1984-85

North Lake College Catalog

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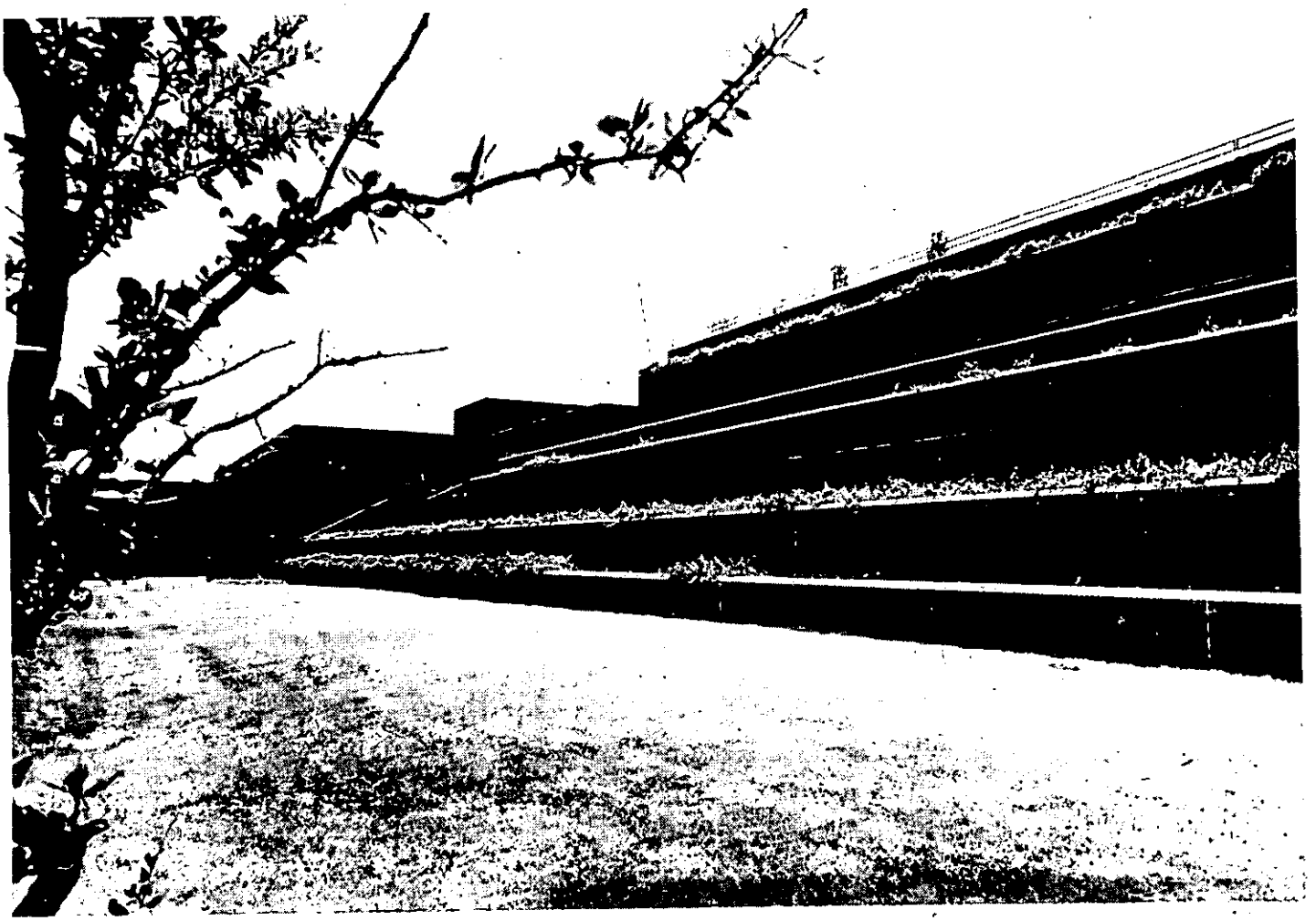
1984-85
North Lake College
Catalog



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

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

1984-85
ACADEMIC CALENDAR

Summer Sessions, 1984

First Session

May 25 (F)	Registration
May 28 (M)	Memorial Day holiday
May 29 (T)	Classes begin
May 30 (W)	Last day for tuition refund
June 1 (F)	4th class day
June 25 (M)	Last day to withdraw "W"
June 28 (R)	Final examinations (4-day schedule) Semester closes
June 29 (F)	Final examinations (5-day schedule) Semester closes

