1988-89
North Lake College Catalog
Dallas County Community College District

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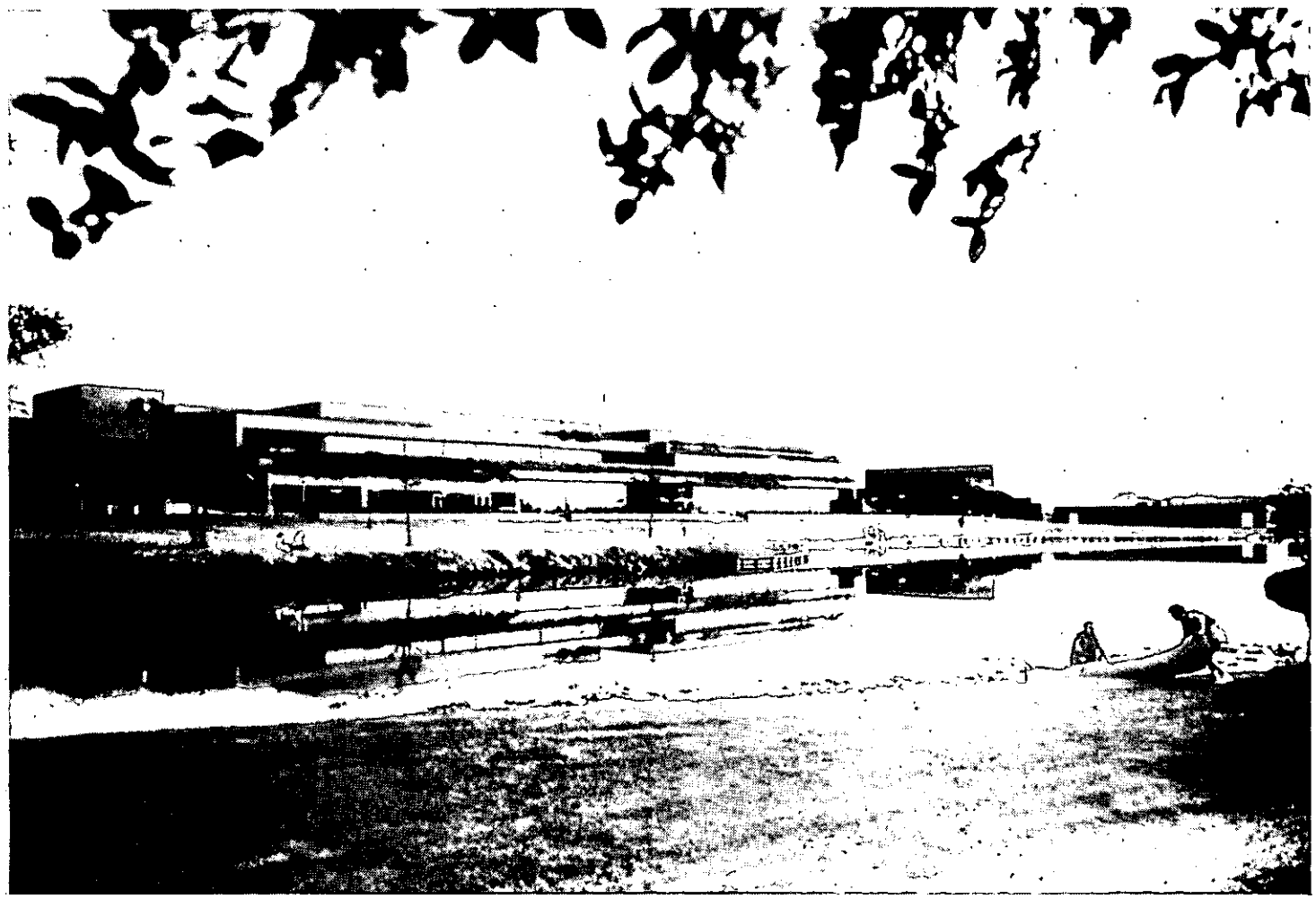
1988-89 North Lake College Catalog



North Lake College
5001 N. MacArthur Blvd.
Irving, Texas 75038-3899

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

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

Academic Calendar For 1988-89

Summer Sessions, 1988

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

May 30 (M)	Memorial Day Holiday
June 2 (R)	Registration
June 6 (M)	Classes Begin
June 9 (R)	4th Class Day
June 10 (F)	Friday Class Meeting
June 23 (R)	Last Day to Withdraw with "W"
July 7 (R)	Final Exams
July 7 (R)	Semester Closes
July 11 (M)	Grades due in Registrar's Office at 10 a.m.

Second Summer Session: (Based on 4 day class week)

July 12 (T)	Registration
July 13 (W)	Classes Begin
July 19 (T)	4th Class Day
August 4 (R)	Last Day to Withdraw with "W"
August 16 (T)	Final Exams
August 16 (T)	Semester Closes
August 18 (R)	Grades due in Registrar's Office at 10 a.m.

Fall Semester, 1988

August 22 (M)	Faculty Reports
August 22-25 (M-R)	Registration Period (Varies by Campus)
August 26 (F)	Faculty Professional Development
August 26 (F)	Friday *Only* Classes Begin
August 27 (S)	Saturday *Only* Classes Begin
August 29 (M)	Classes Begin (M-R Classes)
September 2 (F)	No Friday *Only* Classes
September 3 (S)	No Saturday *Only* Classes
September 5 (M)	Labor Day Holiday
September 10 (S)	12th Class Day
November 3 (R)	Last Day to Withdraw with a Grade of "W"
November 24 (R)	Thanksgiving Holidays Begin
November 28 (M)	Classes Resume
December 9 (F)	Final Exams for Friday *Only* Classes
December 10 (S)	Final Exams for Saturday *Only* Classes
December 12-15 (M-R)	Final Exams for M-R Classes
December 15 (R)	Semester Closes
December 19 (M)	Grades *due* in Registrar's Office by 10 a.m.

Spring Semester, 1989

January 9 (M)	Faculty Reports
January 9-12 (M-R)	Registration Period (varies by campus)
January 13 (F)	Faculty Professional Development
January 13 (F)	Friday *Only* Classes Begin
January 14 (S)	Saturday *Only* Classes Begin
January 16 (M)	Classes Begin (M-R Classes)
January 26 (R)	12th Class Day
February 16 (R)	District Conference Day
February 17 (F)	Faculty Professional Development (TJCTA)
February 17 (F)	No Friday *Only* Classes
February 18 (S)	No Saturday *Only* Classes
March 6 (M)	Spring Break Begins
March 10 (F)	Spring Break Holiday for All Employees
March 13 (M)	Classes Resume
March 24 (F)	Religious Holidays Begin
March 27 (M)	Classes Resume
March 30 (R)	Last Day to Withdraw With a Grade of "W"
May 5 (F)	Final Exams for Friday *Only* Classes
May 6 (S)	Final Exams for Saturday *Only* Classes
May 8-11 (M-R)	Final Exams for M-R Classes
May 11 (R)	Semester Closes
May 11 (R)	Graduation
May 15 (M)	Grades Due in Registrar's Office by 10:00 a.m.

Summer Sessions, 1989

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

May 29 (M)	Memorial Day Holiday
May 31 (W)	Registration (Richland College Only)
June 1 (R)	Registration (All Campuses)
June 5 (M)	Classes Begin
June 8 (R)	4th Class Day
June 9 (F)	Class Day
June 22 (R)	Last Day to Withdraw with a Grade of "W"
July 4 (T)	Fourth of July Holiday
July 6 (R)	Final Exams
July 6 (R)	Semester Closes
July 10 (M)	Grades Due in Registrar's Office by 10:00 a.m.

Second Summer Session: (Based on 4 day class week)

July 11 (T)	Registration (All Campuses)
July 12 (W)	Classes Begin
July 18 (T)	4th Class Day
August 3 (R)	Last Day to Withdraw With a Grade of "W"
August 15 (T)	Final Exams
August 15 (T)	Semester Closes
August 17 (R)	Grades Due in Registrar's Office by 10:00 a.m.

Dallas County Community College District
Board of Trustees

Robert Bettis
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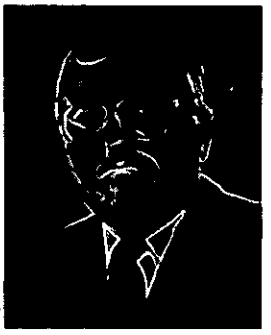
J. D. Hall
Vice Chairman

Don Buchholz

Jerry Gilmore

Kenneth M. Pace

Pattie T. Powell



James W. Smith

Lawrence W. Tyree
Chancellor

Dallas County Community College District Administrators

Chancellor	Lawrence W. Tyree
Vice Chancellor of Business Affairs	Ted B. Hughes
Vice Chancellor of Educational Affairs	Jack Stone
Assistant Chancellor of Planning and Development Affairs	Bill Tucker
Executive Assistant to the Chancellor	Jackie Caswell
Associate Vice Chancellor/Educational Affairs	Rodger A. Pool
Associate Vice Chancellor of Business Affairs	Robb Dean
Director of Development	Carole Shlipak
Legal Counsel	Robert Young
Consultant to the Chancellor	Nancy Armes
Director of Career & Continuing Education	Ted Martinez
Director of Information Technology	Jim Hill
Director of Educational Telecommunications	Pam Quinn
Director of Personnel Services and Development	Barbara K. Corvey
Director of Planning, Research and Evaluation	Felix Aquino
Director of Public Information	Claudia Robinson
Director of Purchasing	Mavis Williams
Director of Resource Development	Bonny Franke-Hill
Director of Student and International Programs	Richard McCrary
Director of Technical Services	Paul Dumont

NORTH LAKE COLLEGE

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 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.

NORTH LAKE COLLEGE ADMINISTRATION

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	Dale Cummings	659-5204
Assistant Director, Continuing Education	Nancy Kinsey	659-5203
Dean of Learning Resources Center	Jim Picquet	659-5340
Director of Admissions and Registration	Stephen Twenge	659-5225
Director of Cooperative Education	Dale Cummings	659-5370
Director of Financial Aid	Nancy Crumrin	659-5227
Director of Public Information	David A. Wright	659-5231
Director of Student Programs and Resources	Sharon Beauchamp	659-5307
Director of Special Needs Program	Mary Ciminelli	659-5237
Natatorium Director	Jean Blair	659-5358

DIVISION CHAIRPERSONS

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

OTHER TELEPHONE NUMBERS

Admissions and Registration	659-5220
Business Office	659-5244
College Information	659-5230
Continuing Education Office	659-5200
Data Center	659-5269
Health Center	659-5209
Library	659-5347
Personnel	659-5246
Physical Plant	659-5310
Placement Office	659-5218
Public Information	659-5230
Safety and Security	659-5300
Wallace Bookstore	550-0509
Women's Center	659-5373

NORTH LAKE COLLEGE FACULTY AND STAFF

Abatso, Yvonne ..... Director, Women's Center/Human Development
Wheaton College, B.A., University of Chicago, M.A., Ph.D.

Agnew, Robert L. .... Chairperson, Natural & Social Sciences/PE/Natatorium Division
North Texas State University, B.A., M.A., Ph.D.

Ates, Clarence ..... Counselor
Oakwood College, B.S., Oklahoma State University, M.S.

Bacon, Gary ..... Chairperson, Business/Management Division
U.S. Military Academy, B.S., Southern Methodist Univ., M.B.A., University of Arizona Naval War College, Study

Beauchamp, Sharon ..... Director, Student Programs and Resources
Brigham Young Univ., B.A., North Texas State Univ., M.Ed.

Bishop, Joe R. ..... Electricity
North Texas State Univ., B.A., East Texas State Univ., Study

Blair, Jean Collins ..... Natatorium Director
Texas A&M Univ., B.S., Michigan State Univ., M.A.

Blankenship, Patsy ..... Office Careers
North Texas State Univ., B.B.A., M.B.E.

Blevins, Larry G. ..... Electricity
Cooke County College, A.A., Wayland Baptist College, B.S.O.E.

Bolin, Bill ..... Solar Energy Technology
East Texas State Univ. B.S., M.Ed.

Bravo, Luis ..... Accounting
Univ. of Arizona, B.A., Univ. of Texas, B.B.A.
Univ. of Houston at Clear Lake City, M.S., Univ. of Houston, M.S., Texas, C.P.A.

Briggs, Cathy ..... French/Spanish
Oklahoma State Univ., B.S., Univ. of Oklahoma, M.A., Ph.D.

Brink, Lynn ..... Government
Southwestern Univ., B.A., North Texas State Univ., M.A., Study

Burns, Robert ..... Electronics Technology
Southwest Texas State University, B.S.

Butler, Alice ..... Theater
North Texas State Univ., B.S., Stephen F. Austin Univ., M.A.

Castilla, Rene ..... Journalism
The Univ. of New Mexico, B.S., East Texas State Univ., M.A.

Chamberlain, Enrique A. ..... Head Librarian
North Texas State Univ., B.A., East Texas State Univ., M.L.S., Ph.D.

Cherry, Grady ..... English
Stephen F. Austin Univ., B.A., M.A., Texas A&M Univ., Ph.D.

Ciminelli, Mary ..... Coordinator/Counselor, Special Needs Program
State Univ. of New York at Buffalo, B.S., North Texas State Univ., M.S.

Coppola, William ..... Video Technology
Michigan State University, B.A.

Crowley, Lee B. ..... Instructional Development Consultant
Lamar Univ., B.S., Texas A&M Univ., M.Ed., Ph.D.

Crumrin, Nancy ..... Director of Financial Aid
Barat College, B.S.; Indiana State University, Study.

Joseph Cudmore ..... Diesel Mechanics
Tarrant County Junior College, East Texas State University, Texas A&M University, The University of Texas at Arlington, Study.

Cummings, Dale ..... Dean of Career and Continuing Education
San Diego State University, B.A., M.A.; Utah State University, Ph.D.

Davis, Jeanne ..... Psychology
Univ. of Texas, B.A., M.A., North Texas State Univ., Study

Downey, Janice .... Senior Account Executive, Business & Professional Institute
Baylor University, B.B.A.

Edwards, Lynda ..... Counselor
Howard University, B.A., Univ. of Pennsylvania, M.A.
Texas Southern Univ., Study

Fleming, Richard ..... Computer Science/Data Processing/Mid-Management
Memphis State Univ., B.S., Univ. of Dallas, M.S., M.B.A.

Franklin, George Lynn ..... Video Technology
B.A., Univ. of Oklahoma

Giles, Charles P. ..... Counselor
Univ. of Arkansas, B.S., B.A., M.Ed., Ed.D.

Gonzalez, Carlos ..... Chemistry/Aviation
College of the City of New York, B.J.
Texas Christian Univ., M.S., Ph.D.

Green, Kim ..... Director of Business Operations
Principia College, B.A., University of Florida, M.A.

Grizzle, Grady ..... Chairperson, Math/Technology
North Texas State Univ., B.A., M.A., Ph.D.

Horton, James F. Jr. ..... President
Univ. of Illinois, B.A., M.A., North Texas State Univ., Ph.D.

Hughes, James P. ..... Vice President of Business Services
Marquette University, B.A.; Southern Methodist University, M.B.A.; North Texas State University, Ph.D.

Hunter, Paul ..... English
Univ. of Texas, B.A., Univ. of Florida, M.A.

Ironside, Robert ..... Mid-Management
U.S. Military Academy, B.S., Univ. of Arizona, M.B.A.
Univ. of Texas at Arlington, B.A., Study , North Texas State Univ., Study

Jones, Nancy ..... English
East Texas State Univ., B.A., M.A., North Texas State Univ., Ph.D.

Keleman, Paul ..... Counselor
Univ. of Texas, B.A., Univ. of Houston at Clear Lake City, M.A., North Texas State Univ., Study

King, Floyd ..... Chemistry
Colorado College, B.S., M.A.T.

Kinsey, Nancy ..... Assistant Director, Continuing Education
Univ. of Texas at Arlington, B.A., M.A.

Kirchhoff, Edwin E. ..... Economics
Univ. of Kansas, B.A., M.A.

Knowles, Jim ..... Physics
Texas Christian Univ., B.S., Ph.D.

Kubicek, Leonard ..... Geology/Environmental Science
Lamar Univ., B.S., Southern Illinois Univ. M.S.
Univ. of Northern Colorado, Ed.D

Lewis, Margaret ..... Vice President of Student Development
Univ. of New Mexico, B.A., Univ. of North Carolina, Chapel Hill, Ph.D.

Lindsey, Paul ..... Air Conditioning/Refrigeration
Eastfield College, A.A.A.S, U.S. Air Force Training Program, AC/R

Lindstrom, Peter ..... Mathematics
Allegheny College B.S., Kent State Univ., M.A.
State Univ. of New York at Buffalo, Ed.D.

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., Study

McClung, 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
Universite' Med V, B.A.; Ohio University, M.A., Ph.D.

Morman, Shelba 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.

Mullin, Patricia L. ..... Chairperson, Communications/Humanities
Miami University, B.A.; University of Iowa, M.A.; The University of Texas at Austin, Ph.D.

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

Olson, Margot ..... Instructional Development Consultant
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Osentowski, Francis ..... Music
Kearney State College, B.M.Ed., North Texas State University, M.M. Ed., D.M.A.

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

Peterson, Robert ..... Account Executive, Business & Professional Institute
Univ. of Texas, B.A.

Picchioni, Anthony ..... 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&I Univ., B.S., East Texas State Univ., M.S.

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

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

Rainwater, Walter M. ..... Director, Physical Plant
Lawrence Institute of Technology, Extensive Bachelor's level coursework, Certification with the National Institute of Technology.

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

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

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

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

Seeley, Robert ..... Music
North Texas State Univ., B.A., M.M.Ed.,
Southwestern Baptist Theological Seminary, D.M.A.

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

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

Taylor, Jackie ..... Personnel Coordinator
North Lake College, A.A.

Thompson, Shirley ..... Physical Education
American River College, A.A., Texas Women'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 ..... Mid-Management
Univ. of Texas, B.A., M.A., Univ. of Houston, Ed.D.

Twenge, Stephen P. ..... 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.

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

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

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

Wilson, Roger ..... Carpentry
Texas State Technical Institute, A.A.,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 is comprised of 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.

