previous gymnastic training. Tumbling and the all-around events for men and women as presented in Physical Education 122 will be emphasized at the intermediate performance level. Course emphasis is placed on the development, preparation, and presentation of gymnastic routines. Laboratory fee. (3 Lab.)

(PEH) 223 Intermediate Swimming (1)
Prerequisite: Successful completion of Physical Education 123, Red Cross Beginning Swimmer Certificate or approval of instructor. The correct performance of the crawl, elementary back stroke, side stroke and breast stroke will be emphasized. Some speed and endurance swimming will be required. Laboratory fee. (3 Lab.)
(PEH) 225 Skin And Scuba Diving (2)
Prerequisite: Physical Education 223 or demonstrated competence approved by the instructor. This course includes the use of equipment, safety, physiology, and open water diving. All equipment is supplied except mask, fins, and snorkel. The student may rent needed equipment at the time of registration. Students completing course requirements receive certification as basic scuba divers from the Professional Association of Diving Instructors (PADI) or the National Association of Underwater Instructors (NAUI) or the Young Men’s Christian Association (YMCA). Laboratory fee. (1 Lec., 2 Lab.)

(PEH) 226 Advanced Life Saving (1)
Prerequisite: Physical Education 223 or deep water swimming ability. Successful completion of this course qualifies students for the Red Cross Advanced Life Saving Certificate. Laboratory fee. (3 Lab.)

(PEH) 228 Advanced Open Water Scuba (2)
Prerequisite: Physical Education 225 or appropriate certifying agency entry level certificate and 10 log book hours. Instruction will include the introductory knowledge and skill development in the open water environment for the student to participate in under water investigation, deep diving, search and light salvage, and limited visibility/night diving. Safety, special equipment, dive planning and dive buddy procedures will be covered. Upon successful completion of the course, the student will receive advanced open water certification through PADI. (1 Lec., 2 Lab.)

(PEH) 231 Intermediate Weight Training (1)
Prerequisite: Physical Education 131. Skills and instruction in weight training techniques are developed beyond the beginner stage. This course may be repeated for credit. Laboratory fee. (3 Lab.)

(PEH) 232 Intermediate Self Defense (1)
Prerequisite: Physical Education 132 or demonstrated competence approved by the instructor. Students will be introduced to intermediate forms of defense and combinations of self defense methods. Emphasis is on practical application of self defense movements. Laboratory fee. (3 Lab.)

(PEH) 233 Jogging For Fitness (1)
Development and improvement of physical fitness through jogging is emphasized. Fitness concepts and jogging skills will be introduced. Laboratory fee. (3 Lab.)

(PEH) 234 Water Safety Instructor (2)
Prerequisite: Current Advanced Life Saving Card. The principles and techniques for instructors in water safety and life saving classes are covered. Completion of the course qualifies the student to test for certification by the Red Cross as a water safety instructor. A uniform is required. Laboratory fee. (1 Lec., 2 Lab.)

(PEH) 236 The Coaching Of Football And Basketball (3)
The skills and techniques of coaching football and basketball are presented. Included are the history, theories, philosophies, rules, terminology, and finer points of the sports. Emphasis is on coaching techniques. (2 Lec., 2 Lab.)

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

(PEH) 257 Advanced First Aid And Emergency Care (3)
The Advanced First Aid and Emergency Care course of the American Red Cross is taught, presenting both theory and practice. Various aspects of safety education also are included. (3 Lec.)

PHYSICAL FITNESS TECHNOLOGY

(PFT) 101 Exercise Science (3)
This course is a survey of scientific principles, methodologies, and research as applied to exercise and physical fitness. The emphasis is on physiological responses and adaptations to exercise. Basic elements of kinesiology, biomechanics, and motor learning are addressed. An introduction to the physical fitness industry is included. (3 Lec.)

(PFT) 110 Aerobic Training Theory And Application (4)
The theoretical bases for aerobic training and the application of theoretical principles to the development of aerobic training programs are covered. Instructional techniques are studied. Tests of aerobic capacity and techniques for the application of test results to individual and group exercise prescriptions are included. Safety and injury prevention are emphasized. Equipment use and maintenance are covered. (3 Lec., 3 Lab.)