Second Session

July 5 (R)	Registration
July 9 (M)	Classes begin
July 10 (T)	Last day for tuition refund
July 12 (R)	4th class day
Aug. 3 (F)	Last day to withdraw "W"
Aug. 9 (R)	Final examinations (4-day schedule) Semester closes
Aug. 10 (F)	Final examinations (5-day schedule) Semester closes

Fall Semester, 1984

August 20	Facuty Reports
August 21,22,23	Registration Period (varies by campus)
August 24	Faculty Professional Development
August 24	Friday *Only* Classes Begin
August 25	Saturday Classes Begin
August 27	Classes Begin
September 3	Labor Day Holiday
September 7	12th Class Day
November 22	Thanksgiving Holidays Begin
November 26	Classes Resume
December 6	Last Day to Withdraw with "W"
December 14	Last Day of Classes
December 14	Final Exams for Friday *Only* Classes
December 15	Final Exams for Saturday Classes
December 17-20	Final Exams
December 20	Semester Closes

Spring Semester, 1985

January 14	Faculty Reports
January 15-17	Registration Period (varies by campus)
January 18	Faculty Professional Development
January 18	Friday *Only* Classes Begin**
January 19	Saturday Classes Begin**
January 21	Classes Begin
January 31	12th Class Day
February 21	District Conference Day
February 22	Faculty Professional Development (TJCTA)
March 18	Spring Break Begins
March 22	Spring Holiday for All Employees
March 25	Classes Resume
April 5	Easter Holidays Begin
April 8	Classes Resume
May 9	Last Day to Withdraw with "W"
May 17	Last Day of Classes
May 17	Final Exams for Friday *Only* Classes
May 18	Final Exams for Saturday Classes
May 20-23	Final Exams
May 23	Graduation
May 23	Semester Closes

**Friday and Saturday only classes should run 160 minutes since they only meet 15 times in Spring, 1985

Summer Sessions, 1985

First Session (Based on four-day class week)

May 27	Memorial Day Holiday
May 28	Registration
May 30	Classes Begin
June 4	4th Class Day
June 26	Last Day to Withdraw with "W"
July 3	Final Exams
July 3	Semester Closes

Second Session (Based on four-day class week)

July 8	Registration
July 10	Classes Begin
July 15	4th Class Day
August 6	Last Day to Withdraw with "W"
August 13	Final Exams
August 13	Semster Closes

Dallas County Community College District
Board of Trustees

Bob Beard
Chairman

Bob Bettis
Vice Chairman

Don Buchholz

James Smith

Jerry Gilmore

J. D. Hall

Pattie T. Powell

R. Jan LeCroy,
Chancellor

Dallas County Community College District Administrators

Chancellor	R. Jan LeCroy
Vice Chancellor of Business Affairs	Ted B. Hughes
Vice Chancellor of Educational Affairs	Jack Stone
Assistant Chancellor of Planning and Development Affairs	Bill Tucker
Associate Vice Chancellor of Educational Affairs	Ruth Shaw
Assistant to the Chancellor	Jackie Caswell
Director of Development	Carole Shlipak
Legal Counsel	Robert Young
Special Assistant to the Chancellor	Nancy Armes
Director of Business Services	Robb Dean
Director of Career & Continuing Education	Ted Martinez
Director of Computer Services	Jim Hill
Director of Educational Resources	Rodger Pool
Director of Facilities Management	Edward Bogard
Director of Personnel Services and Development	Barbara K. Corvey
Director of Planning, Research and Evaluation	Colin Shaw
Director of Public Information	Claudia Robinson
Director of Purchasing	Mavis Williams
Director of Resource Development	Bonny Franke
Director of Student 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
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	Glen I. Bounds	659-5240
Vice President of Student Development	Margaret Lewis	659-5242
Vice President of Business Services	Mike Howard	659-5235
Asso. Dean of Technical/Occupational Programs	Clifton Weaver	659-5237
Asso. Dean of Continuing Education	Robert Bolin	659-5204
Asst. Director, Continuing Education	Nancy Kinsey	659-5203
Asso. Dean, Learning Resources Center	Jim Picquet	659-5340
Asst. Dean of Instruction	Joel Vela	659-5238
Director of Admissions and Registration	Stephen Twenge	659-5220
Director, Center for Independent Study	Pat Feldman	659-5279
Director of Cooperative Education	Shirley Farrow	659-5370
Director of Financial Aid	Paul Chapman	659-5226
Director, Police Academy	David Klundt	659-5355
Director of Public Information	David Wright	659-5230
Director of Student Programs and Resources	Sharon Beauchamp	659-5307
Director of Special Needs Program	Mary Ciminelli	659-5237
Marketing Coordinator	Mary Holdcroft	659-5374
Natatorium Director	Jean Blair	659-5358
Director, Diesel Truck Training Center	Phill Simmons	634-0319