District Philosophy And Goals

Since 1972, the District has been known as the Dallas County Community College District. The name shows that the District has outgrown the term "junior college." The name also reflects the District's philosophy. The colleges truly are community institutions, meeting the varied educational needs of the growing Dallas County region. The primary goal of the District and its colleges is to help students of all ages achieve effective living and responsible citizenship in a fast-changing region, state, nation, and world. Each college is therefore committed to providing a broad range of educational programs for the people it serves.

The needs, abilities, and goals of each student are considered important. The focus is on creating an educational program for the individual rather than squeezing or stretching the individual to fit an "educational mold."

The District therefore has a place for different kinds of students. There is a place for the young person setting forth toward a degree in medicine, and a place for the adult delving into an interesting hobby to enrich leisure hours. There is a place for the person preparing to enter a trade or technical field with a year or two of studies, and a place for the employed individual wanting to improve occupational skills. There is a place for the very bright high school student ready to begin college work in advance of high school graduation, and a place for the high school dropout who now sees the need for education in today's complex society. In short, there is a place for everyone.

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

1. For the student working toward a bachelor's or higher degree, the colleges offer a wide range of first-year and second-year courses which transfer to senior colleges and universities.
2. For the student seeking a meaningful job, the colleges offer one-year and two-year programs in technical and occupational fields.
3. For the employed person wishing to improve job skills or to move into a new job, the colleges offer credit and non-credit adult educational courses.
4. For the person who simply wants to make life a little more interesting, the colleges offer community service programs on cultural, civic and other topics.

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

District Responsibilities

To carry out the District philosophy, the colleges obviously must offer a 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 19 outstanding community college districts throughout the nation. Its purpose is to encourage innovative experimentation and the continuing development of the community college movement in America. Membership commits the District to research, evaluation, and cooperation with other community college districts. The goal is to serve the community with the best educational program and the fullest use of resources.

Equal Educational And Employment Opportunity Policy

Dallas County Community College District is committed to providing equal educational and employment opportunity regardless of sex, marital or parental status, race, color, religion, age, national origin, or 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

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 program in a course without receiving academic credit.

Catalog: The book containing course descriptions, degree plans, and general information.

Class Schedule: The list of courses offered for a specific semester. Names of teachers, days, times, location, fees and registration instructions are included.

Common Learning: "General Education" as defined by the Dallas County Community College District. Common Learning courses contain learning experiences which 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 it is 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 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.

Campus class schedule: A booklet which is published prior to each semester listing classes, sections, dates, times, instructors' names, and meeting places and which is used by students to prepare their personal class schedules each semester.

Developmental Studies Courses: Courses which provide prerequisite skills in reading, writing, and mathematics. Because of the nature of these courses, the credit earned will not count toward graduation requirements.

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.

Early Registration: A method of selecting and reserving courses for subsequent semesters. Consult with an advisor prior to going to early registration.

Electives: Courses which do not count toward 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 which the college requires for services in addition to tuition charges.

Flexible-entry course: A course beginning and ending on dates which are different from the regular semester. This is also referred to as "flex-entry" or "short semester registration". Consult the campus 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 in at least 12 credit hours during a semester or for 6 credit hours during a summer session.

GPA: Grade Point Average. For further explanation, see catalog section entitled "Scholastic Standards."

Grade Points: See catalog section entitled "Scholastic Standards."

Grades: See catalog section entitled "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 5½ 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.

Technical/occupational courses: Courses which 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 which 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 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 terminating enrollment. 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. 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 readmitted.

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:

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

b. present TOEFL (Test of English as a Foreign Language) test scores of 525 or higher and take the DCCCD assessment tests,

c. be proficient in English and provide a letter in their own handwriting indicating educational and vocational plans,

d. show evidence of sufficient financial support for the academic year by submitting an I-134 (Affidavit of support) Immigration and Naturalization Service document,

e. 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.

f. fulfill all admission requirements for international students at least 30 days prior to registration,

g. enroll as a full-time student (minimum of 12 credit hours),

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

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 GPA 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 high school transcript from the last high school attended; (2) for college transfer students, official transcripts for all previous college work attempted. The college's 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 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.

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 educational opportunities. When students enroll in a class, they reserve places which 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:

Continued on page
following Tuition & Fees Schedule

TUITION AND STUDENT SERVICES FEE
Fall and Spring Sessions

Semester Credit Hours	Dallas County			Out-of-District			Out-of-State or Country		
	Tuition	Fee	Total	Tuition	Fee	Total	Tuition	Fee	Total
1	$ 36	$ 3	$ 39	$ 100	$ 3	$ 103	$ 200	$ 3	$ 203
2	36	3	39	100	3	103	200	3	203
3	36	3	39	100	3	103	200	3	203
4	48	4	52	132	4	136	244	4	248
5	60	5	65	165	5	170	305	5	310
6	72	6	78	198	6	204	366	6	372
7	84	7	91	231	7	238	427	7	434
8	96	8	104	264	8	272	488	8	496
9	108	9	117	297	9	306	549	9	558
10	120	10	130	330	10	340	610	10	620
11	130	11	141	342	11	353	671	11	682
12	140	12	152	354	12	366	732	12	744
13	150	12	162	366	12	378	793	12	805
14	160	12	172	378	12	390	854	12	866
15	170	12	182	390	12	402	915	12	927
16	180	12	192	402	12	414	976	12	988
17	190	12	202	414	12	426	1037	12	1049
18	200	12	212	426	12	438	1098	12	1110
19	210	12	222	438	12	450	1159	12	1171
20	220	12	232	450	12	462	1220	12	1232

TUITION
Summer Sessions

Semester Credit Hours	Dallas County Tuition	Out-of-District Tuition	Out-of-State or Country Tuition
1	$ 36	$100	$200
2	36	100	200
3	42	138	200
4	56	184	268
5	70	230	335
6	84	276	402
7	92	286	469
8	100	296	536
9	108	306	603

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**** $67.00 per credit unit; minimum of $200.00
4. **Out-of-Country Residents** $67.00 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.

Continued from page 11

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

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 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.

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 which is a required part of the enrollment process.

The assessment program includes the completion of a questionnaire which 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 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.

Transfer Of Credits

Transfer of credit is generally given for all attempted work at colleges and universities recognized by a national accrediting agency equivalent to the Southern Association Commission on Colleges. The Registrar's Office evaluates all transfer credit. Transfer students admitted with a grade point deficiency cannot graduate until the deficiency is cleared by earning additional grade points. Credits earned in military service schools or through the U.S. Armed Forces Institute are reviewed by the Registrar and credit granted if applicable.

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 Success Program)

The Texas State Education Code requires that all students "...who enter public institutions of higher education in the fall of 1989 and thereafter must be tested for reading, writing and mathematics skills." This includes all "...full-time and part-time freshmen enrolled in a certificate or degree program...", any non-degree students prior to the "accumulation of nine or more [college] credit hours or the equivalent," and "...any transfer students with fewer than 60 semester credit hours or the equivalent who has not previously taken the tests."

Performance on the test will not be used as a condition of admission.

A student may not "...enroll in any upper division course [the] completion of which would give the student 60 or more semester credit hours or the equivalent until the student's test results meet or exceed the minimum standards in all test scores." Other assessment procedures may be used in exceptional cases to allow a student to enroll in upper division courses "...in cases where student test results do not meet minimum standards" (Texas Education Code, Sec. 51.306).

The test fee wil be paid by the student.

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.

Grade	Interpretation	Grade Point Value
A	Excellent	4 points
B	Good	3 points
C	Average	2 points
D	Poor	1 point
F	Failing	0 points
I	Incomplete	Not Computed
WX	Progress; re-enrollment required	Not Computed
W	Withdrawn	Not Computed
CR	Credit	Not Computed

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

Credit Hours	Grade	Grade Points
2-hour course	A	8
3-hour course	B	9
4-hour course	B	12
3-hour course	C	6
Total Credit Hours:		Total Grade Points:
12		35

35 ÷ 12 = 2.93

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 reenroll 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, Human Development 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 six credit hours. The recommended load limit in a six-week summer session is six 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:

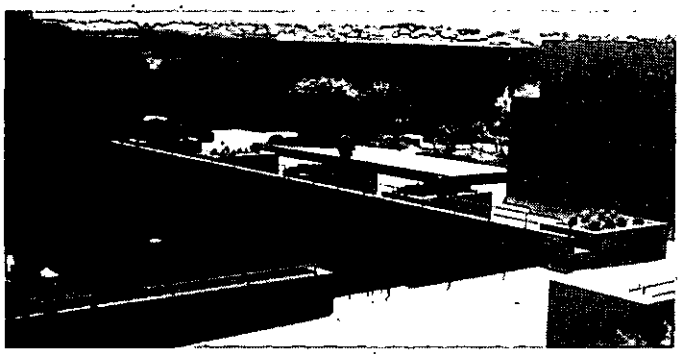
A student carrying 12 or more credit hours in a given semester.

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.) 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. 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 by writing to the Registrar. No drop or withdrawal requests are accepted by telephone. Students who drop a class or withdraw from the College before the semester deadline receive a "W" (Withdraw) in each class dropped. The deadline for receiving a "W" is indicated on the academic calendar. 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 six-11 credit hours and maintain a 3.5 or higher grade point average are placed on the Academic Recognition List.

Scholastic Probation And Scholastic Suspension

Full-time and part-time students who have completed a total of 12 credit hours are placed on probation if they fail to maintain a 2.0 cumulative grade point average. Students may be removed from probation when they earn a 2.0 cumulative grade point average. Students on scholastic probation who achieve either a cumulative grade point average of 1.5 or above or a previous semester grade point average of 2.0 or above are continued on scholastic probation. Students on probation who do not meet the requirements for continued probation are placed on scholastic suspension. Students on suspension for the first time may not register for the immediately following semester or summer 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 issued to each student at the end of each semester and gives the grade earned in each course that semester. A transcript is the official record of college work and gives all grades earned throughout the DCCCD college career. Transcripts are withheld from students who have not met financial or other obligations to the College. (See Student Codes and Expectations: "Financial Transactions with the College.")

Transcripts Of Credit

Upon the written request of a student, the Registrar's Office will send an official transcript to the individual student or to any college or agency named. A fee will be charged for each transcript requested. The transcript may be withheld, however, until the student has settled all obligations with the College.

Degree Requirements

The College confers the Associate in 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.

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 which offers the program in which the student majored. If two or more schools offer the program, the student is granted the degree where the majority of the hours were taken. Correspondence work must be approved by the Registrar for graduation credit. No more than one-fourth of the work required for any degree or certificate may be taken by correspondence.

The Common Learning Curriculum

The Common Learning curriculum is composed of required courses and clusters of courses designed to advance the learning which 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 must take 34-36 hours in approved Common Learning courses beyond the Core. Candidates for the Associate in Applied Arts and Sciences 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, and a grade point average of at least "C" (2.0) to receive the Associate in Arts and Sciences Degree. These 61 hours may be earned at any District college and must include:

- English 101, Speech Communication 101, and a math course numbered 100 or above. (9 credit hours)
- English 102 and a sophomore literature course. (6 credit hours)

- Laboratory Science (8 credit hours) chosen from Astronomy, Biology, Chemistry, Geology, Physical Science, or Physics. (For Astronomy to count as a lab science, the student must complete successfully 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).
- Behavioral Science (3 credit hours) to be chosen from Anthropology, Human Development, Psychology, or Sociology.
- History 101-102 (6 credit hours) and Government 201-202 (6 credit hours). Only three credit hours of history and three credit hours of government may be earned through credit by examination.
- Business (3 credit hours) to be chosen from Business, Accounting, Management, Computer Information Systems, or Economics. Cooperative Work Experience courses may not be used to meet Common Learning degree requirements.
- Electives (16-18 credit hours).

A maximum of four physical education activity hours may be counted as credit toward requirements for graduation. The G.P.A. for graduation is based on the credit earned for all DCCCD work completed and all transfer work. 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.

All students planning to transfer to a four-year institution may complete their four semester requirements in physical education during their freshman and sophomore years. Students are urged to consult the catalogs of the institutions to which they may transfer for their special requirements. These catalogs should be used by students and advisors in planning programs.

Associate in Applied Arts and Sciences Degree

Students must have a minimum of 60 credit hours, a grade of "C" or better in each of the three Core courses, and a grade point average of at least "C" (2.0) to receive the Associate in Applied Arts and Sciences Degree. These 60 hours must include:

- English 101 or Communications 131, Speech Communication 101, and a math course numbered 100 or above. (9 credit hours)
- 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 complete successfully 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 104, a foreign language, Humanities 101, Literature, Music 104, Philosophy 102, or Theatre 101.

  Business: Business, Accounting, Management, Computer Information Systems, or Economics. Cooperative Work Experience courses may not be used to meet Common Learning degree requirements.

Where a technical/occupation 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 four 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 Filing Degree And Certificate Plans And For Graduation

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

An annual graduation ceremony is held at the conclusion of the spring semester. Participation is ceremonial only and

confers on a student no rights to a degree. 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 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 transfering 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

Students who desire to earn a bachelor's degree may complete freshman and sophomore courses in the DCCCD before transferring to a four-year institution. The academic transfer curriculum is coordinated with four-year colleges and universities to aid the transfer of credits to these schools. Students must understand that each four-year institution establishes its own course requirements for its majors and degrees. Even in the same major, what one four-year institution requires may differ greatly from the requirements of another four-year institution. Students should consult with a DCCCD counselor or advisor and the four-year institution on a regular basis to insure enrollment in courses appropriate to the selected degree or program.

Below is a list of some majors which students can begin within the DCCCD. For specific majors and programs, students should consult with an advisor or counselor.

Accounting
Advertising
Agriculture
American Studies
Anthropology
Architecture
Art
Biochemistry
Biological Sciences
Botany
Business Administration (including Accounting, Finance, Management, Marketing)
Business Education
Chemistry
City and Regional Planning
Communications
Computer Science
Dance
Dentistry
Dietetics
Drama
Economics
Elementary Education
Engineering
English
Entomology
Fine Arts
Finance
Foreign Languages
Forestry
Geography
Geology
Health Science
History
Home Economics
Industrial Arts
Industrial Design
Journalism
Law
Liberal Arts
Life Science
Management
Marine Biology
Marketing
Mathematics
Medical Technology
Medicine (Pre-Med)
Meteorology
Microbiology
Music
Natural Sciences
Nursing
Occupational Therapy
Oceanography
Optometry
Pharmacy
Philosophy
Photography
Physical Education
Physical Science
Physical Therapy
Physics
Political Science
Pre-Dental, Pre-Medical, Pre-Veterinary
Psychology
Public Relations
Radio/Television/Film
Recreation

Secondary Education
Sociology
Special Education
Speech Communications
Speech Pathology and Audiology
Theatre
Telecommunications
Theology
Veterinary Medicine
Urban Studies
Wildlife Management
Zoology

The fields of dentistry, law, medicine, optometry, pharmacy, veterinary medicine, and theology generally require graduate study. Students who plan eventually to get a graduate degree in one of these fields or areas should consult with a counselor or advisor about an appropriate undergraduate major.

Students are encouraged to consult counselors about the transfer information and resources which are available in the college counseling center. Counselors and advisors can assist students in interpreting information from university and college catalogs. The number of credit hours which are transferable will vary from institution to institution. Most colleges and universities will accept at least 60 hours in transfer. In addition, some colleges and universities may have specific grade point average requirements for transfer students. 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 a skilled employee after one or two years of college work may enroll in one of the many technical/occupational programs offered by the College.

Technical/occupational courses 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 which 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 this college to receive credit by examination. Students may not request credit by examination in courses for which they are currently enrolled. Students may earn as many credits through examination as their ability permits and needs require, but the last 15 credit hours required for graduation in any degree or certificate program may not be earned through credit by examination except as approved by the Vice President of Instruction.

Credit by examination may be attempted only one time in any given course, and a grade of "C" or better must be earned in order for credit to be recorded. A student may use credit by examination for only three (3) credit hours to apply toward the degree requirements in history and only three (3) credit hours to apply toward the degree requirements in government.

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 according to the following guidelines:

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 which is assessing the learning experiences.

3. A student is required to complete at least 12 semester hours of course work with the District, six 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.

High School Articulation

The College has established a process for evaluating the work of high school vocational graduates to determine if a student can receive college credit for competencies mastered in the high school vocational program. Students should check with the College Dean of Career and Continuing Education or the Counseling Center for more information.

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, KERA/Channel 13 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:

- have completed at least six semester hours in an occupational major or secure waiver of requirement from the instructor;
- 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 which include cooperative education are indicated in this catalog.

International Studies

Each year a number of selected programs combine learning experiences with foreign travel. Such study-travel is under the direct supervision of faculty, and college credit may be earned by students who successfully meet the learning objectives established for these courses. Most of these courses are offered during the summer, and a complete listing for 1988-89 can be secured from the District Office of Student and International Programs (746-2410).

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 surrounding 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 assignment test scores indicate they are performing below college level skills will be advised to enroll in developmental courses. Successful completion of these courses will provide prerequisite skills for college-

level work. Other students who want 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 relevant to students' personal, academic and career goals.

Evening And Weekend College

In dynamic, growing communities such as those encompassing this college, people have continuing educational needs, yet many of them have work schedules and personal involvements which make it impossible for them to attend college during normal daytime hours. For this reason, virtually every course offered during the day is 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 books 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. It provides books, slides, tapes, reference help, 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 supports the classroom instructional program and is 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

Continuing education classes expand the available opportunities for persons of all ages to participate in college programs. A wide spectrum of courses is offered to adults and children through each campus's Continuing Education Division. Continuing education programs are offered throughout the year to meet a variety of needs such as:

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

Continuing education program instructors are professional men and women from the community who have proven experience in their fields. Their objective is to share their knowledge, insight, and experience, and to insure that students acquire a greater perspective of the subject and have a meaningful learning experience. This is accomplished through seminars, workshops, and institutes.

The type of course is determined by the nature of the material, instructional approach, and needs of the requesting individuals or organizations. Usually there are no entrance requirements or examinations. Some courses may have age restrictions or may require a certain amount of experience for enrollment. Admission is on a first-come first-served basis. Registration is simple, quick and easy; you may even want to register by phone.

Classes and activities are held on the campus of each College and in a variety of locations throughout the community. Most classes and activities are conducted on weekday evenings, but are also held on weekdays and weekends.

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

Library privileges are afforded continuing education students during the term in which they are registered. Scholarship money is available for specific vocationally oriented courses. To apply for this type of scholarship, please inquire at the Continuing Education Office.