(PFT) 111 Strength Training Theory And Application (4)
The theoretical bases for strength training and the application of theoretical principles to the development of strength training programs are covered. Instructional techniques are studied. Tests of muscular strength and techniques for the application of test results to individual and group exercise prescriptions are included. Safety and injury prevention are emphasized. Equipment use and maintenance are covered. (3 Lec., 3 Lab.)
(PFT) 120 Fitness And Exercise Testing I (4)
Prerequisite: CPR certification. Techniques for conducting physical fitness assessments are studied. Tests of cardiorespiratory fitness, muscular strength and endurance, joint flexibility, body composition, and pulmonary capacity are included. The course includes and introduction to electrocardiography. Safety guidelines and precautions are emphasized. Equipment use and maintenance are covered. (3 Lec., 3 Lab.)

(PFT) 130 Basic Nutrition (3)
This survey course presents an overview of essential food nutrients. Methods for evaluating nutritional claims and guidelines for establishing nutritionally sound diets are covered. The concepts of caloric intake and energy expenditure in relationship to exercise are explored. Personal computer programs for nutritional analysis and nutritional counseling are introduced. (3 Lec.)

(PFT) 200 Instruction In Lifestyle Change (3)
Health risk appraisals and their application to lifestyle change are covered. The components of weight control, smoking cessation, and stress management programs and the principles of exercise adherence are studied. Techniques in behavior modification, motivation, teaching, and counseling are addressed, and behavior change as lifestyle change is emphasized. The use of personal computer and audiovisual programs for health risk appraisal and lifestyle change instruction is included. (2 Lec., 3 Lab.)

(PFT) 210 Exercise Leadership And Programming (4)
Methods for leading an exercise session, including recruitment, design, instruction, and evaluation are covered. The scheduling and implementation of physical fitness classes, recreational activities, and competitive events are studied. Non-exercise programming and programming for special populations are also included. The design of safe, enjoyable activities is emphasized. (3 Lec., 3 Lab.)

(PFT) 220 Fitness And Exercise Testing II (4)
Prerequisite: PFT 120 or demonstrated competence approved by the instructor. This is an advanced course in graded exercise testing. Various exercise testing protocols for determining cardiorespiratory fitness are covered. Basic electrocardiography is studied, including abnormalities that would prompt limitation or termination of an exercise tolerance test. Methods for prescribing exercise programs based upon exercise test results are also studied. (3 Lec., 3 Lab.)

(PFT) 230 Prevention And Care Of Exercise Injury (3)
Prerequisite: PEH 257 or demonstrated competence approved by the instructor. Methods for the injury-prevention design of the exercise setting and exercise program are covered in this course. The use of physical conditioning techniques to prevent injury, and current exercise fads and myths that promote injury are explored. Methods for injury recognition and evaluation, the on-site care of exercise injuries, and emergency procedures are presented. (2 Lec., 3 Lab.)

(PFT) 240 Practical Aspects Of The Fitness Industry (3)
This course is a survey of the practical aspects of the physical fitness industry. Topics covered include equipment cost analysis, program marketing, legal issues, policy formation, budgetary planning, and time management. A variety of computer applications and current industry trends are also covered. (3 Lec.)

(PFT) 250 Psychosocial Aspects Of Sport And Exercise (3)
The social and cultural influences on exercise initiation and exercise adherence are explored. Emphasis is given to the interrelatedness of mental skills and physical skills and the value of sport and exercise for overall well-being. Techniques for maximizing performance are included. (3 Lec.)

(PFT) 281 Selected Topics In Physical Fitness Technology (1)
This is an elective course designed to deal with specific topics in physical fitness technology. As the topics change, this course may be repeated twice for credit. (1 Lec.)

(PFT) 283 Selected Topics In Physical Fitness Technology (3)
This is an elective course designed to deal with specific topics in physical fitness technology. As the topics change, this course may be repeated once for credit. (3 Lec.)

(PFT) 290 Practical Application In Physical Fitness Technology I (1)
Prerequisites: PFT 110 and PFT 111. The student serves an an instructional assistant in a physical education activity class. Course objectives are individualized to the student. The student assists in a class from one of the three activity course clusters: Aerobic Activities, Strength Activities, Recreational/Sport Activities. (3 Lab.)

(PFT) 291 Practical Application In Physical Fitness Technology II (1)
Prerequisite: PFT 290. The student serves as an instructional assistant in a physical education activity class. Course objectives are individualized to the student. The class in which the student assists must be from an activity course cluster (Aerobic Activities, Strength Activities, Recreational/Sport Activities) different from the student's PFT 290 assignment. (3 Lab.)
(PFT) 703 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in Physical Fitness Technology or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of orientation to cooperative work experience, writing learning objectives, customer service, team building, problem solving, goal setting, and conflict resolution. (1 Lec., 15 Lab.)