DIVISION CHAIRPERSONS

Business and Management	Gary Bacon	659-5290
Communications and Humanities	Ora Watson	659-5270
Mathematics and Technology	Grady Grizzle	659-5320
Science and Technology	Bob Agnew	659-5250
Social Science and Physical Education	Martha Hughes	659-5350

OTHER TELEPHONE NUMBERS

Admissions and Registration	659-5220
Business Office	659-5244
Continuing Education Office	659-5200
Data Processing Center	659-5269
Health Center	659-5208
Library	659-5347
Physical Plant	659-5310
Placement Office	659-5372
Public Information	659-5230
Safety and Security	659-5300
Wallace Bookstore	258-8250

NORTH LAKE COLLEGE FACULTY AND STAFF

Agnew, Robert L. ..... Chairperson, Science Technology
North Texas State Univ., B.A., M.A., Ph.D.

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

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

Baen, John ..... Real Estate
Texas A&M Univ., B.S., M.S. Ph.D.

Baty, Ida ..... Counselor
Stephen F. Austin State Univ., B.S., M.S.;
Univ. of Northern Colorado, Ed.D.

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

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.

Blakenship, 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.

Bolin, Robert R. ..... Associate Dean, Continuing Education
Univ. of Wisconsin at Madison, B.B.A., M.S., Study

Bounds, Glen I. ..... Vice President, Instruction
Northwestern State Univ. of Louisiana, B.S.;
East Texas State Univ., M.S., Ed.D.

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

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

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

Chapman, Paul ..... Director, Financial Aid
Trinity Univ., B.A.; Southern Methodist Univ., M.Th.

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.

Conklin, Lillian M. ..... English
Univ. of Texas at El Paso, B.A.; North Texas State Univ., M.A.;
Texas Christian Univ., Study

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

Davis, Annetta N. ..... Accounting
Southern Methodist Univ., B.B.A., M.B.A.;
Univ. of Texas at Arlington, Study

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

Farrow, Shirley ..... Director, Cooperative Education
North Texas State Univ., B.A.; Stephen F. Austin Univ., M.Ed.

Faulkner, Bob ..... Diesel Mechanics
Eastfield College; East Texas State Univ.; Prairie View A&M;
Diesel Technology

Feldman, Pat ..... Director, Center for Independent Study
St. Lawrence Univ. in New York, B.A.; Univ. of North Carolina, M.Ed.

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

Gerbetz, Elizabeth ..... Librarian
East Texas State Univ., B.A., M.A., M.L.S.

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.

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

Holdcroft, Mary ..... Marketing Coordinator
Texas Tech Univ., B.A.; North Texas State Univ., Study

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

Howard, Mike E. ..... Vice President, Business Services
Lamar State Univ., B.B.A.; Univ. of Dallas, Study

Hughes, Martha ..... Chairperson, Social Science/Physical Education
Texas Tech Univ., B.A., M.A.

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

Ironside, Robert ..... Distribution Technology
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.

Jones, Sue ..... Psychology
Nebraska Wesleyan Univ., B.A.; Southern Methodist Univ., M.A.

Kelemen, 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.

Klundt, David ..... Director, North Lake College Police Academy
Univ. of Texas at Permian Basin, B.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.

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.

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

Morman, Shelba Jean ..... Mathematics
Southern Arkansas Univ., B.S.; Louisiana Univ., M.A.;
Univ. of Houston, Ed.D.

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

Osentowski, Francis ..... Music
Kearney State College, B.M.Ed.;
North Texas State Univ., M.M.Ed., D.M.A.

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

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

Picquet, Jim ..... Associate Dean, Learning Resources
Texas A&I Univ., B.S.; East Texas State Univ., M.S.

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

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.

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

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

Sconce, Evelyn ..... Mid-Management
George Mason College of Univ. of Virginia, B.A.; Univ. of Missouri, M.A.;
East Texas State Univ., Study

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

Simmons, Phil ..... Director, Diesel Truck Training Center
East Texas State Univ., B.S., M.S.

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

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

Thompson, Shirley ..... Physical Education
American River College, A.A.; Texas Woman's Univ., B.S., M.A.