Continuing Education Units (CEU's)

Although no college credit is awarded for continuing education class participation, Continuing Education Units are transcripted for successful completion of most courses. One CEU, by nationwide definition, is "ten contact hours of participation in an organized continuing adult education or extension experience under responsible sponsorship, capable direction and qualified instruction." The CEU is a means of recording and accounting for the various continuing education activities one accumulates over a period of years.

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 or 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, tele-conferencing, basic skills assessment, and small business development assistance.

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

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 examine appropriate choices of courses, educational plans, study skills, and transferability of courses.
3. Confidential personal counseling to make adjustment and life decisions about personal concerns.
4. Small group discussions led by counselors 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 psychological 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.

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 Student 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, job interviewing, writing a resume and cover letter, and developing job search strategies leading to success.

Services for Disabled Students

The Services for Disabled Students Office offers a variety of support services to enable disabled students 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 texts (for those students with visual impairments or learning disabilities). Academic, career and personal counseling are also available. Disabled students should contact the office at least one month before registration. The office will provide students with an orientation session and registration information. For additional information, contact the Services for Disabled Students 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 athletic 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 staff 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. Limited housing for DCCCD students may be available at Bishop College. Interested persons should contact the Vice President of Students at Bishop.

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.

The Department of Education will randomly select about 50% of all 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 assistance can be awarded. An eligible non-citizen 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.

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 costs of attending college.

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

Guaranteed Student Loans (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. 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.

Under the new Supplemental Loans to Students (SLS) Program, independent undergraduate students are eligible to borrow up to $4,000 per academic year at 10.03% interest for the current year. The loan maximum is $20,000 for all the years of undergraduate study. 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.

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. The current interest rate is 10.03%. Repayment 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 one's 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 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 of students. Loans are usually limited to the amount of tuition and fees or books and supplies and bear no interest. These loans must be repaid within the semester for which they are borrowed. 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 goal and are enrolled for at least six credit hours. The wage rate is $4.25 per hour and most students work 15 to 25 hours per week. You will be paid on the last working day of the month. The amount you can earn in a school year is determined by the amount of your financial need and other aid awarded as part of your 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 a job 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 for additional information on these 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.

Social Security Administration

The Social Security Administration has offered benefits to students who met its criteria. However, this program of educational benefits is being phased out so students need to contact the regional Social Security Administration Office regarding eligibility. The Admissions Office on campus acts as liaison between students and the Social Security Administration after eligibility has been established.

Bureau of Indian Affairs

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

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

Veterans' Benefits Program

The Veterans' Benefits Program is coordinated by the Veterans' Affairs Office of the College. Services of this office include counseling the veteran concerning benefits. Veterans Administration loans, Veterans Administration work study programs, financial problems, career counseling, and other areas related to the veteran's general welfare. When testing indicates that a veteran should enroll in developmental courses such as reading, writing, or math, the student may pursue these courses with no charge to his or her benefits. Tutoring services are also available to the veteran who is having learning difficulties in one or more subjects. The veteran student should be aware of some of the Veterans Administration guidelines. Violation of these guidelines causes complications in receiving monthly benefits or loss of those benefits.

1. 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 V.A. 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 V.A. and may lose future benefits. A veteran student must also maintain a satisfactory grade point average as outlined in this catalog.

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

Hazlewood Act

Under the Hazlewood Act certain veterans who have exhausted remaining educational benefits from the Veterans Administration can attend Texas state supported institutions and have some fees waived. To be eligible, students must have been residents of Texas at the time they entered the service, have an honorable discharge, must now be residents of Texas, and be ineligible for federal financial aid. Applications are available at the Financial Aid Office and will take a minimum of eight weeks to process. To apply, students must submit a Hazelwood Act application, a copy of their discharge papers and a Student Aid Report stating ineligibility to the Financial Aid Office.

Academic Progress Requirements:

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

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's policy requires that the following:

The Grade Point Average (GPA) Requirement:

1. A student must maintain a 2.0 GPA for each semester or the combined summer sessions for which an award is approved.
2. A new applicant must have a cumulative 2.0 GPA 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 GPA 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:

In these provisions, probation or suspension means financial aid probation or suspension, not academic probation or suspension.

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 GPA 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 enroll at least half-time for the equivalent of two semesters 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.
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 their 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 courses, 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.

VIII. DALLAS COUNTY COMMUNITY COLLEGE DISTRICT STUDENT RIGHTS AND RESPONSIBILITIES

Synopsis:

1. General Provisions

a. Preamble

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. The District's primary concern is the student. each college attempts to provide an environment which views students in a holistic manner encouraging and inviting them to, learn and grow independently, stressing the process and the acquisition of skills. Such an environment presupposes both rights and responsibilities. Free inquiry and expression are essential parts of this freedom to learn and of room for growth and development. However, this environment also demands appropriate opportunities and conditions in the classroom, on the campus and, indeed, in the larger community. Students must exercise these freedoms with responsibility.

The responsibility to secure and to respect general conditions conducive to the freedom to learn and to grow is shared by all members of the college community. Dallas County Community College District has a duty to develop policies and procedures which provide and safeguard this liberty and this environment. The purpose of this statement is to enumerate the essential provisions for student freedom to learn and grow and the responsibilities which go with these liberties as established by the Dallas County Community college District Board of Trustees.

b. Scope

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

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

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

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

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

(3) "Director of Student Programs" means the Director of Student Programs, his delegate(s) or his representative(s):

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

(5) "President" means the president of a college of the Dallas County Community college District;

(6) "Student" means a person enrolled in a college of the Dallas County Community College District, or a person accepted for admission to the College;

(7) All vice presidents, deans, associate deans, assistant deans, directors, and division chairman of the College for the purposes of this code shall be called "administrators";

(8) "Complaint" is a written summary of the essential facts constituting a violation of a board policy, college regulation or administrative rule;

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

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

(11) "Major violation" means one which can result in suspension or expulsion from the college or denial of degree;

(12) "Minor violation" means one which can result in any disciplinary action other than suspension or expulsion from the College or denial of degree.

2. Acquaintance with Policies, Rules, Regulations

The Student Rights and Responsibilities statement is subject to change by action of the Board of Trustees. Each student is expected to be fully acquainted with all published policies, rules, and regulations of the College, copies of which shall be available to each student for review at the offices of the Vice President of Student Development and Student Programs. The College will hold each student responsible for compliance with these policies, rules and regulations. The student is responsible for obtaining published materials to update the items in this statement. Students are also expected to comply with federal, state and local laws. This principle extends to conduct off campus which is likely to have an adverse effect on the College or on the educational process.

3. Campus Regulations

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

(1) Not to violate any municipal, state, or federal laws, and

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

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

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

(1) Student Identification:

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

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

(2) Use of District Facilities: Each college of the Dallas County Community College District is a public facility entrusted to the Board of Trustees and college officials for the purpose of conducting the process of education. Activities which appear to be compatible with this purpose are approved through a procedure maintained in the Student Programs Office.

Activities which appear to be incompatible or in opposition to the purposes of education are normally disapproved. It is imperative that a decision be made prior to an event in order to fulfill the trust of the public. No public facility could be turned over to the indiscriminate use of anyone for a platform or forum to promote random causes. These reasonable controls are exercised by college officials for the use of facilities to ensure the maximum use of the College for the purpose for which it was intended.

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

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

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

(b) When any special effort to recruit an audience has preceeded the beginning of discussions or presentations.
(c) When a person or group of persons appears to be conducting a systematic discussion or presentation on a definable topic.

(4) Disruptive Activities: Any actitivity which interrupts the scheduled activities or processes of education may be classified as distruptive; thus, anyone who initiates in any way any gathering leading to disruptive activity will be violating college regulations and/or state law.
The following conditions shall normally be sufficient to classify behavior as disruptive:
(a) Blocking or in any other way interfering with access to any facility of the College.
(b) Inciting others to violence and/or participating in violent behavior, e.g., assault; loud or vulgar language spoken publicly; or any form of behavior acted out for the purpose of inciting and influencing others.
(c) Holding rallies, demonstrations, or any other form of public gathering without prior approval of the College.
(d) Conducting any activity which causes college officials to be drawn off their scheduled duties to intervene, supervise or or observe the activity in the interest of maintaining order at the College.

Furthermore, the Vice President of Student Development shall enforce the provisions of the Texas education Code, Section 4.30 (following)

Education Code Section 4.30 provides:

(a) No person or group of persons acting in concert may willfully engage in disruptive activity or disrupt a lawful assembly on the campus or property of any private or public school or institution of higher education or public vocation and technical school or institute.
(b) For the purposes of this section, disruptive activity means
(1) Obstructing or restraining the passage of persons in an exit, entrance, or hallway of any building without the authorization of the administration of the school;
(2) Seizing control of any building or portion of a building for the purpose of interfering with any administrative, educational, research, or other authorized activity;
(3) Preventing or attempting to prevent by force or violence or the threat of force or violence any lawful assembly authorized by the school administration;
(4) Distrupting by force or violence or the threat of force or violence a lawful assembly in progress; or
(5) Obstructing or restraining the passage of any person at an exit or entrance to said campus or porperty or preventing or attempting to prevent by force or violence or by threats thereof the ingress or egress of any person to or from said property of campus without the authorization of the administration of the school.
(c) For the purpose of this section, a lawful assembly is disrupted when any person in attendance is rendered incapable of participating in the assembly due to the use of force or violence or due to a reasonable fear that force or violence is likely to occur.
(d) A person who violates any provision of this section is guilty of a misdemeanor and upon conviction is punishable by a fine not to exceed $200 or by confinement in jail for not less than 10 days nor more than six months, or both.
(e) Any person who is convicted the third time of violating this section shall not thereafter be eligible to attend any school, college, or university receiving funds from the State of Texas for a period of two years from such third conviction.
(f) Nothing herein shall be construed to infringe upon any right of free speech or expression guaranteed by the Constitutions of the United States or the State of Texas.

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

(6) Drugs: Each college of the Dallas County Community College District specifically forbids the illegal possession, use, sale or purchase of drugs, narcotics, or hallucinogens on or off campus.

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

(8) Hazing: Each college of the Dallas County Community College District, as a matter of principle and because it is a violation of state law, is opposed to and will endeavor to prevent hazing activities which involve any of the following factors singly or in conjunction:
(a) Any actions which seriously imperil the physical well-being of any student (all walks and all calisthenics are held to be actions which seriously imperil the physical well-being of students and are, therefore, accordingly specifically prohibited).
(b) Activities which are by nature indecent, degrading, or morally offensive.
(c) Activities which by their nature may reasonably be assumed to have a degrading effect upon the mental or moral attitude of the persons participating therein.

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

(9) Academic Dishonesty
(a) The Vice President of Student Development may initiate disciplinary proceedings against a student accused of academic dishonesty.
(b) "Academic dishonesty" includes, but is not limited to, cheating on a test, plagiarism and collusion.
(c) "Cheating on a test" includes:
(i) Copying from another student's test paper;
(ii) Using, during a test, materials not authorized by the person giving the test;
(iii) Collaborating with another student during a test without authority;
(iv) Knowingly using, buying, selling, steating, transporting or soliciting in whole or part the contents of an unadministered test;
(v) Substituting for another student, or permitting another student to substitute for one's self, to take a test; and
(vi) Bribing another person to obtain an unadministered test or information about an unadministered test.
(d) "Plagiarism" means the appropriation of another's work and the unacknowledged incorporation of that work on one's written work offered for credit.
(e) "Collusion" means the unauthorized collaboration with another person in preparing written work offered for credit.

(10) Financial Transactions with the College
(a) No student may refuse to pay or fail to pay debt he owes to the College.
(b) No student may give the College a check, draft or order with intent to defraud the College.
(c) A student's failure to pay the College the amount due on a check, draft, or order, on or before the fifth class after the day the Business Office sends written notice that the drawee has rightfully refused payment on the check, draft or order, is prima facie evidence that the student intended to defraud the College.
(d) The Vice President of Student Development or designee may initiate disciplinary proceedings against a student who has allegedly violated the provisions of this section.

(11) Other Offenses
(a) The Vice President of Student Development may initiate disciplinary proceedings against a student who:
(i) Conducts himself in a manner that significantly interferes with college teaching, research, administration, disciplinary proceedings or other college activities, including its public service functions, or with other authorized activities on college premises;
(ii) Damages, defaces or destroys college property or property of a member of the college community or campus visitor;
(iii) Knowingly gives false information in response to requests from the College;
(iv) Engages in hazing, as defined by state law and college regulations;
(v) Forges, alters or misuses college documents, records or I.D. cards;
(vi) Violates college policies or regulations concerning parking, registration of student organizations, use of college facilities, or the time, place and manner of public expression;
(vii) Fails to comply with directions of college officials acting in the performance of their duties;
(viii) Conducts himself in a manner which adversely affects his suitability as a member of the academic community or endangers his own safety or the safety of others
(ix) Illegally possesses, uses, sells, or purchases drugs, narcotics, hallucinogens, or alcoholic beverages on or off campus;
(x) Commits any act which is classified as an indictable offense under either state or federal law.

4. Disciplinary Proceedings

a. Administrative Dispostion

(1) Investigation, Conference and Complaint
(a) When the Vice President of Student Development Office receives information that a student has allegedly violated a board policy, college regulation, or administrative rule, the Vice President or a subordinate delegated by him shall investigate the alleged violation. After completing the preliminary investigation, the Vice President may:
(i) Dismiss the allegations as unfounded, either before or after conferring with the student; or
(ii) Proceed administratively and impose disciplinary action; or
(iii) Prepare a complaint based on the allegation for use in disciplinary hearings along with a list of witnesses and documentary evidence supporting the allegation.
(b) The President may take immediate interim disciplinary action, suspend the right of a student to be present on the campus and to attend classes, or otherwise alter the status of a student for violation of a board policy, college regulation, or administrative rule, when in the opinion of such official the interest of the College would best be served by such action.
(c) No person shall search a student's personal possessions for the purpose of enforcing this code unless the individual's prior permission has been obtained. Searches by law enforcement officers of such possessions shall be only as authorized by law.

(2) Summons
(a) A student may be summoned to appear in connection with an alleged violation by sending him a letter by certified mail, return receipt

requested, addressed to the student at his address appearing in the Registrar's Office records. It is the student's responsibility to immediately notify the Registrar's Office of any change of address.

(b) The letter shall direct the student to appear at a specified time and place not less than three class days after the date of the letter. The letter shall also describe briefly the alleged violation and shall state the Vice President of Student Development's intention to handle the allegation as a minor or major violation.

(c) The Vice President of Student Development may place on disciplinary probation a student who fails without good cause to comply with a letter of summons, or the Vice President may proceed against the student as stated below in the sections of **Disposition** and **Penalties.**

(3) Disposition

(a) At a conference with a student in connection with an alleged minor or major violation, the Vice President shall advise the student of his rights.

(b) A student may refuse administrative disposition of the alleged violation and, on refusal, is entitled to a hearing. If a student accepts administrative disposition, he shall sign a statement that he understands the nature of the charges, his right to a hearing. If a student accepts administrative disposition, he shall sign a statement that he understands the nature of the charges, his right to a hearing or to waive the same, the penalty imposed, and his waiver of the right of appeal.

(c) The Vice President of Student Development shall prepare an accurate, written summary of each administrative disposition and forward a copy to the student (and, if the student is a minor, to the parent or guardian of the student), to the Director of Student Programs and to the Director of Campus Security.

(d) The Vice President of Student Development may impose disciplinary action as follows:

(i) For minor violations, any action authorized by this code in the section on **Penalties** (from 1-8, i.e. Admonition through Suspension of eligibility);

(ii) For major violations, any action authorized by this code in the section on **Penalties** (from 1-11, i.e. Admonition through Expulsion).

b. Student Discipline Committee

(1) Composition; Organization

(a) When a student refuses administrative disposition of either a major or a minor violation, he is entitled to a hearing before the Student Discipline Committee. This request must be made in writing on or before the sixth working day following administrative disposition. The committee shall be composed of equal numbers of students, administrators and faculty of the College. The committee shall be appointed by the president for each hearing on a rotating basis or on a basis of availability.

(b) The Student Discipline Committee shall elect a chairman from the appointed members. The chairman of the committee shall rule on the admissibility of evidence, motions, and objections to procedure, but a majority of the committee members may override the chairman's ruling. All members of the committee 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 Vice President of Student Development shall represent the College before the Student Discipline Committee and present evidence to support any allegations of violations of Board policy, college regulation, or administrative rules. The Vice President of Student Development may be assisted by legal counsel when in the opinion of the Vice President of Student Development the best interests of the student or the College would be served by such assistance.

(2) Notice

(a) The committee chairman shall by letter notify the student concerned of the date, time and place for the hearing. The letter shall specify a hearing date not less than three (3) nor more than ten (10) class days after the date of the letter. If the student is under 18 years of age, a copy of the letter shall be sent to the parents or guardian.

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

(c) The Student Discipline Committee may hold a hearing at any time if the student has actual notice of the date, time, and place of the hearing, and consents in writing thereto, and the President, or his designated representative in his absence, states in writing to the committee that, because of extra-ordinary circumstances the requirements are inappropriate.

(d) The notice shall specify whether the charge or charges are considered minor violations or major violations, shall direct the student to appear before the committee on the date and at the time and place specified, and shall advise the student of the following rights:

(i) To a private hearing;

(ii) To appear alone or with legal counsel (if charges have been evaluated as a major violation or if the College is represented by legal counsel);

(iii) To have his parents or legal guardian present at the hearing;

(iv) To know the identity of each witness who will testify against him;

(v) To cause the committee to summon witnesses, require the production of documentary and other evidence possessed by the College, and to offer evidence and argue in his own behalf;

(vi) To cross-examine each witness who testifies against him;

(vii) To have a stenographer present at the hearing to make a stenographic transcript of the hearing, at the student's expense, but the student is not permitted to record the hearing by electronic means;

(viii) To appeal to the Faculty-Student Board of Review, subject to the limitations established by the **Faculty-Student Board of Review** section.

(e) The Vice President of Student Development may suspend a student who fails without good cause to comply with a letter sent under this section, or, at his discretion, the Vice President of Student Development may proceed with the hearing in the student's absence.