(PFT) 704 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in Physical Fitness Technology or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of orientation to cooperative work experience, writing learning objectives, customer service, team building, problem solving, goal setting, and conflict resolution. (1 Lec., 20 Lab.)

(PFT) 713 Cooperative Work Experience (3)
Prerequisite: Completion of Physical Fitness Technology 703 or 704 or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of orientation to cooperative work experience, writing learning objectives, customer service, team building, problem solving, goal setting, and conflict resolution. (1 Lec., 15 Lab.)

(PFT) 714 Cooperative Work Experience (4)
Prerequisite: Completion of Physical Fitness Technology 703 or 704 or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of orientation to cooperative work experience, writing learning objectives, customer service, team building, problem solving, goal setting, and conflict resolution. (1 Lec., 20 Lab.)

(PFT) 803 Cooperative Work Experience (3)
Prerequisite: Completion of Physical Fitness Technology 713 or 714 or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. The seminar consists of orientation to cooperative work experience, writing learning objectives, customer service, job interviews, career goals, work ethics, and professional resources. (1 Lec., 15 Lab.)

(PFT) 804 Cooperative Work Experience (4)
Prerequisite: Completion of Physical Fitness Technology 713 or 714 or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. The seminar consists of orientation to cooperative work experience, writing learning objectives, customer service, job interviews, career goals, work ethics, and professional resources. (1 Lec., 20 Lab.)

PHYSICAL SCIENCE

(PSC) 118 Physical Science (4)
This course is primarily for non-science majors. It is a study of the basic principles and concepts of physics, chemistry, and nuclear science. The three basic sciences are related to the physical world at an introductory level. Laboratory fee. (3 Lec., 3 Lab.)

(PSC) 119 Physical Science (4)
This course is for non-science majors. It focuses on the interaction of the earth sciences and the physical world. Geology, astronomy, meteorology, and space science are emphasized. Selected principles and concepts are explored. Laboratory fee. (3 Lec., 3 Lab.)

PHYSICS

(PHY) 111 Introductory General Physics (4)
Prerequisite: Two years of high school algebra, including trigonometry, or the equivalent. This course is for pre-dental, biology, pre-medical, pre-pharmacy, and pre-architecture majors and other students who need a two-semester technical course in physics. Mechanics and heat are studied. Laboratory fee. (3 Lec., 3 Lab.)

(PHY) 112 Introductory General Physics (4)
Prerequisite: Physics 111. This course is a continuation of Physics 111. Electricity, magnetism, light, and sound are studied. Laboratory fee. (3 Lec., 3 Lab.)
(PHY) 117 Concepts in Physics (4)
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 worldwide energy production are examined. Laboratory fee. (3 Lec., 3 Lab.)

(PHY) 118 Concepts in Physics (4)
This is for non-science majors. It introduces principles of physics and does not require a mathematical background. Emphasis is on modern developments in physics. Topics include acoustics, electricity and magnetism, light and the electromagnetic spectrum, atomic physics, and relativity. Laboratory fee. (3 Lec., 3 Lab.)

(PHY) 131 Applied Physics (4)
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. (3 Lec., 3 Lab.)

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

(PHY) 201 General Physics (4)
Prerequisite: Credit or concurrent enrollment in Mathematics 124. This course is designed primarily for physics, chemistry, mathematics, and engineering majors. The principles and applications of mechanics, wave motion, and sound are studied. Emphasis is on fundamental concepts, problem-solving, notation, and units. The laboratory includes a one-hour problem session. Laboratory fee. (3 Lec., 3 Lab.)

(PHY) 202 General Physics (4)
Prerequisites: 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. (3 Lec., 3 Lab.)

PSYCHOLOGY

(PSY) 101 Introduction To Psychology (3)
Introduction to Psychology surveys major topics in the study of behavior. Factors which determine and affect behavior are examined. Psychological principles are applied to the human experience. (This course is offered on campus and may be offered via television.) (3 Lec.)

(PSY) 103 Human Sexuality (3)
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. (3 Lec.)

(PSY) 131 Applied Psychology And Human Relations (3)
Psychological principles are applied to human relations problems in business and industry. Topics include group dynamics and adjustment factors for employment and advancement. (3 Lec.)

(PSY) 201 Developmental Psychology (3)
Prerequisite: Psychology 101. 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). (3 Lec.)

(PSY) 202 Applied Psychology (3)
Prerequisite: Psychology 101. 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. (3 Lec.)