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 E. ..... Assistant Dean
Incarnate Word College, B.A.; Angelo State Univ., M.A.;
Univ. of Wyoming, Ed.D.

Watson, Ora ..... Chairperson, Communications/Humanities
Ball State Univ., B.S.; Purdue Univ., M.S., Ph.D.

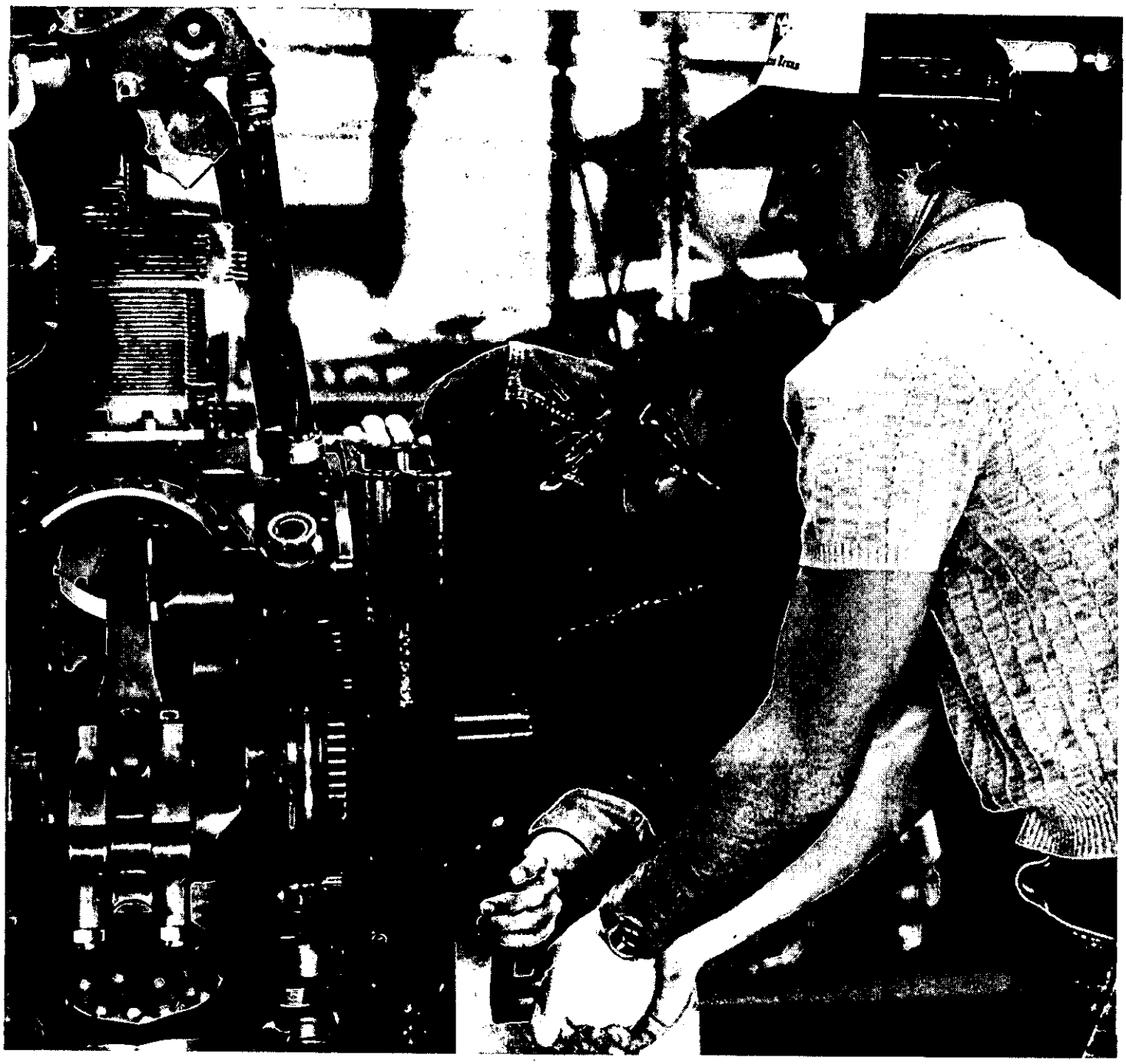
Weaver, Clif ..... Associate Dean, Technical/Occupational Programs
Southern State Univ., B.S.; North Texas State Univ., M.Ed.;
East Texas State Univ., Study

White, James ..... Mid-Management
Texas A&M Univ., B.B.A.; North Texas State Univ., M.B.A.;
Southwestern Baptist Theological Seminary, M.R.E.