(3) Preliminary Matters

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

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

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

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

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

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

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

(4) Procedure

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

(i) Representatives of the College Council,

(ii) A staff member of the college newspaper;

(iii) Representatives of the Faculty Association;

(iv) Student's legal counsel, and

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

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

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

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

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

(iv) The student may present his defense;

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

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

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

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

(5) Evidence

(a) Legal rules of evidence shall not apply to hearings before the Student Discipline Committee, and the committee may admit and give probative effect to evidence that possesses probative value and is commonly accepted by reasonable men in the conduct of their affairs. The committee shall exclude irrelevant, immaterial and unduly repetitious evidence. The committee shall recognize as privileged communications between a student and a member of the professional staff of the Health Center, Counseling and Guidance Center, or the Office of the Vice President of Student Development 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.

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

(c) All evidence shall be offered to the committee during the hearing and made a part of the hearing record. Documentary evidence may be

admitted in the form of copies of extracts, or by incorporation by reference. Real evidence may be photographed or described.

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

(6) Record

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

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

b. Faculty-Student Board of Review

(1) Right to Appeal

(a) In those cases in which the disciplinary penalty imposed was as prescribed in the section on **Penalties**, (6) Restitution through (11) Expulsion, the student may appeal the decision of the Student Discipline Committee, or the decision of the President in an interim action to the Faculty-Student Board of Review. Disciplinary actions taken under the section on **Penalties**, (1) Admonition through (5) Bar against readmission, cannot be appealed beyond the Student Discipline Committee. A student appeals by giving written notice to the Vice President of Student Development on or before the third class day after the day the decision or action is announced. This notice may be informal, but shall contain the student's name, the date of the decision or action, the name of his legal counsel, if any, and a simple request for appeal.

(b) Notice of appeal timely given suspends the imposition of penalty until the appeal is finally decided, but interim action may be taken as authorized under the section on **Disciplinary Disposition** which authorizes the President to take immediate interim disciplinary action.

(2) Board Composition

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

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

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

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

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

(3) Consideration of Appeal

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

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

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

(d) Appellate hearings will follow the procedure prescribed in this code.

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

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

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

(i) In violation of a federal or state law, board policy, college regulation, administrative rule, or authorized procedure.

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

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

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

(4) Petition for Administrative Review

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

(b) A petition for review is informal but shall contain, in addition to the information required, notice of appeal, the date of the Board of Review's action on the student's appeal and his reasons for disagreeing with the board's action. A student shall file his petition with the President on or before the third class day after the day the Board of Review announces its action on the appeal. If the President rejects the petition, and the student appellant wishes to petition the Chancellor, he shall file the petition with the Chancellor on or before the third class day after the President rejects the petition in writing.

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

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

5. Penalties

a. Authorized Disciplinary Penalties:

The Vice President of Student Development, the Student Discipline Committee, or the Faculty-Student Board of Review may impose one or more of the following penalties for violation of a board policy, college regulation, or administrative rule:

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

b. Definitions:

The following definitions apply to the penalties provided above:

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

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

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

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

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

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

(7) "Disciplinary suspension" may be either or both of the following:

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

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

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

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

(10) "Expulsion" is permanent severance from the College. This policy shall apply uniformly to all of the colleges of the Dallas County Community College District.

In the event any portion of this policy conflicts with the state law of Texas, the state law shall be followed.

6. Parking and Traffic

a. Reserved Parking Areas

These reserved areas are designated by signs; all other parking areas are open

and are non-reserved.
(1) Handicapped persons, college visitors
(2) Motorcycles

b. Tow Away Areas
(1) Handicapped persons area
(2) Fire lanes
(3) Parking or driving on campus in areas other than those designated for vehicular traffic
(4) Parking in "No Parking" zone
(5) Parking on courtyards

c. General Information
(1) College parking areas are regulated by state, municipal and campus statutes. College campus officers are commissioned to cite violators.
(2) All vehicles which park on the campus of the College must bear a parking decal emblem. The parking decal may be secured from the College Security Division or during fall and spring registration periods. No fee is charged for the decal.
(3) Placement of decal emblem:
(a) Cars: lower left corner of rear bumper.
(b) Motorcycles, motor bikes, etc.: gas tank
(4) Campus Speed Limits*
(a) 10 M.P.H. in parking areas
(b) 20 M.P.M. elsewhere on campus.
*Unless otherwise posted.
(5) All handicapped parking must be authorized and handicapped decal displayed on vehicle prior to parking in handicapped reserved areas.

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

e. Procedures
(1) All motor vehicles must be parked in the parking lots between the parking lines. Parking in all other areas, such as campus drives, curb areas, courtyards, and loading zones, will be cited.
(2) Citations may be issued for:
(a) Speeding (the campus speed limit is 20 M.P.H. except where posted)
(b) Reckless driving
(c) Double parking
(d) Driving wrong way in one-way lane
(e) Parking in "No Parking" lane
(f) Improper parking (parts of car outside the limits of a parking space)
(g) Parking in wrong area (for example, handicapped or "No Parking" areas)
(h) Parking trailers or boats on campus
(i) Parking or driving on campus in areas other than those designated for vehicular traffic
(j) Violations of all state statues regulating vehicular traffic
(k) Failure to display parking permit
(l) Collision with another vehicle or any sign or immovable object
(3) A citation is notice that a student's parking permit has been suspended. The service charge to reinstate the parking and driving permit must be paid at the Business Office. Failure to pay the service charge will result in the impoundment of a vehicle that is parked on campus and whose decal has been suspended.
(4) A person who receives a campus citation shall have the right within ten days to appeal in writing to the Vice President of Business, accompanied by whatever reason the person feels that the citation should not have been issued.
(5) If it becomes necessary to remove an improperly parked vehicle, an independent wrecker operator may be called. The owner of the vehicle will be charged the wrecker fee in addition to the service charge for reinstatement of driving and parking privileges.
(6) Visitors to campus are also required to follow college regulations.
(7) The service charge for reinstatement of the parking and driving permit will be $5.00 per citation.
(8) Four citations per car during an academic year will result in permanent suspension of parking and driving permit for the balance of that academic year. A new total commences on August 1, of each year. A fee may be assessed for unauthorized parking in an area designated for handicapped persons. (Not to exceed $200).
(9) The College is not responsible for the theft of vehicles on campus or their contents.

Student Grievance Procedure

A copy of the Student Grievance Procedure designed to provide students with the opportunity to question conditions which the student believes impede his/her education or instruction is available in the office of the Vice President of Student Development.

RECIPROCAL TUITION AGREEMENT

TCJC PROGRAMS

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

Program	Campus*
Agribusiness Technology	NORTHWEST
Banking and Finance	NORTHEAST
Business	NORTHEAST, NORTHWEST, SOUTH
Civil/Construction	NORTHEAST
Dental Hygiene	NORTHEAST
Emergency Medical Technology	NORTHEAST
Fashion Merchandising	NORTHEAST
Industrial Supervision	SOUTH
Major Appliance Repair	SOUTH
Marketing	NORTHEAST, NORTHWEST, SOUTH
Media Communications	NORTHEAST
Medical Record Technology	NORTHEAST
Mental Health/Mental Retardation Technology	NORTHEAST
Motorcycle Service Technician	NORTHWEST
Nondestructive Evaluation Technology	SOUTH
Physical Therapist Assistant	NORTHEAST
Consumer Electronics Technician	SOUTH
Small Gasoline Engine Repair	NORTHEAST
Surveying Technology	NORTHEAST

DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

1988-89 Technical/Occupational Programs Offered On Our Campuses

Career Education Programs	BHC	CVC	EFC	ECC	MVC	NLC	RLC
Accounting Associate	•	•	•	•	•	•	•
Advertising Art	•						
Air Conditioning & Refrigeration—Residential		•	•			•	
Air Conditioning & Refrigeration Technology			•				
Animal Medical Technology		•					
Apparel Design				•			
Architectural Technology				•			
Associate Degree Nursing	•			•			
LVN Option				•			
Auto Body Technology			•				
Automotive Technology		•	•				
Dealership-Sponsored Technician	•						
Electronic Engine Control Technician	•						
Service Technician	•						
Automotive Technology Apprenticeship		•					
Aviation Technology							
Career Pilot					•		
Air Cargo Transport					•		
Air Traffic Control					•		
Aircraft Dispatcher					•		
Airline Marketing					•		
Fixed Base Operations/Airport Management					•		
Carpentry						•	
Child Development Associate	•		•				
Administrative	•		•				
CDA Training Certificate	•		•				
Infant-Toddler	•		•				
Special Child Certificate	•		•				
Commercial Music							
Arranger/Composer/Copyist		•					
Music Retailing		•					
Performing Musician		•					
Recording Technology		•					
Computer Information Systems							
Business Computer Assistant				•			
Business Computer Information Systems	•	•	•	•	•	•	•
Business Computer Programmer	•	•	•	•	•	•	•
Computer Center Specialist				•			
Computer Operations Technician				•			
Personal Computer Support				•	•		•
Construction Management & Technology							•
Criminal Justice				•			
Dental Assisting Technology				•			
Diesel Mechanics						•	
Digital Electronics			•				
Drafting & Computer Aided Design			•		•		
Electronic Design			•				
Educational Personnel							•
Bilingual/ESL							•
Educational Assistant							•
Electrical Technology						•	
Electronic Telecommunications			•		•	•	
Electronics Technology					•	•	
Avionics					•		
Enginnering Technology							
Electro-Mechanical	•						•
Electronic Controls	•						•
Electronic Quality Control	•						•

Career Education Programs	BHC	CVC	EFC	ECC	MVC	NLC	RLC
Industrial Technology	•				•		
Manufacturing Engineering	•						•
Mechanical Quality Control							•
Mechanical Technology							•
Quality Control							•
Robotics Technology					•		
Robotics and Fluid Power	•				•		•
Fashion Marketing	•	•					
Financial Management							•
Fire Protection Technology				•			
Food And Hospitality Service				•			
Graphic Communications			•				
Graphic Arts			•				
Interior Design				•			
Interpreter Training Program			•				
Sign Language Studies			•				
Legal Assistant				•			
Machine Parts Inspection					•		
Machine Shop					•		
Management Careers							
Administrative Management	•	•	•	•	•	•	•
Mid-Management	•	•	•	•	•	•	•
Postal Service Administration					•		
Sales, Marketing & Retail Management	•	•					
Small Business Management		•			•		•
Transportation and Logistics Management			•				
Medical Assisting Technology				•			
Medical Laboratory Technology				•			
Medical Transcription				•			
Motorcycle Mechanics		•					
Office Careers							
Administrative Assistant	•	•	•	•	•	•	•
Legal Secretary	•	•	•	•	•	•	•
General Office Certificate	•	•	•	•	•	•	•
Office Information Systems Specialist	•	•	•	•	•	•	•
Word Processing Operator	•	•	•	•	•	•	•
Ornamental Horticulture Technology							
Greenhouse Florist							•
Landscape Management							•
Landscape Nursery							•
Florist							•
Landscape Gardener							•
Outboard Marine Engine Mechanics		•					
Pattern Design				•			
Physical Fitness Technology						•	
Radiologic Sciences							
Diagnostic Medical Sonography				•			
Radiography Technology				•			
Real Estate						•	•
Respiratory Therapy Technology				•			
Small Engine Mechanics		•					
Social Work Associate			•				
Human Services			•				
Surgical Technology				•			
Surgical Technology for Graduate R.N.				•			
Video Technology						•	
Vocational Nursing				•			
Welding Technology					•		

BHC — Brookhaven College
CVC — Cedar Valley College
EFC — Eastfield College
ECC — El Centro College
MVC — Mountain View College
NLC — North Lake College
RLC — Richland College

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 emphasizes bookkeeping procedures and practices should consider the General Office Certificate with elective emphasis on accounting careers. The General Office Certificate is available in the Office Careers Program.

		CREDIT HOURS
SEMESTER I		
ACC 201	Principles of Accounting I	3
BUS 105	Introduction to Business	3
ENG 101	Composition I	3
MTH 130	Business Mathematics or	
MTH 111	Mathematics for Business and Economics	3
OFC 160	Office Calculating Machines	3
		15
SEMESTER II		
ACC 202	Principles of Accounting II	3
ENG 102	Composition II	3
CIS 103	Introduction to Computer Information Systems	3
MGT 136	Principles of Management	3
OFC 172	Beginning Typing*	3
SC 101	Introduction to Speech Communication	3
		18
SEMESTER III		
ACC 203	Intermediate Accounting I	3
ACC 204	Managerial Accounting	3
ACC 250	Microcomputer-Based Accounting Applications	3
ECO 201	Principles of Economics I	3
†Elective		3
ACC 803	Cooperative Work Experience or	
ACC 804	Cooperative Work Experience or	
†††Elective		3-4
		18-19
SEMESTER IV		
ACC 238	Cost Accounting or	
ACC 239	Income Tax Accounting	3
BUS 234	Business Law	3
ECO 202	Principles of Economics II	3
OFC 231	Business Communications	3
††Elective		3
		15
Minimum Hours Required		66

†Elective must be selected from the following:

ANT 100	Introduction to Anthropology	3
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 105	Basic Process of Interpersonal Relationships	3
HD 106	Personal and Social Growth	3
PSY 101	Introduction to Psychology	3
PSY 103	Human Sexuality	3
PSY 131	Applied Psychology and Human Relations	3
SOC 101	Introduction to Sociology	3
SOC 102	Social Problems	3

††Elective must be selected from the following:

ART 104	Art Appreciation	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
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		

†††Electives may be selected from the following:

Any CIS or CS Programming Course		
ACC 205	Business Finance	3
ACC 207	Intermediate Accounting II	3
ACC 238	Cost Accounting	3
ACC 239	Income Tax Accounting	3
ACC 703-713	Cooperative Work Experience	3
ACC 704-714	Cooperative Work Experience	4
ACC 813	Cooperative Work Experience	3
ACC 814	Cooperative Work Experience	4
BUS 143	Personal Finance	3
BUS 237	Organizational Behavior	3
CIS 262	Contemporary Topics in Computer Information Systems	3
CIS 264	Special Topics in Computer Information Systems	4
MKT 206	Principles of Marketing	3

*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
SEMESTER I		
ACR 120	Principles of Refrigeration or	6
ACR 121	Principles of Refrigeration I and	(3)
ACR 122	Principles of Refrigeration II	(3)
ACR 125	Principles of Electricity or	6
ACR 126	Principles of Electricity I and	(3)
ACR 127	Principles of Electricity II	(3)
MTH 195	Technical Mathematics I or	
MTH 139	Applied Mathematics	3
		15
SEMESTER II		
ACR 130	Residential Cooling Systems or	6
ACR 131	Residential Cooling Systems I and	(3)
ACR 132	Residential Cooling Systems II	(3)
ACR 140	Residential Heating Systems or	6
ACR 141	Residential Heating Systems I and	(3)
ACR 142	Residential Heating Systems II	(3)
PHY 131	Applied Physics	4
		16
SEMESTER III		
ACR 200	Contractor Estimating or	6
ACR 209	Contractor Estimating I and	(3)
ACR 210	Contractor Estimating II	(3)
ACR 212	System Servicing or	6
ACR 213	System Servicing I and	(3)
ACR 214	System Servicing II	(3)
COM 131	Applied Communications or	
ENG 101	Composition I	3
		15
SEMESTER IV		
SC 101	Introduction to Speech Communication	3
PSY 131	Applied Psychology and Human Relations	3
+ Electives		8-9
		14-15
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 703-713	Cooperative Work Experience	3
ACR 704-714	Cooperative Work Experience	4
ACR 803-813	Cooperative Work Experience	3
ACR 804-814	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
MGT 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

Cedar Valley, Eastfield, and North Lake only

(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.

		CREDIT HOURS
SEMESTER I		
ACR 120	Principles of Refrigeration or	6
ACR 121	Principles of Refrigeration I and	(3)
ACR 122	Principles of Refrigeration II	(3)
ACR 125	Principles of Electricity or	6
ACR 126	Principles of Electricity I and	(3)
ACR 127	Principles of Electricity II	(3)
MTH 195	Technical Mathematics I or	
MTH 139	Applied Mathematics	3
		15
SEMESTER II		
ACR 130	Residential Cooling Systems or	6
ACR 131	Residential Cooling Systems I and	(3)
ACR 132	Residential Cooling Systems II	(3)
ACR 140	Residential Heating Systems or	6
ACR 141	Residential Heating Systems I and	(3)
ACR 142	Residential Heating Systems II	(3)
+ Elective		3-4
		15-16
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

CARPENTRY

North Lake only

This program is designed to prepare the student for entry-level employment as a carpenter in the building construction field. Specific training is provided in the use and care of hand tools and power equipment, scheduling, layout and construction of residential and light commercial type buildings, cabinet-making, blueprint reading and cost estimating. 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.

CARPENTRY

North Lake only

(Associate Degree)

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

		CREDIT HOURS
SEMESTER I		
CAR 101	Woodworking Tools and Materials	3
CAR 102	Site Preparation	3
CAR 103	Construction Safety	1
BPR 177	Blueprint Reading	2
COM 131	Applied Communications	3
MTH 195	Technical Mathematics I	3
		15
SEMESTER II		
CAR 104	Residential Framing	3
CAR 105	Roof Framing I	3
CAR 106	Exterior Trim and Finish	3
CAR 107	Construction Cost Estimating	3
SS 131	American Civilization	3
		15
SEMESTER III		
CAR 201	Cabinet Building I	3
CAR 205	Roof Framing II	3
CAR 208	Interior Finish I	3
BUS 105	Introduction to Business	3
SC 101	Introduction to Speech Communication	3
		15
SEMESTER IV		
CAR 202	Cabinet Building II	3
CAR 203	Stair Building	3
CAR 703	Cooperative Work Experience or	3
CAR 704	Cooperative Work Experience	(4)
ACC 131	Bookkeeping I	3
PSY 131	Applied Psychology and Human Relations	3
		15-16
Minimum Hours Required		60

CARPENTRY

North Lake only

(Certificate)

The Carpentry Certificate is designed to prepare the student for entry-level employment as a carpenter in all phases of residential and light commercial construction.