(PSY) 205 Psychology Of Personality (3)
Prerequisite: Psychology 101. This course is an introduction to the study of personality. Topics of personality and adjustment will be studied in the context of various personality theories. Emphasis will be on the application of those topics. (3 Lec.)

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

(RD) 101 College Reading And Study Skills (3)
Comprehension techniques for reading college texts are emphasized. Also included are vocabulary development, critical reading, and rate flexibility. Study skills addressed include listening, notetaking, underlining, concentrating, and memory. (3 Lec.)

(RD) 102 Speed Reading And Learning (3)
Reading and learning skills are addressed. Speed reading techniques and comprehension are emphasized. Learning and memory skills are also covered. (3 Lec.)

REAL ESTATE

(RE) 130 Real Estate Principles (3)
This course provides an overview of licensing for the real estate broker and salesman, ethics of practice, titles to and conveyancing of real estate, legal descriptions, law of agency, deeds, encumbrances and liens. Distinctions between personal and real property, contracts, appraisal, finance and regulations, closing procedures, and real estate mathematics are also included. Three classroom hours will be devoted to federal, state and local laws governing housing discrimination, housing credit discrimination, and community reinvestment. (3 Lec.)

(RE) 131 Real Estate Finance (3)
Prerequisite: Real Estate 130 or concurrent enrollment in Real Estate 130 or equivalent. This course covers monetary systems, primary and secondary money markets, sources of mortgage loans, federal government programs and loan applications, processes, and procedures. Closing costs, alternative financial instruments, equal credit opportunity act, community reinvestment act, and state housing agency are also included. (3 Lec.)

(RE) 132 Real Estate Marketing (3)
Prerequisite: Real Estate 130 or concurrent enrollment in Real Estate 130 or the equivalent. The emphasis of this course is on real estate professionalism and ethics and the satisfaction of all parties. Topics covered include characteristics of successful salesmen, time management, psychology of marketing, listing procedures, advertising, negotiating and closing, financing, and the Deceptive Trade Practices-Consumer Protection Act, as amended, Section 17.01 et seq, Business and Commerce Code. (3 Lec.)

(RE) 135 Real Estate Appraisal (3)
Prerequisites: Real Estate 130 and 131 or the equivalent. This course focuses on principles and methods of appraising. Topics include central purposes and functions of an appraisal, social and economic determinants of value, appraisal case studies, cost, market data and income approaches to value estimates, final correlations, and reporting. (3 Lec.)

(RE) 136 Real Estate Law (3)
Prerequisite: Real Estate 130 or concurrent enrollment in Real Estate 130 or the equivalent. This course examines the legal concepts of real estate land description, real property rights and estates in land, contracts, conveyances, encumbrances, foreclosures, recording procedures, and evidence of titles. (3 Lec.)

(RE) 138 Real Estate Law: Contracts (3)
Prerequisite: Real Estate 130 or concurrent enrollment in Real Estate 130 or equivalent. Concepts of general contract law are reviewed as required by the Real Estate License Act. Emphasis is on detailed instructions and hands-on exercises in preparation of all promulgated contract forms. The Real Estate License Act and the working process of the Broker-Lawyer Committee are included. (3 Lec.)

(RE) 230 Real Estate Office Management/Brokerage (3)
Prerequisite: Real Estate 130 or demonstrated competence approved by the instructor. This course focuses on knowledge and skills required to manage a real estate office. Topics include law of agency, planning and organization, operational policies and procedures, recruiting, selection and training of personnel, records and control, and real estate firm analysis and expansion criteria. (3 Lec.)

(RE) 233 Commercial And Investment Real Estate (3)
Prerequisite: Real Estate 130 or demonstrated competence approved by the instructor. Topics include real estate investment characteristics, techniques of investment analysis, time-value of money, discounted and non-discounted investment criteria, leverage, tax shelters, depreciation, and applications to property tax. (3 Lec.)

(RE) 235 Property Management (3)
Prerequisite: Real Estate 130 or demonstrated competence approved by the instructor. This course focuses on the various aspects of managing property. The role of the property manager, landlord policies, operational guidelines, leases, lease negotiations, tenant relations, maintenance, reports, habitability laws, and the Fair Housing Act are included. (3 Lec.)

(RE) 240 Special Problems In Real Estate (1)
This is a special problems study course for organized class instruction in real estate. Examples of topics might include: market analysis and feasibility studies, land economics, International real estate, urban planning and development, tax shelter regulations, international money market, environmental impact and energy conservation. This course may be repeated for credit up to a maximum of three hours of credit. (1 Lec.)
(RE) 241 Special Problems In Real Estate (3)
This is a special problems study course for organized class instruction in real estate. Examples of topics might include: market analysis and feasibility studies, land economics, International real estate, urban planning and development, tax shelter regulations, International money market, environmental impact and energy conservation. This course may be repeated for credit up to a maximum of six hours of credit. (3 Lec.)