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

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

Younger, Charles ..... Solar Energy Technology
West Texas State Univ., B.S.; Univ. of Rochester; Univ. of Houston, 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 17 outstanding community college districts throughout the nation. Its purpose is to encourage innovative experimentation and the continuing development of the community college movement in America. Membership commits the District to research, evaluation, and cooperation with other community college districts. The goal is to serve the community with the best educational program and the fullest use of resources.

Equal Educational And Employment Opportunity Policy

Dallas County Community College District is committed to providing equal educational and employment opportunity regardless of sex, marital or parental status, race, color, religion, age, national origin, or handicap. The District provides equal opportunity in accord with federal and state laws. Equal educational opportunity includes admission, recruitment, extra- curricular programs and activities, access to course offerings, counseling and testing, financial aid, employment, health and insurance services, and athletics. Existing administrative procedures of the College are used to handle student grievances. When a student believes a condition of the College is unfair or discriminatory, the student 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 Public Law 178, 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.

II. ADMISSIONS AND REGISTRATION

General Admissions Policy

The College has an "open door" admissions policy. It insures that all persons who can profit from post-secondary education have an opportunity to enroll. The College requires certain assessment procedures for use in course placement prior to admission to a certificate or degree program, but the assessment is not used to determine admissions.

Admission Requirements

Beginning Freshman

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. Students must continue to make normal progress toward high school graduation.

Transfer Students

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

Former Students

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

Non-Credit Students

Students enrolling for non-credit courses apply through 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,

e. complete a health information form,

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

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

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

Contact the Admissions Office for information.

Application And Admission Procedures

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

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

a. An official application, available from the Admissions Office.

b. An official transcript from the last school (high school or college) attended. Students seeking certificates or associate degrees must submit official transcripts of all previous college work. The College's accrediting agency requires transcripts, and the College uses them in program advisement.

c. Written proof from a medical office of (1) a negative tuberculin skin test or chest X-ray, (2) a polio immunization if the applicant is under 19 years of age, and (3) a diphtheria/tetanus injection within the last 10 years. This medical proof is required by state law (Tex. ED Code 2.09).

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

Tuition

Tuition is charged on a sliding scale according to the number of credit hours for which a student is enrolled and the student's place of legal residence. Tuition is subject to change without notice by the Board of Trustees or the Texas Legislature.

Additional Fees

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

Special Fees And Charges

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

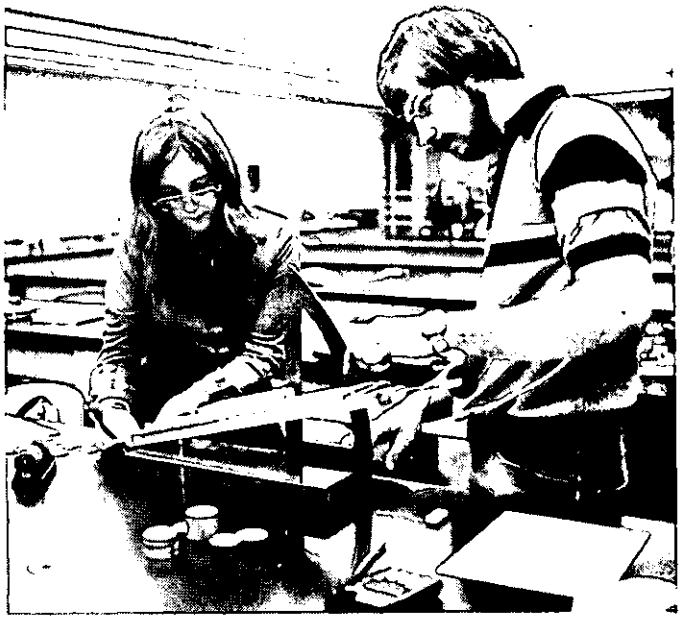
Physical Education Activity Fee: $5 a semester.

Bowling Class Fee: Student pays cost of lane rental.

Private Music Lesson Fee: *$45 for one hour per week (maximum) for one course, $25 for one half hour per week.

Audit Fee: The charge for auditing a course is the same as if the course were taken for credit, except that a student service fee is not charged.

Credit by Examination: A fee will be charged for each examination. This fee can change without prior notice.