		CREDIT HOURS
SEMESTER I		
CAR 101	Woodworking Tools and Materials	3
CAR 102	Site Preparation	3
CAR 103	Construction Safety	1
BPR 177	Blueprint Reading	2
MTH 195	Technical Mathematics I	3
		12
SEMESTER II		
CAR 104	Residential Framing	3
CAR 105	Roof Framing I	3
CAR 106	Exterior Trim and Finish	3
CAR 107	Construction Cost Estimating	3
		12
SEMESTER III		
CAR 201	Cabinet Building I	3
CAR 205	Roof Framing II	3
CAR 208	Interior Finish I	3
		9
SEMESTER IV		
CAR 202	Cabinet Building II	3
CAR 203	Stair Building	3
CAR 703	Cooperative Work Experience or	3
CAR 704	Cooperative Work Experience	(4)
		9-10
Minimum Hours Required		42

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 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
SEMESTER I		
CIS 103	Introduction to Computer Information Systems	3
BUS 105 MGT 136	Introduction to Business or Principles of Management	3
MTH 111	Mathematics for Business and Economics I	3
ENG 101	Composition I	3
+ Elective		3
		15
SEMESTER II		
CIS 162	COBOL Programming I	4
MTH 112	Mathematics for Business and Economics II	3
SC 101	Introduction to Speech Communication	3
CIS 150	Computer Program Logic and Design	3
ACC 201	Principles of Accounting I*	3
		16
SEMESTER III		
CIS 164	COBOL Programming II	4
ECO 201	Principles of Economics I	3
ACC 202	Principles of Accounting II	3
++ Elective		3
+++ Elective		3-4
		16-17
SEMESTER IV		
CIS 210	Assembly Language I	4
ECO 202	Principles of Economics II	3
Any CIS/CS or Accounting course		3
++++ Elective		3-4
		13-14
Minimum Hours Required:		60

+ Elective—must be selected from the following:

Anthropology
Government
History
Human Development
Psychology
Sociology

++ Elective—must be selected from the following:

ART 104	Art Appreciation	3
ENG 102	Composition II	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
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

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

Any 200 level accounting course not listed.

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

CIS 167	C Programming	4
CIS 168	4th Generation Language Concepts	3
CIS 170	RPG Programming	3
CIS 172	BASIC Programming	3
CIS 173	PASCAL Programming for Business	3

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. Both courses must be taken for equivalent credit to 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. 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
SEMESTER I		
CIS 103	Introduction to Computer Information Systems	3
BUS 105 / MGT 136	Introduction to Business or Principles of Management	3
MTH 115	College Mathematics I*	3
ENG 101	Composition I	3
PSY 131 / PSY 101 / HD 105 / HD 107	Applied Psychology and Human Relations or Introduction to Psychology or Interpersonal Relationships or Developing Leadership Behavior	3
		15
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 I**	3
SC 101	Introduction to Speech Communication	3
		16
SEMESTER III		
CIS 164	COBOL Programming II	4
CIS 205	JCL and Operating Systems	4
ACC 202	Principles of Accounting II	3
+ Elective		3-4
++ Elective		3
		17-18
SEMESTER IV		
CIS 210	Assembly Language I	4
CIS 225	Systems Analysis & Design	4
CIS 258 / CIS 254	On-Line Applications or Data Base Systems	4
+++ Elective		3-4
		15-16
Minimum Hours Required:		63

+ Electives—must be selected from the following: Any CIS or CS course (including CIS 700-800 Cooperative Work Experience).

BUS 105	Introduction to Business	3
BUS 234	Business Law	3
BUS 237	Organizational Behavior	3
ECO 201	Principles of Economics I	3
ECO 202	Principles of Economics II	3
MGT 136	Principles of Management	3
MKT 206	Principles of Marketing	3
MTH 202	Introductory Statistics	3

Other 200 level Accounting courses.

++ Electives—must be selected from the following:

ART 104	Art Appreciation	3
ENG 102	Composition II	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
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

+++ 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 168	4th Generation Language Concepts	3
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

*MTH 111 and MTH 130 may be substituted

**ACC 131 Bookkeeping I and ACC 132 Bookkeeping II may be substituted for ACC 201 Principles of Accounting I

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

(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.

		CREDIT HOURS
SEMESTER I		
DME 104	Caterpillar Diesel Engine	5
DME 105	Cummins Diesel Engine Overhaul	5
DME 127	Shop Practices	2
MTH 139	Applied Mathematics	3
+ Elective		1-3
		16-18
SEMESTER II		
DME 106	Detroit Diesel Engine Overhaul	5
DME 126	Heavy Truck Air Conditioning	2
DME 147	Heavy Truck Electrical Systems	3
DME 148	Diesel Engine Air Induction, Cooling and Lubrication Systems	2
PHY 131	Applied Physics	4
		16
SEMESTER III		
DME 123	Air Brake Systems	2
DME 125	Automatic Transmissions	2
DME 128	Standard Transmissions and Heavy Duty Clutches	3
DME 129	Chassis, Differentials and Drive Lines	3
DME 704	Cooperative Work Experience	4
SC 101	Introduction to Speech Communication	3
		17

SEMESTER IV		
DME 137	Oxygen/Acetylene and Arc Welding	3
DME 141	Caterpillar Diesel Engine Tune-Up and Fuel System	2
DME 142	Cummins Diesel Engine Tune-Up and Fuel System	2
DME 143	Detroit Diesel Engine Tune-Up and Fuel System	2
ENG 101	Composition I or	
COM 131	Applied Communciations	3
BUS 105	Introduction to Business or	
ACC 131	Bookkeeping I or	
HST 102	History of the United States	3
		15

Minimum Hours Required 64-66

+ Elective: This elective course must receive the 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.

		CREDIT HOURS
SEMESTER I		
DME 104	Caterpillar Diesel Engine	5
DME 105	Cummins Diesel Engine	5
DME 127	Shop Practices	2
		12
SEMESTER II		
DME 123	Air Brake Systems	2
DME 125	Automatic Transmissions	2
DME 128	Standard Transmissions and Heavy Duty Clutches	3
DME 129	Chassis, Differentials and Drive Lines	3
DME 137	Fundamentals of Oxygen/Acetylene and Arc Welding	3
		13
SEMESTER III		
DME 126	Heavy Duty Truck Air Conditioning	2
DME 141	Caterpillar Diesel Engine Tune-Up and Fuel Systems	2
DME 142	Cummins Diesel Engine Tune-Up and Fuel Systems	2
DME 143	Detroit Diesel Engine Tune-Up and Fuel Systems	2
DME 147	Heavy Truck Electrical Systems	3
DME 148	Diesel Engine Air Induction Cooling and Lubrication Systems	2
		13
SEMESTER IV		
DME 106	Detroit Diesel Engine Overhaul	5
DME 703	Cooperative Work Experience	3
MTH 139	Applied Mathematics	3
		11
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.

		CREDIT HOURS
SEMESTER I		
ELE 106	Fundamentals of Electricity	4
ELE 107	Electrical Transformers	4
ELE 108	General Electrical Codes	2
MTH 195	Technical Mathematics I	3
SC 101	Introduction to Speech Communication	3
		16
SEMESTER II		
ELE 115	Low Voltage Circuits	3
ELE 116	General Electrical Wiring	3
ELE 117	General Electrical Planning	4
ELE 118	Commercial Codes	2
COM 131	Applied Communications	3
		15
SEMESTER III		
ELE 205	Commercial Wiring	3
ELE 206	Commercial Planning	4
ELE 207	Industrial Planning	2
ELE 208	Industrial Codes	2
ELE 703	Cooperative Work Experience or	3
ELE 704	Cooperative Work Experience	(4)
CIS 103	Introduction to Computer Information Systems	3
		17-18
SEMESTER IV		
ELE 213	Electrical Motor Fundamentals	2
ELE 214	Solid State Controls	3
ELE 216	Motor Controls	3
ELE 218	Electrical Design	3
PSY 131	Applied Psychology and Human Relations	3
ELE 803	Cooperative Work Experience or	
ELE 804	Cooperative Work Experience or	
Elective		3-4
		17-18
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.

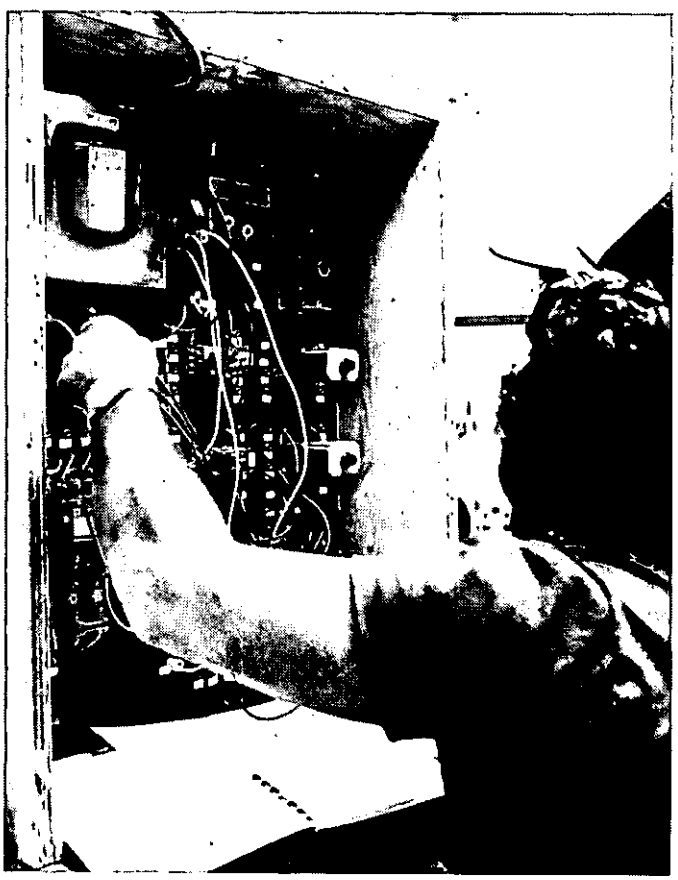
ELECTRICAL TECHNOLOGY

North Lake only

(Certificate)

Completion of all courses listed below qualifies a student for a Certificate in Electrical Technology. The courses may be taken in any order after consultation with the instructor.

		CREDIT HOURS
SEMESTER I		
ELE 105	Introduction to Electrical Technology	2
ELE 106	Fundamentals of Electricity	4
ELE 107	Electrical Transformers	4
ELE 108	General Electrical Codes	2
MTH 195	Technical Mathematics I	3
		15
SEMESTER II		
ELE 115	Low Voltage Circuits	3
ELE 116	General Electrical Wiring	3
ELE 117	General Electrical Planning	4
ELE 118	Commercial Codes	2
COM 131	Applied Communications	3
		15
Minimum Hours Required		30



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.

		CREDIT HOURS
SEMESTER I		
ET 101	Introduction to Telecommunications	4
ET 190	DC Circuits and Electrical Measurements	4
MTH 195	Technical Mathematics I	3
ENG 101	Composition I	3
PSY 101 PSY 131	Introduction to Psychology or Applied Psychology and Human Relations	3
		17
SEMESTER II		
ET 191	AC Circuits	4
ET 192	Digital Computer Principles	3
ET 193	Active Devices	4
SC 101	Introduction to Speech Communication	3
+ + Electives		3-4
		17-18
SEMESTER III		
ET 292	Telephony Switching Systems	4
ET 293	Basic Radio Circuitry	4
+ + Electives		3-4
+ + Electives		3-4
		14-16
SEMESTER IV		
ET 294	High Frequency Transmission Systems	4
ET 295	Telecommunication Signaling	4
ET 296	System Installation and Testing	6
+ Elective(s)		3-4
		17-18
Minimum Hours Required		65

+ Electives must be chosen from the following:

ACC 131	Bookkeeping I	3
ART 104	Art Appreciation	3
BUS 105	Introduction to Business	3
BUS 143	Personal Finance	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
MUS 104	Music Appreciation	3
OFC 172	Beginning Typing	3
PHY 131	Applied Physics	4
SPA 101	Beginning Spanish	4

+ + Electives must be selected from the following:

CHM 101	General Chemistry	4
CS 111	Computing Science I	3
CS 112	Computing Science II	3
DFT 182	Technician Drafting	2
DFT 231	Electronic Drafting	3
DFT 240	Printed Circuit Design	3
DFT 243	Advanced Printed Circuit Design	3
DFT 245	Computer Aided Design	3
ET 135	DC-AC Theory and Circuit Analysis	6
ET 170	Printed Circuit Board Manufacturing	1
ET 172	Soldering	1
ET 174	Oscilloscope Utilization	1
ET 194	Instrumentation	4
ET 200	Special Applications of Electronics	4
ET 238	Linear Integrated Circuits	4
ET 260	Sinusoidal Circuits	4
ET 261	Pulse and Switching Circuits	4
ET 263	Digital Computer Theory	4
ET 264	Digital Systems	4
ET 265	Digital Research	4
ET 266	Computer Applications	4
ET 267	Microprocessors	4
ET 268	Microprocessor Troubleshooting and Interface	4
ET 290	Advanced Electronic Devices	4
ET 291	Linear Integrated Circuit Applications	4
ET 704	Cooperative Work Experience	4
ET 713	Cooperative Work Experience	3
ET 804	Cooperative Work Experience	4
EGR 101	Engineering Analysis	2
EGR 105	Engineering Design Graphics	3
EGR 204	Electrical Systems Analysis	3
MTH 196	Technical Mathematics	3
MTH 101	College Algebra	3
MTH 102	Plane Trigonometry	3
MTH 104	Elementary Functions and Coordinate Geometry I	5
MTH 105	Elementary Functions and Coordinate Geometry II	5
MTH 106	Elementary Functions and Coordinate Geometry III	5
MTH 121	Analytic Geometry	3
MTH 124	Calculus	5
MTH 202	Introductory Statistics	3
MTH 221	Linear Algebra	3
MTH 225	Calculus II	4
MTH 226	Calculus III	3
MTH 230	Differential Equations	3
PHY 111	Introductory General Physics	4

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		
ET 190	DC Circuits and Electrical Measurements or	4
ET 135	DC-AC Theory and Circuit Analysis	(6)
COM 131	Applied Communications or	
ENG 101	Composition I	3
DFT 182	Technician Drafting or	2
DFT 183	Basic Drafting or	(4)
DFT 231	Electronic Drafting	(3)
MTH 195	Technical Mathematics I or	
MTH 101	College Algebra	3
+ Elective		3
		15-19
SEMESTER II		
ET 191	AC Circuits (Unless ET 135 Completed)	(4)
ET 193	Active Devices	4
ET 194	Instrumentation	3
SC 101	Introduction to Speech Communication	3
MTH 196	Technical Mathematics II or	
MTH 102	Plane Trigonometry	3
		13-17
SEMESTER III		
ET 231	Special Circuits with Communications Applications	4
ET 232	Analysis of Electronics Logic and Switching Circuits	4
ET 238	Linear Integrated Circuits	4
ET 240	Electronic Theory and Application of Digital Computers	4
PHY 131	Applied Physics or	
PHY 117	Concepts in Physics	3
		20
SEMESTER IV		
ET 234	Electronic Circuits & Systems	3
ET 237	Modular Memories & Microprocessors	4
ET 239	Microwave Theory	3
+ + Elective		7-8
		17-18
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 Relationships	3

+ +Electives—must be selected from the following:

ET 210	Basic CRT Display	4
ET 268	Microprocessor Troubleshooting and Interface	4
ET 803	Cooperative Work Experience	3
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, personnel administration) but also encompasses the critical areas of business operations (principles of marketing, accounting, business law).

		CREDIT HOURS
SEMESTER I		
MGT 136	Principles of Management	3
BUS 105	Introduction to Business	3
ENG 101	Composition I	3
MTH 111	Mathematics for Business and Economics I or	
MTH 130	Business Mathematics	3
+ Elective		3
		15
SEMESTER II		
MKT 206	Principles of Marketing	3
ACC 201	Principles of Accounting I	3
ENG 102	Composition II	3
CIS 103	Introduction to Computer Information Systems	3
+ + Elective		3
		15
SEMESTER III		
ACC 202	Principles of Accounting II	3
BUS 234	Business Law	3
ECO 201	Principles of Economics I	3
PSY 131	Applied Psychology and Human Relations	3
SC 101	Introduction to Speech Communication	3
		15
SEMESTER IV		
MGT 242	Personnel Administration	3
BUS 237	Organizational Behavior	3
ECO 202	Principles of Economics II	3
OFC 231	Business Communications	3
+ + Elective		3
+ + + Elective		3
		18
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:

MGT 153	Small Business Management	3
MGT 171	Introduction to Supervision	3
MGT 212	Special Problems in Business	1
MGT 703	Cooperative Work Experience	3
MGT 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 Process of Interpersonal Relationship	3
HD 106	Personal and Social Growth	3
ANT 100	Introduction to Anthropology	3
PSY 103	Human Sexuality	3
PSY 101	Introduction to Psychology	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 150	Management Training	4
MGT 154	Management Seminar: Role of Supervision	2
BUS 105	Introduction to Business	3
ENG 101	Composition I	3
		15
SEMESTER II		
MGT 151	Management Training	4
MGT 155	Management Seminar: Personnel Management	2
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
+ Elective		3
		18
SEMESTER III		
MGT 250	Management Training	4
MGT 254	Management Seminar: Organizational Development	2
ACC 201	Principles of Accounting I*	3
ECO 201	Principles of Economics I	3
PSY 131	Applied Psychology and Human Relations	3
SC 101	Introduction to Speech Communication	3
		18
SEMESTER IV		
MGT 251	Management Training	4
MGT 255	Management Seminar: Planning Strategy and the Decision Process	2
ECO 202	Principles of Economics II	3
++ Elective		3
+++ Elective		3
		15
	Minimum Hours Required:	**66**

+ 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—may be selected from the following:

MGT 153	Small Business Management	3
MGT 212	Special Problems in Business	1
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

+++ 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
SOC 101	Introduction to Sociology	3
SOC 102	Social Problems	3
HD 105	Basic Processes of Interpersonal Relationship	3
HD 106	Personal and Social Growth	3
ANT 100	Introduction to Anthropology	3
PSY 100	Human Sexuality	3
PSY 101	Introduction to Psychology	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 Legal Secretary.