(RE) 704 Cooperative Work Experience (4)
Prerequisites: Completion of two core Real Estate courses, concurrent enrollment in a core or related course or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of the development of a personalized on-the-job training plan and discussions with field experts on the application of real estate fundamentals which may include brokerage, marketing, finance, law, property management and appraisal in the residential and commercial real estate sectors. (1 Lec., 20 Lab.)

(RE) 714 Cooperative Work Experience (4)
Prerequisites: Completion of two core real estate courses and Real Estate 704, enrollment in a core or related course or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of the development of a personalized on-the-job training plan and continuation of discussions with field experts on the application of real estate fundamentals which may include brokerage, marketing, finance, law, property management and appraisal in the residential and commercial real estate sectors. Seminar topics will build upon and not duplicate learning experience of Real Estate 704. (1 Lec., 20 Lab.)

RELIGION

(REL) 101 Religion In American Culture (3)
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. (3 Lec.)

(REL) 102 Contemporary Religious Problems (3)
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 offered with emphasis on a specific topic, such as death and dying. (3 Lec.)

(REL) 105 The History And Literature Of The Bible (3)
This course presents a history and literature of both the Hebrew people during the Old Testament period and the Christian movement during the New Testament period with emphasis upon the origins and development of the religious ideas and institutions of the biblical people. (3 Lec.)

(REL) 201 Major World Religions (3)
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. (3 Lec.)

SOCIOLOGY

(SOC) 101 Introduction To Sociology (3)
This course is a study of the nature of society and the sources of group life and social conflict. Topics include institutions, social change, processes, and problems. (This course is offered on campus and may be offered via television.) (3 Lec.)

(SOC) 102 Social Problems (3)
This course is a sociological 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. (3 Lec.)

(SOC) 103 Human Sexuality (3)
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. (3 Lec.)
(SOC) 203 Marriage And Family (3)
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. (3 Lec.)

(SOC) 204 American Minorities (3)
Prerequisite: Sociology 101 or six 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. (3 Lec.)

(SOC) 206 Introduction To Social Work (3)
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. (3 Lec.)

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

(SOC) 209 Selected Topics (3)
Prerequisite: Sociology 101 or demonstrated competence approved by the instructor. An in-depth study of specific contemporary topics in sociology such as popular culture (including sports, religion and mass media), the military as a social institution, education, medicine, ethnographic film, apartheid, deviance or formal organizations. (3 Lec.)

(SOC) 210 Field Studies In American Minorities (3)
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. (3 Lec.)

(SOC) 231 Urban Social Problems (3)
The sociology of social institutions is studied. Topics include urbanization, theories of formation, and the impact of urbanization on the individual. (3 Lec.)

SPANISH

(SPA) 101 Beginning Spanish (4)
The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee. (3 Lec., 2 Lab.)

(SPA) 102 Beginning Spanish (4)
Prerequisite: Spanish 101 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Spanish 101. Emphasis is on idiomatic language and complicated syntax. Laboratory fee. (3 Lec., 2 Lab.)

(SPA) 201 Intermediate Spanish (3)
Prerequisite: Spanish 102 or the equivalent or demonstrated competence approved by the instructor. Reading, composition, and intense oral practice are covered. Grammar is reviewed. (3 Lec.)

(SPA) 202 Intermediate Spanish (3)
Prerequisite: Spanish 201 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Spanish 201. Contemporary literature and composition are studied. (3 Lec.)

(SPA) 203 Introduction To Spanish Literature (3)
Prerequisite: Spanish 202 or the equivalent or demonstrated competence approved by the instructor. This course is an introduction to Spanish literature. It includes readings in Spanish literature, history, culture, arts, and civilization. (3 Lec.)

(SPA) 204 Introduction To Spanish Literature (3)
Prerequisite: Spanish 202 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Spanish 203. It includes readings in Spanish literature, history, culture, arts, and civilization. (3 Lec.)

SPEECH COMMUNICATION

(SC) 100 Speech Laboratory (1)
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. (3 Lab.)

(SC) 101 Introduction To Speech Communication (3)
Theory and practice of speech communication behavior in one-to-one, small group, and public communication situations are introduced. Students learn more about themselves, improve skills in communicating with others, and make formal oral presentations. This course requires college-level skills in reading and writing. (3 Lec.)