TUITION AND STUDENT SERVICES FEE
Fall and Spring Sessions

Semester Credit Hour	Dallas County			Out-of-District			Out-of-State or Country		
	Tuition	Fee	Total	Tution	Fee	Total	Tuition	Fee	Total
1	$ 32	$ 1	$ 33	$ 32	$ 1	$ 33	$ 59	$ 1	$ 60
2	32	2	34	62	2	64	118	2	120
3	32	3	35	93	3	96	177	3	180
4	40	4	44	124	4	128	236	4	240
5	50	5	55	155	5	160	295	5	300
6	60	6	66	186	6	192	354	6	360
7	70	7	77	217	7	224	413	7	420
8	80	8	88	248	8	256	472	8	480
9	90	9	99	279	9	288	531	9	540
10	100	10	110	310	10	320	590	10	600
11	108	10	118	320	10	330	649	10	659
12	116	10	126	330	10	340	708	10	718
13	124	10	134	340	10	350	767	10	777
14	132	10	142	350	10	360	826	10	836
15	140	10	150	360	10	370	885	10	895
16	148	10	158	370	10	380	944	10	954
17	156	10	166	380	10	390	1003	10	1013
18	164	10	174	390	10	400	1062	10	1072
19	172	10	182	400	10	410	1121	10	1131
20	180	10	190	410	10	420	1180	10	1190

TUITION
Summer Sessions

Semester Credit Hour	Dallas County Tuition	Out-of-District Tution	Out-of-State or Country Tuition
1	$ 32	$ 44	$ 65
2	32	88	130
3	36	132	195
4	48	176	260
5	60	220	325
6	72	264	390
7	78	272	448
8	84	280	506
9	90	288	564

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

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

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

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

A foreign national 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.

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:

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, yearbooks, 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 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 followed during the semester in which the courses are reported.

(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.

(9) A student who withdraws from the institution will be assessed a matriculation fee as provided by Coordinating Board regulations.

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.

Advisement Procedures

Individual assessment of skill levels is an important part of student success in college. Therefore, the District has provided an assessment process available through the counseling centers at each of the District colleges. Information gained from assessment is used to advise students in the selection of courses which can provide the best possible opportunity for academic success. All students are required to go through an assessment process and should schedule it prior to initial registration. Developmental studies are available for students who need skill development in reading, writing, or math. Test data, transcripts, previous work, and counseling may be used to determine placement in this program.

Course Prerequisites

Prerequisites are established for certain advanced courses to help assure that students have sufficient background in the subject area to maximize their probability of success in the course. The College recognizes that certain related life experiences may also provide necessary background for success in these courses. Therefore, the division chairperson is authorized to waive a course prerequisite.

Change Of Schedule

Students should be careful in registering to schedule courses only for the days and hours they can attend. Students requesting class changes should contact the Registrar's Office during the time specified in the class schedule. No change is complete until it has been processed by the Registrar's Office.

Non-Credit Student (Audit)

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

Transfer Of Credits

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

Dropping A Course Or Withdrawing From College

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

Address Changes And Social Security Number

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

III. ACADEMIC INFORMATION

Degree Requirements

The College confers the Associate in Arts and Sciences Degree upon students who have completed all general specific requirements for graduation. Each degree candidate must earn the last 15 hours as a resident student in the District colleges or accrue 45 hours in residence.

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

Associate In Arts And Sciences Degree

Students must have a minimum of 60 credit hours and a grade point average of at least "C" (2.0) to receive the Associate in Arts and Sciences Degree. These 60 hours may be earned at any District college. They must include:

English 101-102 plus an additional six hours of English for a total of 12 credit hours in English.

Eight credit hours in laboratory science (Music majors will substitute Music 101-102 for this requirement.)

12 credit hours of History 101-102 and Government 201-202. No substitutions are allowed. Only three credit hours of history and three credit hours of government may be earned through credit by examination. CLEP credit may not be used to meet this requirement.

Three credit hours in humanities, selected from Theatre 101, Art 104, Music 104, Humanities 101 or Philosophy 102.

A maximum of four physical education activity hours may be counted as credit toward requirements for graduation. Courses numbered 99 and below cannot be included to meet degree or certificate requirements. Music 199, Art 199, and Theatre 199 may not be counted toward the 60 hour minimum.

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

Associate In Applied Arts And Sciences Degree And Certificate Career Programs

Students must have a minimum of 60 credit hours and a grade point average of at least "C" (2.0) to receive the Associate in Applied Arts and Sciences Degree. For some programs, more than 60 credit hours are required. All prescribed requirements for the specific technical/occupational program in which the student is enrolled must be completed. These programs may also have other criteria in addition to degree requirements.