		CREDIT HOURS
CORE CURRICULUM		
(For all first year students in Office Careers)		
SEMESTER I		
ENG 101	Composition I	3
MTH 130	Business Mathematics	3
OFC 150	Automated Filing Procedures	3
**OFC 160	Office Calculating Machines	3
**OFC 172	Beginning Typing*	3
BUS 105	Introduction to Business	3
		18
SEMESTER II		
ENG 102	Composition II	3
OFC 162	Office Procedures	3
OFC 173	Intermediate Typing*	3
ACC 131	Bookkeeping I or	
ACC 201	Principles of Accounting	3
CIS 103	Introduction to Computer Information Systems	3
**OFC 179	Office Information Systems Concepts	2
**OFC 182	Introduction to Word Processing Equipment	1
		18
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

(Associate Degree)

The primary objective of the Administrative Assistant Option to the Office Careers Program is to prepare students for positions as assistants to administrators within public 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		
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
OFC 159	Beginning Shorthand or	
OFC 103	Speedwriting	4
		17
SEMESTER IV		
HUM 101	Introduction to the Humanities	3
OFC 283	Specialized Software	1
MGT 136	Principles of Management or	
BUS 237	Organizational Behavior	3
OFC 166	Intermediate Shorthand or	
OFC 106	Speedwriting Dictation and Transcription	4
OFC 803, 804	Cooperative Work Experience	3-4
		14-15
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
		16
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 803-804	Cooperative Work Experience	3-4
		13-14
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 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 — GENERAL OFFICE

Offered at all seven campuses

(Certificate)

The General Office Certificate Program with a clerical emphasis is designed to provide the student with a basic working knowledge of office procedures.

		CREDIT HOURS
SEMESTER I		
ENG 101	Composition I	3
MTH 130	Business Mathematics	3
**OFC 160	Office Calculating Machines	3
**OFC 172	Beginning Typing*	3
BUS 105	Introduction to Business	3
CIS 103	Introduction to Computer Information Systems	3
		18
SEMESTER II		
OFC 162	Office Procedures	3
OFC 173	Intermediate Typing*	3
**OFC 190	Principles of Word Processing	4
OFC 231	Business Communications	3
ACC 131	Bookkeeping I or	
ACC 201	Principles of Accounting	3
		16
Minimum Hours Required		34

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

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/informations 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	Introducation 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 ACC 201	Bookkeeping I or Principles of Accounting	3
		16
SEMESTER III		
SC 101	Introduction to Speech Communication	3
PSY 131 HD 105	Applied Psychology and Human Relations or 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 803-804	Cooperative Workd 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 176, 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.

PHYSICAL FITNESS TECHNOLOGY

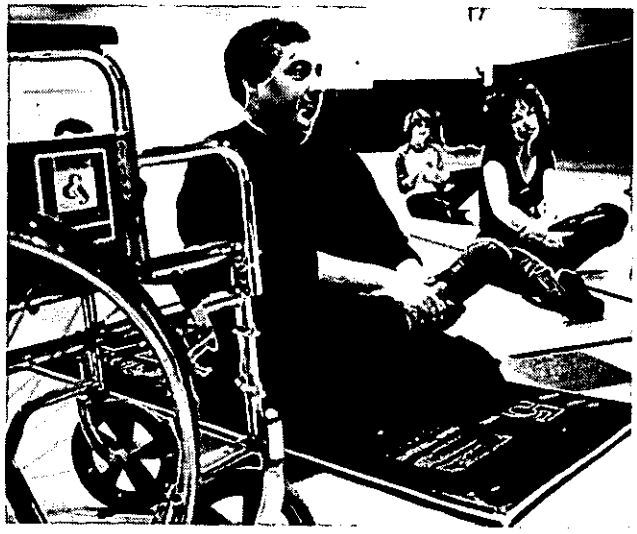
North Lake only

(Associate)

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.

		CREDIT HOURS
SEMESTER I		
ENG 101	Composition I	3
BIO 120	Introduction to Human Anatomy and Physiology	4
PEH 115	Physical Fitness	1
PFT 101	Exercise Science	3
PFT 110	Aerobic Training Theory and Application	4
		15
SEMESTER II		
SC 101	Introduction to Speech Communication	3
BIO 121	Introduction to Human Anatomy and Physiology	4
*PEH Activity		1
PFT 120	Fitness and Exercise Testing I	4
PFT 111	Strength Training Theory and Application	4
		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
		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
		15-16
Minimum Hours Required		60

+Elective — must be selected from the following:

PFT 130	Basic Nutrition	3
PFT 220	Fitness and Exercise Testing II	4
PFT 230	Prevention and Care of Exercise Injury	3
PFT 250	Psychosocial Aspects of Sport and Exercise	3
PFT 281	Selected Topics in Physical Fitness Technology	1
PFT 283	Selected Topics in Physical Fitness Technology	3
PFT 713	Cooperative Work Experience	3
PFT 803	Cooperative Work Experience	3

++Elective — must be selected from the following:

ACC 201	Principles of Accounting I	3
BUS 105	Introduction to Business	3
CHM 101	General Chemistry	4
CIS 105	Introduction to Computer Information Systems	3
ET 200	Special Applications of Electronics	4
HD 105	Basic Processes of Interpersonal Relationships	3
MGT 136	Principles of Management	3
MKT 230	Salesmanship	3
PHY 111	Introductory General Physics	4
VFT 106	Video Production I	4

*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

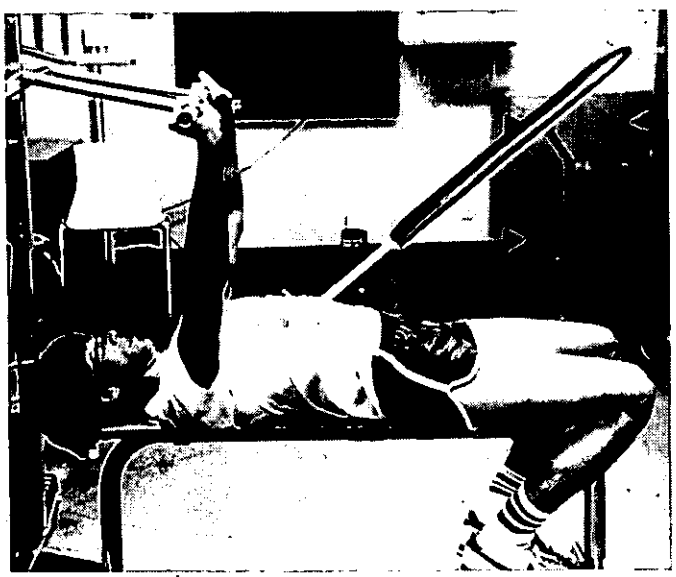
North Lake only

(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.

		CREDIT HOURS
SEMESTER I		
BIO 120	Introduction to Human Anatomy and Physiology	4
PEH 115	Physical Fitness	1
PEH 257	Advanced First Aid and Emergency Care	3
PFT 101	Exercise Science	3
PFT 110	Aerobic Training Theory and Application	4
		15
SEMESTER II		
BIO 121	Introduction to Human Anatomy and Physiology	4
PFT 111	Strength Training Theory and Application	4
PFT 120	Fitness and Exercise Testing I	4
†Elective		3-4
		15-16
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 HOURS
SEMESTER I		
RE 130	Real Estate Principles	3
RE 131	Real Estate Finance	3
BUS 105	Introduction to Business	3
COM 131 / ENG 101	Applied Communications or Composition I	3
MTH 130 / MTH 111	Business Mathematics or Mathematics for Business and Economics I	3
		15
SEMESTER II		
RE 133	Real Estate Marketing	3
RE 135	Real Estate Appraisal	3
RE 136	Real Estate Law	3
SC 101	Introduction to Speech Communication	3
Elective (Psychology, Sociology, or Human Development)		3
		15
SEMESTER III		
ECO 201 / ECO 105	Principles of Economics I or Economics of Contemporary Social Issues	3
RE 230	Real Estate Office Management/Brokerage	3
RE 250	Real Estate Internship I*	4
RE 254	Real Estate Seminar I*	2
+ Elective		3
		15
SEMESTER IV		
ACC 201	Principles of Accounting I	3
GVT 201	American Government	3
+ Elective		9
		15
Minimum Hours Required:		60

+ Recommended Electives

RE 138	Real Estate Law Contracts	3
RE 233	Commerical and Investment Real Estate	3
RE 235	Property Management	3
**RE 251	Real Estate Internship	4
**RE 255	Real Estate Seminar	2
RE 240	Special Problems in Real Estate	1
RE 241	Special Problems in Real Estate	3
ACC 202	Principles of Accounting II	3
ECO 202	Principles of Economics II	3
SC 105	Fundamentals of Public Speaking	3

*RE 250 and RE 254 must be taken concurrently. Preliminary interview by real estate coordinator required.

**RE 251 and RE 255 must be taken concurrently. Preliminary interview by real estate coordinator required.

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:

		CREDIT HOURS
SEMESTER I		
VFT 101	Introduction to Video Technology	3
VFT 103	Television Lighting	3
VFT 106	Video production I	4
ENG 101	Composition I	3
MTH 101 or MTH 195	College Algebra or Technical Mathematics I	3
		16
SEMESTER II		
VFT 110	Video Production II	4
VDT 112	Video Editing and Post Production I	4
VFT 115	Audio Production	3
SC 101	Introduction to Speech Communication	3
		14
SEMESTER III		
VFT 203	Video Production III	4
VFT 205	Broadcast Engineering I	3
PHY 131	Applied Physics	4
HUM 101 or ART 104 or MUS 104	Introduction to the Humanities or Art Appeciation or Music Appreciation	3
		14
SEMESTER IV		
VFT 213	Video Editing and Post Production II	4
VFT 214	Business Aspects of Video Management	3
VFT 803 or VFT 804	Cooperative Work Experience or Cooperative Work Experience	3 (4)
CIS 103	Introduction to Computer Information Systems	3
†Elective		3
		16-17
Minimum Hours Required:		60

†Electives — Must be selected from the following:

VFT 215	Broadcast Engineering II	3
VFT 210	Video Production IV	4
VFT 218	Scriptwriting and Property Management	3
VFT 220	Computer Applications to Video Production	3
VFT 226	Music Video Production	3
VFT 232	Broadcast, Cable, and Satellite Technology	3
VFT 813 or VFT 814	Cooperative Work Experience or Cooperative Work Experience	3 4

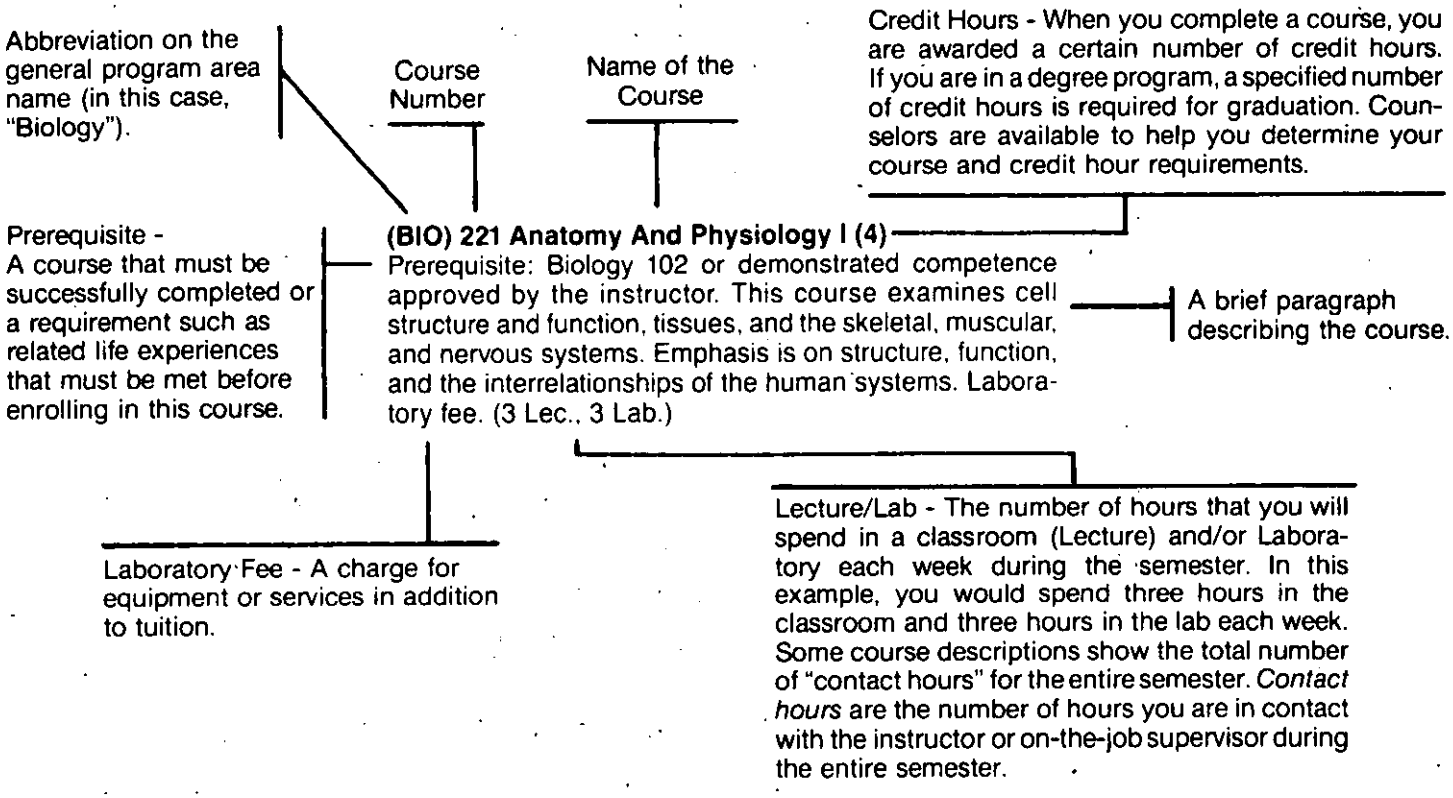
NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

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



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) 205 Business Finance (3)
Prerequisites: Economics 201 or 202 and Accounting 201. This course focuses on the financial structure in the free enterprise system. Topics include interest rates, value analysis, the financing of business firms and government, and security markets. Financial requirements for decision-making and capital formation are analyzed. (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. Budget, 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, 713, 803, 813 Cooperative Work Experience (3)
(See Cooperative Work Experience). (1 Lec., 15 Lab.)

(ACC) 704, 714, 804, 814 Cooperative Work Experience (4)
(See Cooperative Work Experience). (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 applying 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)
Prerequisite: 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, condensors, 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)
Prerequisite: Air Conditioning and Refrigeration 122 and 127. The principles of refrigeration and electricity are applied to residential cooling systems. Emphasis is placed on compressors, condensors, evaporators, metering devices and electrical components function and relationship. 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)
Prerequisite: 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)
Prerequisite: 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)
Prerequisite: Air Conditioning and Refrigeration 130 and 140. This course is a comprehensive course that includes Air Conditioning 213 and 140. 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)
Prerequisite: 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)
Prerequisite: 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)
Prerequisites: 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) 703, 713, 803, 813 Cooperative Work Experience (3)
(See Cooperative Work Experience). (1 Lec., 15 Lab.)

(ACR) 704, 714, 804, 814 Cooperative Work Experience (4)
(See Cooperative Work Experience). (1 Lec., 20 Lab.)

ANTHROPOLOGY

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

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

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 culture, 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) 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 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) 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) 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) 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. (This course is offered on campus and may be offered via television.) (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.)

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 for the non-science major. Topics include the cell concept and basic chemistry as it relates to biology. An introduction to genetics, evolution, cellular processes, such as mitosis, meiosis, respiration, and photosynthesis, and plant and animal reproduction is also covered. Laboratory fee. (This course is offered on campus and may be offered via television.) (3 Lec., 3 Lab.)

(BIO) 116 Biological Science (4)
Selected topics in biological science are presented for the non-science major. Topics include the systems of the human body, disease, drug abuse, aging, evolution, ecology, and people in relation to their environment. Laboratory fee. (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) 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 microorganisms, 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 inter-relationships 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 Mendelian inheritance, recombination genetics, the biochemical theory of genetic material, and mutation theory. Plant and animal materials are used to study population genetics, linkage, gene structure and function, and other concepts of heredity. Laboratory fee. (3 Lec., 3 Lab.)

(BIO) 230 Mammalian Physiology (4)
Prerequisite: Twelve hours of biology, eight hours of inorganic 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 operations. Topics include: the business system, legal forms of business, organization and management, business functions (production, marketing, finance, risk management, information systems, accounting) and the environments affecting business (the economy, labor, government regulation, social responsibility, law, international business, and technology). (This course is offered on campus and may be offered via television.) (3 Lec.)

(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.)

(BUS) 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.)