(SC) 105 Fundamentals Of Public Speaking (3)
Public speaking is introduced. Topics include the principles of reasoning, audience analysis, collection of materials, and outlining. Emphasis is on giving well prepared speeches. (3 Lec.)
(SC) 109 Voice And Articulation (3)
Students may register for either Speech Communication
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. (3 Lee.)

(SC) 110 Forensic Workshop (1)
This course focuses on preparing speeches, readings, and
debate propositions. Presentations are made in competi-
tion and before select audiences. This course may be
repeated for credit. (2 Lab.)

(SC) 201 Forensic Workshop (1)
This course focuses on preparing speeches, readings, and
debate propositions. Presentations are made in competi-
tion and before select audiences. This course may be
repeated for credit. (2 Lab.)

(SC) 205 Discussion And Debate (3)
Public discussion and argumentation are studied. Both
theories and techniques are covered. Emphasis is on
evaluation, analysis, and logical thinking. (3 Lee.)

(SC) 206 Oral Interpretation (3)
Techniques of analyzing various types of literature are
examined. Practice is provided in preparing and present-
ing selections orally. Emphasis is on individual
improvement. (3 Lee.)

(SC) 208 Group Interpretation (3)
Prerequisites: Speech Communication 105 and 206.
Various types of literature are studied for group present-
tation. Emphasis is on selecting, cutting and arranging prose
and poetry, and applying reader’s theatre techniques to the
group performance of the literature. Although not an acting
class, practical experience in sharing selections from fic-
tion and non-fiction with audiences will be offered. (3 Lee.)

THEATRE

(THE) 101 Introduction To The Theatre (3)
The various aspects of theatre are surveyed. Topics in-
clude plays, playwrights, directing, acting, theatres, artists,
and technicians. (3 Lee.)

(THE) 102 Contemporary Theatre (3)
This course is a study of the modern theatre. The historical
background and traditions of each style are included. Em-
phasis is on understanding the social, culture, and
aesthetic significance of each style. A number of modern
plays are read and selected video tapes are viewed. (3 Lee.)
(THE) 103 Stagecraft I (3)
The technical aspects of play production are studied. Topics include shop procedures, the planning and fabrication of scenic elements, and backstage operations. (2 Lec., 3 Lab.)

THE 104 Stagecraft II (3)
Prerequisite: Theatre 103 or demonstrated competence approved by the instructor. Emphasis is placed on the design process and individual projects. (2 Lec., 3 Lab.)

THE 105 Make-Up For The Stage (3)
The craft of make-up is explored. Both theory and practice are included. Laboratory fee. (3 Lee.)

THE 106 Acting I (3)
The theory of acting and various exercises are presented. Body control, voice, interpretation, characterization, and stage movement are included. Both individual and group activities are used. Specific roles are analyzed and studied. (2 Lec., 3 Lab.)

THE 107 Acting II (3)
Prerequisite: Theatre 106 or demonstrated competence approved by the instructor. This course is a continuation of Theatre 106. Emphasis is on characterization and ensemble acting. (2 Lec., 3 Lab.)

THE 109 Voice And Articulation (3)
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. (3 Lec.)

THE 110 History Of Theatre I (3)
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. (3 Lee.)

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

THE 112 Beginning Dance Technique In Theatre (3)
Basic movements of the dance are explored. Emphasis is on swing movements, circular motion, fall and recovery, contraction and release, and contrast of literal and abstract movements. Body balance, manipulation of trunk and limbs, and the rhythmic flow of physical energy are developed. (2 Lec., 3 Lab.)

THE 113 Intermediate Dance (3)
Prerequisite: Theatre 112 or demonstrated competence approved by the instructor. Various aspects of dance are surveyed. Topics include the role of dance in total theatre, the evolution of dance styles, and the jazz style. Emphasis is on the flow of movement, body placement, dynamic intensity, level, focus, and direction. (2 Lec., 3 Lab.)

THE 114 Rehearsal And Performance I (1)
Participation in the class may include any phase of rehearsal and performance of the current theatrical presentation. This course may be repeated for credit. (3 Lab.)

THE 199 Demonstration Lab (1)
Scenes studied in various theatre classes are demonstrated to show contrast and different styles. This course may be repeated for credit. (1 Lab.)

THE 201 Television Production I (3)
Station organization, studio operation, and the use of studio equipment are introduced. Topics include continuity, camera, sound, lights, and videotape recording. (2 Lec., 3 Lab.)