See the Technical/Occupational Programs section of this catalog for a more detailed explanation. The require-

ments for certificates are detailed under specific programs listed in the Technical/Occupational Programs section of this catalog. A "C" (2.0) grade point average is required. A maximum of four physical education activity hours may be counted as credit toward graduation. Courses numbered 99 and below may not be included to meet degree or certificate requirements. Music 199, Art 199, and Theatre 199 may not be counted toward the 60-hour minimum.

Procedure For Filing Degree And Certificate Plans And For Graduation

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

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

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

Recommended Academic Load

The maximum academic load is 18 credit hours of course work per semester or five classes plus physical education. Students must receive permission of the Registrar or the appropriate college official to carry a heavier load. Employed students carrying a full load (12 credit hours or more) should not work more than 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.

Class Attendance

Students are expected to attend regularly all classes in which they are enrolled. Students have the responsibility to attend class and to consult with the instructor when an absence occurs.

Instructors are responsible for describing attendance policy and procedures to all students enrolled in their classes. Students who do not attend class during the first 12 days of a long semester or the first four days of a summer session are dropped by the instructor. After this time, it is the responsibility of the student to withdraw from the course. A student, however, may be dropped from the class roll prior to the published withdrawal deadline notice for lack of attendance at the discretion of the instructor.

If an instructor drops a student, the student is notified by a letter from the Registrar's Office sent to the student's address of record. The effective drop date is stated in the letter. A student who desires to remain in class must contact the instructor within the time specified in the instructor's letter. With the instructor's approval, a student may be reinstated. Students dropped for excessive absences prior to the published withdrawal deadline receive a grade of "W."

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. Transcripts do, however, indicate all work completed in the District, even if the latest grade is lower than a preceding grade. When a student withdraws from a course being repeated, the cumulative grade point average is calculated by using the immediately preceding grade in the same course.

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 are included in computing a student's scholastic standing, but they cannot be used to meet graduation requirements.

Honors

Full-time students who complete at least 12 hours of credit and earn a grade point average of 3.00-3.49 are listed on the College's Honor Roll. Full-time students who complete at least 12 hours of credit and average 3.50-4.00 are placed on the Vice President's Honor List. Part-time students who take 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 college career. Transcripts are withheld from students who have not met financial or other obligations to the College. (See Student Codes and Expectations: "Financial Transactions with the College.")

Waiving Of Scholastic Deficiency

Any student in an academic transfer program may transfer to a career program. In such a case, the student may choose to have any grades below "C" disregarded. However, the procedure for disregarding low grades may only be exercised while the student is in a career program. If the student changes to an academic transfer program, the original conditions of the academic transfer program must be followed, including the calculation of a cumulative grade point average of all college credits earned. The procedure for waiving scholastic deficiency applies both to students of this college and to students 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.

Transcripts Of Credit

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

Classification Of Students

Freshman:

A student who has completed fewer than 30 credit hours.

Sophomore:

A student who has completed 30 or more credit hours.

Part-time:

A student carrying fewer than 12 credit hours in a given semester.

Full-time:

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

Learning Resources Center And Library Obligations

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

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

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

IV. EDUCATIONAL AND SPECIAL OPPORTUNITIES

Academic Transfer Studies

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

Technical/Occupational Programs

Students who desire to enter a chosen field as a skilled employee after one or two years of college work may enroll in one of the many technical/occupational programs offered by the College.

Technical/occupational courses carry college credit leading to a Certificate of Completion or an Associate in Applied Arts and Sciences Degree. These programs are established only after studies verify that employment opportunities will exist at the time the student completes training.

The College attempts to match the community's labor requirements with the ambitions and goals of its students. This realistic approach to occupational education is made possible by the excellent cooperation of local industry, business, and public agencies. They increasingly depend on District colleges to supply skilled personnel. A continuous liaison is maintained with prospective employers to help place graduates and to keep the training programs current with job requirements. Recommendations for adding new programs to the College offerings are made periodically and are based on community studies which identify additional training needs.

Credit By Examination

Students who believe they already meet the requirements of a course by experience or previous training may request credit by examination. The counseling center has a list of courses available through this method. The examination may be a section of the College Level Examination Program (CLEP), Advanced Placement Exams (CEEB), or a teacher-made test, depending on the course.

The student pays an examination fee for each course examination. This fee must be paid prior to taking the examination and is not refundable. The College'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.

(CLEP exam does not meet this requirement.)