CARPENTRY

(CAR) 101 Woodworking Tools And Materials (3)
This course focuses on the use of woodworking tools and equipment. Machines used include the table saw, jointer, planer, radial arm saw, router, sander, and various portable power tools. Proper safety procedures are emphasized. Laboratory fee. (90 Contact Hours)

(CAR) 102 Site Preparation (3)
Knowledge and skills for site preparation are presented. Included are laying out and constructing foundations for domestic buildings, constructing and placing piers, erecting concrete foundation forms, and pouring concrete foundations. Laboratory fee. (90 Contact Hours)

(CAR) 103 Construction Safety (1)
Construction safety is covered. This course is based on standards of the Occupational Safety and Health Administration for residential and commercial construction. (30 Contact Hours)

(CAR) 104 Residential Framing (3)
Erection of frame structures is the focus of this course. Both balloon and western framing are included. The construction of floor systems, ceilings, and walls is also covered. Safety procedures are emphasized. Laboratory fee. (90 Contact Hours)

(CAR) 105 Roof Framing I (3)
This course covers the knowledge and skills needed to lay rafters of all types. The cutting and erecting of rafters for gable, shed, and gambrel roofs are included. The styles and terminology of roof framing are also included. Laboratory fee. (90 Contact Hours)

(CAR) 106 Exterior Trim And Finish (3)
Exterior wall coverings, roof cornice, and roofing are the topics of this course. Wall coverings, roof sheathing, shingles, and cornice are applied to different styles of roofs and buildings. Laboratory fee. (90 Contact Hours)

(CAR) 107 Construction Cost Estimating (3)
Prerequisite: Blueprint Reading 177. This course covers cost estimates for residential and small commercial structures. Estimates are made from blueprints and specifications. Emphasis is on the process of bid preparation. (48 Contact Hours)

(CAR) 108 Modern Construction Practices (3)
The basic terminology used in commercial construction is surveyed. The design and erection of tilt-up wall construction are studied. The erection and study of pre-cast panels and other new systems for commercial building are included. Laboratory fee. (90 Contact Hours)

(CAR) 109 Concrete Slabs In Commercial Building (3)
The different designs and systems used in concrete slabs are examined. Both below grade and suspended slabs are included. Emphasis is on practical knowledge in the erection, shoring and scaffolding of slabs. Laboratory fee. (90 Contact Hours)

(CAR) 201 Cabinet Building I (3)
The design and layout of modern cabinets are presented. Emphasis is on quality work. Included are making material lists, drafting cabinet details, and installing factory-built cabinets. Laboratory fee. (90 Contact Hours)

(CAR) 202 Cabinet Building II (3)
This course focuses on cabinet designs and construction. All stages from rough materials to a finished product are covered. Laboratory fee. (90 Contact Hours)

(CAR) 203 Stair Building (3)
The knowledge and skills needed in building stairs are presented. Included are riser and tread calculation, material estimates, layout, and construction. The course also covers the construction of stair forms for concrete stairs. Laboratory fee. (90 Contact Hours)

(CAR) 204 Commercial Wall Forms (3)
Wall systems are examined. Different types and systems of construction are covered. Included are basement walls, retaining walls, patented walls, and job-built walls. Emphasis is on the erection of these walls. Laboratory fee. (90 Contact Hours)

(CAR) 205 Roofing Framing II (3)
Hip and mansard roof systems are presented. Layouts and cutting and erection of each type of roof system are covered. The design and erection of a truss system is also included. Laboratory fee. (90 Contact Hours)

(CAR) 206 Vertical Piers And Columns (3)
The construction of piers and concrete columns is the focus of this course. Different forms are studied. Emphasis is on the layout and erection of different systems. Laboratory fee. (90 Contact Hours)

(CAR) 208 Interior Finish I (3)
This course covers interior finish. Cutting, applying, and finishing panelling is included. Dry wall and trim are also included. The fitting and hanging of interior doors and installing of hardware are covered. Laboratory fee. (90 Contact Hours)

(CAR) 209 Interior Finish II-Commercial (3)
This course covers interior finish of commercial buildings. Included are store fronts, metal frame walls and floor systems, moveable partitions, and dropped and suspended ceiling systems. Layout and erection of systems are practiced. Laboratory fee. (90 Contact Hours)

(CAR) 210 Horizontal Beam Form And Fire Encasement Forms (3)
The design of horizontal beams and fireproof encasement forms is studied. Different types of materials and commercial systems are included. Emphasis is on safety. Laboratory fee. (90 Contact Hours)

(CAR) 211 Properties Of Concrete (1)
The nature of concrete is explored. Emphasis is on the manufacturing of concrete, the selection and design of concrete, and methods used in placing and finishing concrete. Laboratory fee. (30 Contact Hours)

(CAR) 703, 713, 803, 813 Cooperative Work Experience (3)
(See Cooperative Work Experience). (1 Lec., 15 Lab.)

(CAR) 704, 714, 804, 814 Cooperative Work Experience (4)
(See Cooperative Work Experience). (1 Lec., 20 Lab.)

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 solutions. 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-scientific 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) 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, stero-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.)

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. (I 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.)

COMPUTER INFORMATION SYSTEMS

(CIS) 103 Introduction to Computer Information Systems (3)
This course provides an overview of computer information systems. Topics include history of computers, vocabulary, cultural impact, procedures and systems, development of basic algorithms, and number systems. The fundamentals of computer problem-solving are applied through the use of the BASIC programming language and microcomputer software packages. Laboratory fee. (This course is offered on campus and may be offered via television.) (3 Lec., 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 Lec., 4 Lab.)

(CIS) 111 Data Entry Applications and Concepts (3)
Prerequisites: 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 Lec., 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 Lec., 2 Lab.)

(CIS) 116 Operations I (4)
Prerequisites: Credit or concurrent enrollment in Computer Information Systems 103 or demonstrated competence approved by the Instructor. The interrelationships among computer systems, hardware, software, and personnel are covered. Topics include the role of personnel in computer operations, data entry, scheduling, data control, and librarian functions, the importance of job documentation, standards manuals, error logs, operating procedures, job control language, and the flow of data between the user and the data processing department. Laboratory fee. (3 Lec., 4 Lab.)

(CIS) 118 Text Processing Applications (3)
Prerequisites: Computer Information Systems 108 or demonstrated proficiency approved by the instructor. This course covers text 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 two commercially available text processors. Laboratory fee. (2 Lec., 3 Lab.)

(CIS) 126 Operations II (4)
Prerequisites: Computer Information Systems 103, and Computer Information Systems 116, or demonstrated competence approved by the instructor. Concepts and functions of an operating system in a multiprocessing environment are presented. Topics include system commands, interpretation of messages and codes, maintaining data and physical security, and an introduction to data communications, data base management systems, and query languages used on mainframes and microcomputer systems. Laboratory fee. (3 Lec., 4 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. 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) 168 4th Generation Language Concepts (3)
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. (2 Lec., 2 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 totals, 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)
Prerequisites: 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: Credit or concurrent enrollment in Computer Information Systems 164 or Computer Information Systems 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)
Prerequisites: 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 Computer Information Systems 114 or demonstrated competence approved by the instructor. Using a commercially available spreadsheet package, this course covers the theory and uses of electronic spreadsheets including 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 anaylsis, 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 Computer Information Systems 160. This course covers operating system concepts and includes scheduling, data and memory management, the use of batch files, and "path techniques" to facilitate efficient use of secondary storage. Back-up techniques, operating system commands, and operating system enhancer programs and utilities will be analyzed. Laboratory fee. (3 Lec., 3 Lab.)

(CIS) 223 PC Hardware (3)
Prerequisites: 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, trouble-shoot 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 and to design new systems using structured methodology. 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 Computer Information Systems 114 or demonstrated competence approved by the instructor. Using a commercially available database management program, this course covers 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) 256 Computer Center Management (3)
Prerequisite: Computer Information Systems 103 and 116 or demonstrated competence approved by the instructor. The management of a computer center is examined. Topics include introduction to management theory, personnel management, production, scheduling, and processing within a computer center. Methods for computer selection and evaluation are also presented. (3 Lec.)

(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 when 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 proficiency approved by the 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, 711, 801, 811 Cooperative Work Experience (1)
(See Cooperative Work Experience) (1 Lec., 5 Lab.)

(CIS) 702, 712, 802, 812 Cooperative Work Experience (2)
(See Cooperative Work Experience) (1 Lec., 10 Lab.)

(CIS) 703, 713, 803, 813 Cooperative Work Experience (3)
(See Cooperative Work Experience) (1 Lec., 15 Lab.)

(CIS) 704, 714, 804, 814 Cooperative Work Experience (4)
(See Cooperative Work Experience) (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 covered 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 a related field who require 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 105 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.)

DANCE

(DAN) 116 Rehearsal And Performance (1)
This course supplements beginning 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 1 (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 151 or Dance 156. 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.)

(DC) 120 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

(DL) 094 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

(DM) Developmental Mathematics
Developmental Mathematics courses offer a review of mathematical skills. Developmental Mathematics 093 satisfies prerequisites for Mathematics 101, 111, 115, 116, and 117. Developmental Mathematics 091 satisfies prerequisites for Mathematics 130 and 195.

(DM) 060 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. (I Lec.)

(DM) 061 Basic Mathematics II (I)
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.)

(DM) 062 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.)

(DM) 063 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. (I Lec.)

(DM) 064 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.)

(DM) 065 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.)

(DM) 070 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. (I Lec.)

(DM) 071 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. (I Lec.)

(DM) 072 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.)

(DM) 073 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.)

(DM) 080 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.)

(DM) 081 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.)

(DM) 082 Intermediate Algebra III (1)
Prerequisite: Developmental Mathematics 081 or equivalent. This course includes selected topics such as graphing, exponents, and factoring. (1 Lec.)

(DM) 090 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

(DW) 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, oxy-acetylene 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 System (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, 713, 803, 813 Cooperative Work Experience (3)
(See Cooperative Work Experience). (1 Lec., 15 Lab.)

(DME) 704, 714, 804, 814 Cooperative Work Experience (4)
(See Cooperative Work Experience). (1 Lec., 20 Lab.)

DRAFTING

(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. (I Lec., 3 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. (This course is offered on campus and may be offered via television.) (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 unguided technological development. Proper planning of societal and individual action in order to protect the natural environment is stressed. (This course may be offered via television.) (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 anti-trust 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 international 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. (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 upon 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 Electric Code. (2 Lec.)

(ELE) 205 Commercial Wiring (3)
Topics in this course are centered on accepted procedures and practices in wiring for commercial applications. Materials, conduit, and circuit layouts are included. Laboratory fee. (2 Lec., 4 Lab.)

(ELE) 206 Commercial Planning (4)
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.)

(ELE) 207 Industrial Planning (2)
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.)

(ELE) 208 Industrial Codes (2)
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.)

(ELE) 213 Electrical Motor Fundamentals (2)
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.)

(ELE) 214 Solid State Controls (3)
Solid state digital logic concepts and applications for motor controls are presented. System diagnostic procedures are covered. Laboratory fee. (2 Lec., 2 Lab.)

(ELE) 216 Motor Controls (3)
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.)

(ELE) 218 Electrical Design (3)
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.)

(ELE) 703, 713, 803, 813 Cooperative Work Experience (3)
(See Cooperative Work Experience). (1 Lec., 15 Lab.)

(ELE) 704, 714, 804, 814 Cooperative Work Experience (4)
(See Cooperative Work Experience). (1 Lec., 20 Lab.)

ELECTRONICS TECHNOLOGY

(ET) 135 DC-AC Theory And Circuit Analysis (6)
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.)

(ET) 170 Printed Circuit Board Manufacturing (1)
The student will build a working printed circuit board. The course will begin with a schematic and parts list and progress through all steps necessary to produce a single sided photographically produced board. Laboratory fee. (1 Lec., 1 Lab.)

(ET) 172 Soldering (1)
This course is intended to ensure that the student understands the theory and use of tools and equipment for proper industrial soldering techniques. The prime emphasis is to build the student's skill in soldering. Laboratory fee. (1 Lec., 1 Lab.)

(ET) 174 Oscilloscope Utilization (1)
This course will cover all front panel controls on basic laboratory calibrated oscilloscopes. Emphasis will be placed on utilizaton of oscilloscope in troubleshooting a circuit. Laboratory fee. (1 Lec., 1 Lab.)

(ET) 190 DC Circuits and Electrical Measurements (4)
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.)

(ET) 191 A.C. Circuits (4)
Prerequisite: Electronics Technology 190 and credit or concurrent enrollment in Mathematics 195 or the equivalent. This course covers the fundamental theories of alternating current. The theories are applied in various circuits. Included are laboratory experiments on power factor, sine wave analysis, resonant circuits, capacitance, inductance, Q of coils, magnetism, and resistance. Laboratory fee. (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 include 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 nonlinear 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) 200 Special Applications Of Electronics (4)
This course is intended for use by any given group of students that desire specific topics to be covered. This course may substitute for any 200 level electronics course with the demonstrated competence approved by the instructor. This course is repeatable for credit as topics vary. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 210 Basic CRT Display And Television Theory And Service (4)
Prerequisites: 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 functions covered include clamping, gating, switching, and counting. Circuits include voltage discriminators, multivibrators, 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) 235 Fundamentals Of Electricity (4)
This course is an introduction to electricity for students in related programs. Topics include basic AC and DC theory, voltage, current, and resistance, and electrical wiring principles and schematics. Transformers, relays, timers, electrical measuring devices, and basic electrical calculations are also included. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 237 Modular Memories And Microprocessors (4)
Prerequisites: Electronics 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. Microprocessor 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) 250 Principles of Electronic Integrated Circuits (4)
Prerequisites: Electronics Technology 190 and concurrent enrollment in Drafting 241. This is a survey course of solid state devices and their associated circuitry. This course is intended to teach the student fundamentals of common electronic circuits which contain integrated circuits and to teach elements of solid state devices from the principle of the PN junction through the function of integrated circuits. Laboratory fee. (3 Lec., 2 Lab.)

(ET) 260 Sinusoidal Circuits (4)
Prerequisites: Electronics Technology 191 and 193. Power supply circuits are presented. Included are full wave rectification, filtering, and regulation. Amplifier circuits involving large and small signal analysis, coupling, classes of operation and feedback techniques are also covered. Semiconductor devices considered include the Zener diode, SCR, TRIAC, MOSFET, JFET, CMOS, and unijunction transistors. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 261 Pulse And Switching Circuits (4)
Prerequisites: Electronics Technology 191 and 193. Thevenin's theorem and superposition are applied to AC and DC sources. Waveform analysis is studied including pulse characteristics and pulsetrain measurements of harmonic content. Other topics include RC and RL circuit response to step inputs, exponential forms, diode clipper and clamp circuits, and transistor action in digital circuits involving saturation and cutoff. Gate types of RTL, DTL, TTL, ECL, and MOS technologies are also included. The bistable, monostable, and astable types of multivibrator circuits are covered. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 263 Digital Computer Theory (4)
Prerequisite: Electronics Technology 192. This course focuses on basic computer circuits. Included are flip-flops, shift registers, counters (sequential and nonsequential), operational amplifiers, and A to D converters. Analysis of specific current integrated circuits is also included. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 264 Digital Systems (4)
Prerequisite: Electronics Technology 192 and 263 or concurrent enrollment in Electronics Technology 263. The three major component systems of a digital computer are studied. The arithmetic-logic section covers arithmetic in binary, hexadecimal, counting, and number representation within a machine. The memory studies center around the operation of core and semiconductor memory assemblies which include addressing and data buffering. The control section deals with state, distributive, and ROM type of control circuits. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 265 Digital Research (3)
Prerequisites: Electronics Technology 192 and concurrent enrollment in Electronics Technology 263 and 264. The design, layout, construction, and calibrating of a major electronic project are covered. The project uses digital circuits. Students develop independent projects and prepare term papers on functions of components, operating specifications, and schematics. Laboratory fee.
(1 Lec., 5 Lab.)

(ET) 266 Computer Applications (4)
Prerequisite: Electronics Technology 192. Machine language and assembly language programming are the focus of this course. Emphasis is on problem solving for in-house computers. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 267 Microprocessors (4)
Prerequisite: 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.)

(ET) 268 Microprocessor Troubleshooting and Interface (4)
Prerequisite: Electronic Technology 267. This course studies troubleshooting techniques on microprocessor, disk controls, CRT controls and interfaces. Emphasis is on hardware troubleshooting and peripheral interface. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 802 Cooperative Work Experience (2)
(See Cooperative Work Experience). (1 Lec., 10 Lab.)

(ET) 703, 713, 803 Cooperative Work Experience (3)
(See Cooperative Work Experience). (1 Lec., 15 Lab.)

(ET) 704, 804 Cooperative Work Experience (4)
(See Cooperative Work Experience). (1 Lec., 20 Lab.)

ELECTRONIC TELECOMMUNICATIONS

(ET) 101 Introduction to Telecommunications (4)
This course is an introduction to the fundamentals of telecommunications, with an emphasis on analog and digital voice transmission techniques and technology. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 290 Advanced Electronic Devices (4)
Prerequisite: Electronics Technology 193 and 101. 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)
Prerequisites: 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 Circuitry (4)
Prerequisites: 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 techniques 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 longhaul transmission techniques utilized in the telecommunication industry will be covered. Microwave transmission, fiberoptics 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 signaling topics are SF (single frequency) E & M, DX (duplex), and looping systems. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 296 System Installation and Testing (6)
Prerequisites: Electronics Technology 295 or concurrent enrollment in Electronics Technology 295. This course is designed to familiarize the student with the installation of telecommunication switching equipment. Switching equipment theory, operation, maintenance, and troubleshooting techniques will be covered. Laboratory fee. (5 Lec., 2 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.)

(EGR) 108 Computer Methods In Engineering (3)
Prerequisite: Credit or concurrent enrollment in Mathematics 124. Fundamental methods of numerical analysis with applications by computer programming are presented. Topics include computer programming, recursion formulas, successive approximations, error analysis, nonlinear equations, and systems of linear equations and matrix methods. Probabilistic models, interpolation, determination of parameters, numerical integration, and solution of ordinary differential equations are also covered. (3 Lec.)

ENGLISH

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)
Prerequisite: 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.)

(ENG) 215 Studies in Literature (3)
Prerequisite: English 102. This course includes selections in literature organized by genre, period, or geographical region. Course descriptions are available each semester prior to registration. This course may be repeated for credit. (3 Lec.)

(ENG) 216 Studies in Literature (3)
Prerequisite: English 102. This course includes selections in literature organized by theme, interdisciplinary content or major author. Course titles and descriptions are available each semester prior to registration. This course may be repeated for credit. (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 tracks 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 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. All four ESL-Reading (ESL 041-044) courses precede the Developmental Reading courses in level of difficulty. Therefore, ESL students needing additional academic preparation should enroll for regular Developmental Reading courses upon completion of the ESL-Reading courses.

ESL 051-054/ESL 063 (Writing-Grammar)
These courses are designed to prepare a student for English 101. The courses involve 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 given the District Assessment Battery to determine readiness for English 101, Developmental Writing, or a combination of both, based on the test scores.

INGLES-COMO-SEGUNDO-IDIOMA

El programa de crédito de *Inglés-Como-Segundo-Idioma* (ESL) está diseñado para proporcionar al estudiante la abilidad de ser proficiente en el desarrollo del idioma inglés en las areas de escuchar, conversar, leer, y escribir. El plan de estudio consiste de trece cursos divididos en tres secciones y cuatro niveles: escuchar-conversar, leer, y escribir. El programa de ESL se entrelaza con los programas de Educación Continua (Continuing Education) y los de Estudios de Preparación (Developmental Studies).

ESL 031-034 (Escuchar y Conversar)
Estos cursos preparan al estudiante a comunicarse oralm ente en inglés. Pueden (pero no necesariamente) preceder la clase de Lectura (ESL 041-044) y Escritura (ESL 051-054, ESL 063).

ESL 041-044 (Lectura)
Estos cursos preparan al estudiante en la lectura del inglés en la vida diaria y a leer libros de texto al nivel colegial. Los cuatro cursos de Lectura (ESL 041-044) preceden los cursos Preparatorios de Lectura (Developmental Reading) en los diferentes grados de dificultad. Por lo tanto los estudiantes que necesiten preparación académica adicional se les recomienda matricularse en cursos regulares de Preparación de la Lectura (Developmental Reading) cuando terminen los cursos de Lectura de ESL (ESL-Reading).