THE 202 Television Production II (3)
Prerequisite: Theatre 201. This course is a continuation of Theatre 201. Emphasis is on the concept and technique of production in practical situations. (2 Lec., 3 Lab.)

THE 205 Scene Study I (3)
Prerequisites: Theatre 106 and 107. Emphasis is on the study, rehearsal and performance of selected scenes of various periods and styles. (2 Lec., 3 Lab.)

THE 207 Scene Study II (3)
Prerequisite: Theatre 205. This course is a continuation of Theatre 205. Emphasis is on individual needs of the performer and the various styles of production. (2 Lec., 3 Lab.)

THE 208 Introduction To Technical Drawing (3)
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. (2 Lec., 3 Lab.)

THE 209 Lighting Design (3)
The design and techniques of lighting are covered. Topics include instrumentation, electricity, control and practical experience. (2 Lec., 3 Lab.)

THE 210 Rehearsal And Performance II (2)
Participation in the class may include any phase of rehearsal and performance of the current theatrical presentation. This course may be repeated for credit. (6 Lab.)

THE 211 Broadcasting Communications I (3)
Basic techniques of television and video performance are introduced. (3 Lec.)

THE 212 Broadcasting Communications II (3)
Prerequisite: Theatre 211 or demonstrated competence approved by the instructor. This course is a continuation of Theatre 211. Emphasis is on radio and television as mass media and practical applications in both radio and television. (3 Lec.)
A course in theatre with emphasis on performance techniques in musical and repertory theatre with practical performance experience. This course may be repeated for credit. (2 Lee., 3 Lab.)

**VIDEO TECHNOLOGY**

**(VFT) 101 Introduction To Video Technology (3)**
This course covers the practical selection and application of production supplies and equipment to shooting situations. It further covers the study of the properties of video tape and a variety of video apparatus used in studio and field production. Equipment theory covers the technical aspects of equipment internal operation and application. Laboratory fee. (2 Lec., 2 Lab.)

**(VFT) 103 Television Lighting (3)**
This course introduces students to the theory and application of lighting for television production. Topics include basic lighting equipment for studio and location productions and the application of lighting to a variety of production environments. Choices of color, angle, intensity, distribution, and the proper use of lighting control devices are emphasized. Laboratory fee. (2 Lec., 3 Lab.)

**(VFT) 106 Video Production I (4)**
This course introduces students to video production and provides an opportunity for students to get initial experience as directors, producers, and equipment crew while handling talent, blocking scenes, dealing with composition, lighting, packing, staging, sound, scripting, and sequencing of shots. This course reviews the history of television in looking at site selection, location shots, set discipline, breaks, shooting schedules, and property management. Laboratory fee. (3 Lec., 4 Lab.)

**(VFT) 110 Video Production II (4)**
Prerequisite: Video Technology 106 and 108. This course provides training in the operation of the equipment used in television production facilities and remote shooting locations. The course includes camera operations, application of light and sound, technical directing, video recording techniques, silent and soundover applications, switching, special effects, set blocking, and development of the shoot and use of above and below the line personnel. Laboratory fee. (3 Lec., 4 Lab.)

**(VFT) 112 Video Editing And Post Production I (4)**
Prerequisite: Video Technology 106. This course provides the theory and practice of video editing through laboratory exercises in the creative and mechanical aspects of editing and visual sweetening. Laboratory fee. (3 Lec., 4 Lab.)

**(VFT) 115 Audio Production (3)**
This course introduces students to the fundamentals of audio production. The course focuses on the properties of sound, conversion into electronic signals, mixing, and recording. The application of audio production to television is emphasized. Laboratory fee. (2 Lec., 3 Lab.)

**(VFT) 201 Video Production IV (4)**
Prerequisite: Video Technology 202. Students produce a variety of final projects demonstrating mastery of field and studio competence. The process of developing a video portfolio for use of graduate interviews, polishing production techniques, and developing an individual style are all important parts of the final production course. Laboratory fee. (2 Lec., 6 Lab.)

**(VFT) 203 Video Production III (4)**
Prerequisite: Video Technology 106 and 110. The advanced application and design of video productions in location and studio shoots are studied. The students are provided opportunities to build on Video Production I and II knowledge in a variety of productions with real deadlines and quality control restrictions. Students will be introduced to a variety of more sophisticated production equipment than used in Video Technology 108 or 110. (2 Lec., 6 Lab.)