ESL 051-054/ESL 063 (Escritura-Gramatica)
Estos cursos están diseñados para preparar al estudiante para pasar a la clase de Inglés 101 (English 101). Estas clases tienen tres cursos de desarrollo en la sintaxis (ESL 051, ESL 052, ESL 063) y dos cursos en Principios de la Composición (ESL 053 y ESL 054). Terminando estas clases, el estudiante tomará una evalución, para determinar si está preparado Para la clase de Inglés 101 (English 101), Desarrollo de la Escritura (Developmental Writing) o una combinación de ambas, basado en los resultados de la evaluación.

(ESL) 031 ESL Conversation — Listening (3)
This course is designed to develop academic and social skills needed to speak and understand English more effectively in school, in the market place, and in social situations. (3 Lec.)

(ESL) 032 ESL Conversation—Listening (3)
This course strengthens competencies initiated in ESL 031. Special emphasis is placed on academic listening and speaking skills. (3 Lec.)

(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)
Prerequisite: Concurrent enrollment in ESL 063 is recommended. This course introduces principles of composition and emphasizes the processes of paragraph formation. (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 multiparagraph compositions. (3 Lec.)

(ESL) 063 ESL Writing — Grammar (3)
Prerequisite: Concurrent enrollment in ESL 053 is recommended. 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. (3 Lec.)

FRENCH

(FR) 101 Beginning French (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.)

(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. This course is not intended for geology majors. 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; 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.)

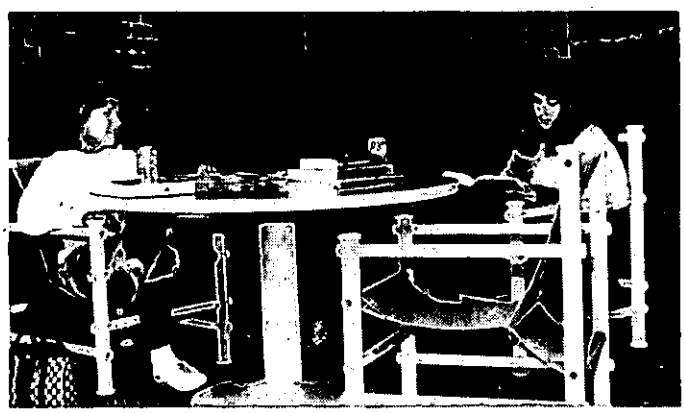
(GER) 202 Intermediate German (3)
Prerequisite: German 201 or the equivalent. This course is a continuation of German 201. Contemporary literature and composition are studied. (3 Lec.)

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.



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

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. (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)
Related examples of humans' creative achievements are examined. Emphasis is on understanding the nature of humans and the values or human life. (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.)

JOURNALISM

(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. The 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.)

MANAGEMENT

(MGT) 136 Principles Of Management (3)
The process of management is studied. The functions of planning, organizing, leading, and controlling are included. Particular emphasis is on policy formulation, decision-making processes, operating problems, communications theory, and motivation techniques. This course is offered on campus and may be offered via television. (3 Lec.)

(MGT) 150 Management Training (4)
Prerequisite: Concurrent enrollment in Management 154 or demonstrated competence approved by the instructor. This course consists of supervised on-the-job training, giving practical experience to students of business management. The course is designed to develop the student's managerial skills through the completion of job-related projects which will enhance and complement classroom knowledge. (20 Lab.)

(MGT) 151 Management Training (4)
Prerequisite: Concurrent enrollment in Management 155 or demonstrated competence approved by the instructor. This course consists of supervised on-the-job training, giving practical experience to students of business management. The course is designed to develop the student's managerial skills through the completion of job-related projects which will enhance and complement classroom knowledge. (20 Lab.)

(MGT) 154 Management Seminar:Role Of Supervision (2)
Prerequisite: Concurrent enrollment in Management 150 or demonstrated competence approved by the instructor. This seminar is designed to explore the role of the supervisor from an applied approach. Emphasis is on improving leadership skills, motivational techniques, effective time management, goal-setting, planning and overcoming communication problems. (2 Lec.)

(MGT) 155 Management Seminar:Personnel Management (2)
Prerequisite: Concurrent enrollment in Management 151 or demonstrated competence approved by the instructor. This course is designed to explore the manager's role in attracting, selecting, and retaining qualified employees. Planning for and recruiting employees, selecting high performers, improving interviewing skills, conducting performance appraisals, training, EEO legislation, and labor relations are emphasized through an applied approach. (2 Lec.)

(MGT) 171 Introduction To Supervision (3)
Prerequisite: Enrollment in Technical/Occupational program or demonstrated competence approved by the instructor. 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, motivating, communicating, handling grievances, recruiting, counseling, and cost accounting. (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 upon relevant problems and pragmatic solutions that integrate total knowledge of the business process in American society. This course may be repeated for credit up to a maximum of three hours credit. (1 Lec.)

(MGT) 242 Personnel Administration (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) 250 Management Training (4)
Prerequisite: Concurrent enrollment in Management 254 or demonstrated competence approved by the instructor. This course consists of supervised on-the-job training, giving practical experience to students of business management. The course is designed to develop the student's managerial skills through the completion of job-related projects which will enhance and complement classroom knowledge. (20 Lab.)

(MGT) 251 Management Training (4)
Prerequisite: Concurrent enrollment in Management 255 or demonstrated competence approved by the instructor. This course consists of supervised on-the-job training, giving practical experience to students of business management. The course is designed to develop the student's managerial skills through the completion of job-related projects which will enhance and complement classroom knowledge. (20 Lab.)

(MGT) 254 Management Seminar:Organizational Development (2)
Prerequisite: Concurrent enrollment in Management 250 or demonstrated competence approved by the instructor. The role of managers in managing human resources, group interaction and team building, motivational dynamics, improving interpersonal communication skills, and dealing with company politics and conflict are explored in this course through an applied approach. (2 Lec.)

(MGT) 255 Management Seminar:Planning, Strategy, And The Decision Process (2)
Prerequisite: Concurrent enrollment in Management 251 or demonstrated competence approved by the instructor. This course is designed to develop managerial skills in individual and group decision-making and cause analysis. Rational and creative problem-solving skills are developed. Personal and organizational strategy skills are enhanced. (2 Lec.)

(MGT) 703 Cooperative Work Experience (3)
(See Cooperative Work Experience). (1 Lec., 15 Lab.)

(MGT) 704 Cooperative Work Experience (4)
(See Cooperative Work Experience). (1 Lec., 20 Lab.)

MARKETING

(MKT) 206 Principles of Marketing (3)
The scope and structure of marketing are examined. Marketing functions, consumer behavior, market research, sales forecasting, and relevant state and federal laws are analyzed. (3 Lec.)

(MKT) 230 Salesmanship (3)
The selling of goods and ideas is the focus of this course. Buying motives, sales psychology, customer approach, and sales techniques are studied. (3 Lec.)

(MKT) 233 Advertising and Sales Promotion (3)
This course introduces the principles, practices, and media of persuasive communication. Topics include buyer behavior, use of advertising media, and methods of stimulating sales people and retailers. The management of promotion programs is covered, including goals, strategies, evaluation, and control of promotional activities. (3 Lec.)

MATHEMATICS

(MTH) Mathematics
(See also Developmental Mathematics. 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 functions and relations, absolute values, variation, quadratic equations, complex numbers, functions of two variables, systems of equations and inequalities, elementary aspects of the theory of equations, progressions, the binomial theorem, and algebraic proofs. (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) 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 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)
This 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 partícular technical/occupational program. The prerequisite will vary accordingly and be determined by the needed skils. (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) 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, topics 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 calculus, 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) 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) 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) 185 Stage Band (1)
Prerequisite: The 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) 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. The 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, sightreading, 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.)

OFFICE CAREERS

(OFC) 143 Contemporary Topics In Office Careers (1)
Prerequisite: 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 difference emphasis up to six hours. (1 Lec.)

(OFC) 144 Contemporary Topics In Office Careers. (2)
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 office careers are studied. (2 Lec.)

(OFC) 145 Contemporary Topics in Office Careers (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 office careers are studied. (3 Lec.)

(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 Lec., 2 Lab.)

(OFC) 159 Beginning Shorthand (4)
Prerequisites: Credit or concurrent enrollment in Office Careers 172 or one year of typing in high school. The principles of Gregg Shorthand are introduced. Included is the development of the ability to read, write, and transcribe shorthand outlines. Knowledge of the mechanics of English is also developed. Laboratory fee. (3 Lec., 2 Lab.)

(OFC) 160 Office Calculating Machines (3)
This course focuses on the development of skills in using office machines. Adding machines, printing calculators, and electronic display calculators, and electronic printing calculators are included. Emphasis is on developing the touch system for both speed and accuracy. Office Careers 160 is equivalent to Office Careers 192, 193, and 194. Laboratory fee. (3 Lec.)

(OFC) 162 Office Procedures (3)
Prerequisite: 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 or one year of shorthand in high school, Office Careers 172 or one year of typing in high school. The principles of Gregg Shorthand are studied. Emphasis is on increased speed dictation, accuracy in typing from shorthand notes, and beginning techniques of transcription skills. Also included are oral reading, 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)
Prerequisite: 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 Lec.)

(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 Lec., 3 Lab.)

(OFC) 173 Intermediate Typing (3)
Prerequisites: Office Careers 172 or one year of typing in high school. Typing techniques are developed further. Emphasis is on problem solving. Increasing speed and accuracy in typing business forms, correspondence, and manuscripts are also covered. Laboratory fee. (2 Lec., 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 Lec., 1 Lab.)

(OFC) 177 Beginning Typing II (1)
Prerequisite: 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 Lec.)

(OFC) 178 Beginning Typing III (1)
Prerequisite: Office Careers 176. The typing of manuscripts and tables is emphasized. Production typing is included, and proper report typing is developed. Exercises to increase skill 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 wordprocessor 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. 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)
Prerequisite: Office Careers 172. 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)
Prerequisite: 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)
Prerequisite: 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 machines are reviewed. Ten-key touch development is introduced. Speed development is incorporated with accuracy requirements. Laboratory fee. (1 Lec.)

(OFC) 193 Office Machines II (1)
Prerequisite: Office Careers 192. This course offers extensive training on basic office machines. Speed development and business applications are stressed. Laboratory fee. (1 Lec.)

(OFC) 194 Office Machines III (1)
Prerequisite: Office Careers 192. Extensive training on basic office machines is continued. Speed development and business applications are stressed. Laboratory fee. (1 Lec.)

(OFC) 231 Business Communications (3)
Prerequisites: Office Careers 172 or one year of typing in high school and Communications 131 or English 101. This practical course includes a study of letter forms, the mechanics of writing and the composition of various types of communications. A critical analysis of the appearance and content of representative business correspondence, proposals, and reports is made. (3 Lec.)

(OFC) 266 Advanced Shorthand (4)
Prerequisites: Office Careers 166 or two years of shorthand in high school and Office Careers 173 or two years of typing in high school. Emphasis is on building dictation speed. Producing mailable, typed transcriptions under timed conditions is also stressed. Vocabulary and extensive production work capabilities are developed. 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)
Prerequisities: 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)
Prerequisite: 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 proccessing 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. Composing and dictating business communications are introduced. (1 Lec., 1 Lab.)

(OFC) 713, 803, 813 Cooperative Work Experience (3)
(See Cooperative Work Experience). (1 Lec., 15 Lab.)

(OFC) 714, 804, 814 Cooperative Work Experience (4)
(See Cooperative Work Experience). (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 120. Publicity photography, architectural photography, interior photography, and advertising photography are included. The latest equipment, papers, films, and techniques are explored. Exchanges are made with sample clients, employers, studios, and agencies. Laboratory fee. (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 journalism, 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) 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) 115 Physical Fitness (1)
Students are introduced to fitness related activities for the purposes of gaining 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) 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) 134 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) 144 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) 147 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) 148 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) 200 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) 217 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) 218 Intermediate Golf (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) 219 Intermediate Tennis (1)
Prerequisite: Successful completion of Physical Education 119 or approval by the instructor. Emphasis is placed on proper execution of the strokes presented in Physical Education 119 as well as on specialty shots such as the lob, overhead, and spins. Competitive activities in singles, doubles and mixed doubles will be available. 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) 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) 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) 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
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 an 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.

(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 as 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) 713, 803, 813 Cooperative Work Experience (3)
Prerequisite: Completion of two courses in the student's major or instructor or coordinator approval. These courses consist of seminars and on-the job experience. Theory and instruction received in the courses of the student's major curricula are applied to the job. Students are placed in work-study positions in their technical occupational fields. Their skills and abilities to function successfully in their respective occupations are tested. These work internship courses are guided by learning objectives composed at the beginning of each semester by the students, their instructors or coordinators, and their supervisors at work. The instructors determine if the learning objectives are valid and give approval for credit. (1 Lec., 15 Lab.)

(PFT) 714, 804, 814 Cooperative Work Experience (4)
Prerequisite: Completion of two courses in the student's major or instructor or coordinator approval. These courses consist of seminars and on-the-job experience. Theory and instruction received in the courses of the student's major curricula are applied to the job. Students are placed in work-study positions in their technical occupational fields. Their skills and abilities to function successfully in their respective occupations are tested. These work internship courses are guided by learning objectives composed at the beginning of each semester by the students, their instructors or coordinators, and their supervisors at work. The instructors determine if the learning objectives are valid and give approval for credit. (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) 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) 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 acts, community reinvestment act, and state housing agency are also included. (3 Lec.)

(RE) 133 Real Estate Marketing (3)
Prerequisite: Real Estate 130 or concurrent enrollment in Real Estate 130 or 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)
Prerequisites: Real Estate 130, 131, 133, 135, and 136 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)
Prerequisites: Real Estate 130, 131, 135 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)
Prerequisites: Real Estate 130, 131, and 136 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 3 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 6 hours of credit. (3 Lec.)

(RE) 250 Real Estate Internship I (4)
Prerequisites: Real Estate 130, 131, and 133 and concurrent enrollment in Real Estate 254. Students must submit an application to the instructor, be interviewed, and be approved prior to registration. This course provides practical work experience in the field of real estate. Principles and skills learned in other courses are applied. The employer/sponsor and a member of the real estate faculty provide supervision. job-related studies and independent research are emphasized. (20 Lab.)

(RE) 251 Real Estate Internship II (4)
Prerequisites: Real Estate 130, 131, and 133 and concurrent enrollment in Real Estate 255. Also, the student must submit an application to the instructor, be interviewed, and be approved prior to registration. This course is a continuation of Real Estate 250. (20 Lab.)

(RE) 254 Real Estate Seminar I (2)
Prerequisites: Real Estate 130, 131, and 133 and concurrent enrollment in Real Estate 250. Preliminary interview by real estate faculty is required. This course is for students majoring in real estate. A particular area or problem beyond the scope of regularly offered courses is studied. Problems are analyzed, and projects are developed. (2 Lec.)

(RE) 255 Real Estate Seminar II (2)
Prerequisites: Real Estate 130, 131, and 133 and concurrent enrollment in Real Estate 251. Preliminary interview by real estate faculty is required. Business strategy and the decision-making process are applied to trends in the real estate profession. Emphasis is on the use of the intern's course knowledge and work experience. (2 Lec.)

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 characteristic 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 existance of God, world religions, mysticism, sexuality and religion, and the interpretation of death are included. This course may be offered with emphasis on a specific topic, such as death and dying. (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 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 6 hours of U.S. history recommended. Students may register for either History 204 or Sociology 204 but may receive credit for only one. The principal minority groups in American society are the focus of this course. The sociological significance and historic contributions of the groups are presented. Emphasis is on current problems of intergroup relations, social movements, and related social changes. (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. This is an elective course designed to deal with specific topics in sociology. Examples of topics might be: "urban sociology," "women in society," or "living with divorce." As the topics change, this course may be repeated once for credit. (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, art, and civilization. (3 Lec.)

(SPA) 204 Introductión 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 each semester. (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 Lec.)

(SC) 110 Forensic Workshop (1)
This course focuses on preparing speeches, readings, and debate propositions. Presentations are made in competition and before select audiences. This course may be repeated for credit. (2 Lab.)

(SC) 201 Forensic Workshop (1)
This course focuses on preparing speeches, readings, and debate propositions. Presentations are made in competition and before select audiences. This course may be repeated for credit. (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 Lec.)

(SC) 206 Oral Interpretation (3)
Techniques of analyzing various types of literature are examined. Practice is provided in preparing and presenting selections orally. Emphasis is on individual improvement. (3 Lec.)

(SC) 208 Group Interpretation (3)
Prerequisite: Speech 105 and 206. Various types of literature are studied for group presentation. Emphasis is on selecting, cutting and arranging prose and poetry, and applying reader's theatre techniques to the group performance of the literature. Although not an acting class, practical experience in sharing selections from fiction and nonfiction with audiences will be offered. (3 Lec.)

THEATRE

(THE) 101 Introduction to the Theatre (3)
The various aspects of theatre are surveyed. Topics include plays, playwrights, directing, acting, theatres, artists, and technicians. (3 Lec.)

(THE) 102 Contemporary Theatre (3)
This course is a study of the modern theatre. The historical background and traditions of each style are included. Emphasis 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 Lec.)

(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 Lec.)

(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) 108 Movement for the Stage (3)
Movement is studied as both a pure form and as it is used in all theatrical styles, and in the development of characterization. This course may be repeated for credit. (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 Lec.)

(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 Lec.)

(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. This is a continuation of Theatre 107. Emphasis is on developing dramatic action through detailed study of the script. Students deal with stylistic problems presented by the staging of period plays and the development of realism. Rehearsals are used to prepare for scene work. (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. Rehearsals are used to prepare for scene work. (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)
Prerequisites: Theatre 103 and 104. The design and techniques of lighting are covered. Practical experience in departmental productions is required for one semester. (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 Communicaitons 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 203. Emphasis is on radio and television as mass media and practical applications in both radio and television. (3 Lec.)

(THE) 236 Theatre Workshop (3)
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 Lec., 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 applilcation. 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 scrim, screens, and gells 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) 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 106 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 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 in post 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 protfolio programs. This 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 the 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) 713, 803, 813 Cooperative Work Experience (3)
(See Cooperative Work Experience). (1 Lec., 15 Lab.)

(VFT) 714, 804, 814 Cooperative Work Experience (4)
(See Cooperative Work Experience). (1 Lec., 20 Lab.)

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