**(VFT) 205 Broadcast Engineering I (3)**
Prerequisite: Video Technology 101. This course emphasizes the basics of engineering of video productions. It includes the basic alignment of cameras, vectorscopes, waveform monitors, signal and sync generators, time base correctors, the general operation of each and servicing of many other pieces of equipment. It includes audio and video cable and connector identification, construction, and testing. It further covers PAL, SMPTE, SECAM, NTSC, and EIAJ standards. The basics of electricity and electronics are also emphasized in this class. Laboratory fee. (2 Lec., 3 Lab.)

**(VFT) 210 Video Production V (4)**
Prerequisite: Video Technology 202. Students produce a variety of final projects demonstrating mastery of field and studio competence. The process of developing a video portfolio for use of graduate interviews, polishing production techniques, and developing an individual style are all important parts of the final production course. Laboratory fee. (2 Lec., 6 Lab.)

**(VFT) 213 Video Editing And Post Production II (4)**
Prerequisite: Video Technology 203 and 112. This course provides the students with the opportunity to apply advanced editing and post production skills to advanced equipment while producing final portfolio programs. The course incorporates the use of SMPTE time code editing with time base correction and multisource edits. It also provides opportunities for students to visit local post production facilities. Laboratory fee. (2 Lec., 6 Lab.)

**(VFT) 214 Business Aspects Of Video Management (3)**
This general business course for video stresses personnel management, production budgeting, staffing, decision-making, portfolio/resume development, interviewing techniques, site selection, contract law, and copyright management. Use of legal and financial advisors, with a variety of business topics related to production companies, use of post houses, professional organizations, taxes, insurance, entrepreneurship, distribution, marketing, and sales will be discussed in depth. (3 Lec.)
(VFT) 215 Broadcast Engineering II (3)
Prerequisite: Video Technology 205. This course carries forward the concepts taught in Video Technology 205 and provides for detailed application of electricity and electronics theory in the troubleshooting of problems and maintenance of video equipment. Specific problems in control room equipment adjustment and maintenance will be combined with detailed problems on camera, sound, and lighting instrument maintenance. Laboratory fee. (2 Lec., 4 Lab.)

(VFT) 218 Scriptwriting And Property Management (3)
This course provides instruction in converting books, plays, drama, story, and other properties into video scripts. The course also deals with the management of these properties and the legal responsibility of property manager. (3 Lec.)

(VFT) 220 Computer Application To Video Production (3)
Students are provided the opportunity to develop skills in producing computer graphics, working with character generators, teleprompters, and a variety of special computer applications to visual enhancement and special effects. Laboratory fee. (2 Lec., 4 Lab.)

(VFT) 226 Music Video Production (3)
Prerequisite: Video Technology 202. The student will produce a variety of video programs with a music theme and a complementary visual sequence. The process of making music videos will be thoroughly explored including visits to local production houses and application of both original, live, and canned music to visual aesthetics. Laboratory fee. (2 Lec., 4 Lab.)

(VFT) 232 Broadcast, Cable, And Satellite Technology (3)
This course is designed to provide a working knowledge of control room, distribution, headend, uplink, transmission, and a variety of other signal transfer techniques. Students will study the theory and application of these diverse video operations. (3 Lec.)

(VFT) 703 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Video Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of orientation, writing objectives, and work station objectives, how to find a job, resume writing, preparation for the interview, the interview, job interview from the employer’s viewpoint, group discussions on experiences of job interviews, interpersonal relationships with supervisor and co-workers. (1 Lec., 15 Lab.)

(VFT) 704 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Video Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of orientation, writing objectives and work station agreements, review of work station objectives, problem solving in the workplace, role of supervisor and subordinates, building the workplace, role of supervisor and subordinates, building self-esteem, discussion of job site problems, revising existing resume, interpersonal relationships with professionals in the field that the students comes into contact with, and how to gain a professional attitude within the workplace. (1 Lec., 15 Lab.)

(VFT) 713 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Video Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of orientation, writing objectives and work station agreements, review of work station objectives, problem solving in the workplace, role of supervisor and subordinates, building self-esteem, discussion of job site problems, revising existing resume, interpersonal relationships with professionals in the field that the student comes into contact with, and how to gain a professional attitude within the workplace. (1 Lec., 20 Lab.)

(VFT) 714 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Video Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of orientation, writing objectives and work station agreements, review of work station objectives, problem solving in the workplace, role of supervisor and subordinates, building self-esteem, discussion of job site problems, revising existing resume, interpersonal relationships with professionals in the field that the student comes into contact with, and how to gain a professional attitude within the workplace. (1 Lec., 20 Lab.)