Non-Traditional Learning

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

1. student must be currently enrolled in the College to receive equivalent credit for non-traditional learning.
2. Credit may be granted for non-traditional learning as it relates to specific courses offered by the college assessing the learning experiences. Credit will be awarded on a

course by course basis only. The student must be enrolled in the college which is assessing the learning experience.

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

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

Flexible Entry Courses

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

Telecourses

Students may take a variety of college credit courses via television. The schedule of telecourses varies each semester and may include courses in anthropology, astronomy, business, earth science, ecology, biology, English, economics, government, history, humanities, psychology, religion, and sociology. Content and credit for these courses are the same as for similar courses taken on campus.

Telecourses include the viewing of television programs on KERA/Channel 13 and on cable, plus reading, study guide and writing assignments. Students come to the campus for an orientation session at the beginning of the semester, for one to four discussion meetings, for three or four tests, and for laboratory sessions in science courses having laboratories. These campus visits are normally scheduled for a time convenient to the students. Field trips are required in some courses. Telecourses may be taken in conjunction with on-campus courses or by persons who are not enrolled in any on-campus courses. Students may register for telecourses by mail or through the regular on-campus registration process.

Cooperative Work Experience

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 occupational goal. This work experience takes place at work training stations approved by the College. The employers must be willing to enter into training agreements with the College and the student employee.

Credit for cooperative education during the semester is based on the completion of a minimum of 80 hours of work per semester for each credit to be earned to a maximum of four (4) credits. Attendance at sixteen (16) hours of campus seminars is also required.

To enroll in a cooperative education course, students must have completed at least six semester hours in an occupational major or secured instructor approval, be concurrently enrolled in a course related to a major subject area, and have approval of the instructor.

To participate in a cooperative education course, a student must be employed at a college-approved training station. The college will assist a student in seeking approvable employment.

Additional information regarding cooperative education may be secured from the Cooperative Education Office at each college. The technical/occupational programs having cooperative education are indicated in this catalog.

International Studies

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

Human Development

In human development courses, students can learn skills useful in everyday living to promote their personal growth. Much of 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 attain and practice skills in these important areas.

These courses are taught by counselors and other qualified instructors. They offer academic credit which transfers to most surrounding four-year institutions. The courses in human development enhance the total curriculum and blend in with the total concept of the community college.

Evening And Weekend College

In dynamic, growing communities such as those encompassing this college, people have continuing educational needs, yet many of them have work schedules and personal involvements which make it impossible for them to attend college during normal daytime hours. For this reason, evening and weekend college courses offer the same broad spectrum of programs available for full-time day students. Courses are offered both on campus and at selected community locations.

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

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

Continuing education programs are offered in the following categories:

Continuing education opportunities for individuals who want to broaden their knowledge or learn new skills for different occupational fields.

Cultural and community enrichment studies for groups and individuals seeking to enhance their quality of life.

Personal entertainment and recreation for individuals wishing to explore new activities for personal growth and enjoyment.

Resources for industry, government and professional groups needing to supplement their own training and development programs.

Continuing education programs offer short courses, seminars, workshops, and institutes. The type of course offering is determined by the nature of the material, instructional approach, and needs of the requesting individuals or organizations. Generally there are no entrance requirements or examinations. Some courses may have age restrictions or may require a certain amount of experience for enrollment. Admission is on a first- come, first-served basis. All one need do to register is fill out the form and pay the fee. Classes and activities are held on campus and in a variety of locations throughout the community. Most classes and activities are conducted on weekday evenings, but many are also held on weekdays and weekends.

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 experience. 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 available for continuing education students during the term they are registered: Contact the Continuing Education Office for further information.

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. The CEU, by nationwide definition, is "ten contact hours of participation in an organized continuing adult education or extension experience under responsible sponsorship, capable direction, and qualified instruction." The CEU is a means of recording and accounting for the various continuing education activities one accumulates over a period of years.

V. STUDENT SERVICES

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

Student Programs and Resources

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

Counseling Services

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

1. Career counseling to explore possible vocational directions, occupational information, and self appraisals of interest, personality and abilities.
2. Academic advisement to examine appropriate choices of courses, educational plans, study skills, and transferability of courses.
3. Confidential personal counseling to make adjustment and life decisions about personal concerns.
4. Small group discussions led by counselors focusing on such areas as interpersonal relationships, test anxiety, and assertiveness. Counselors will consider forming any type of group for which there is a demand.
5. Standardized testing to provide additional information about interests, personality and abilities needed in planning and making decisions.
6. Referral sources to provide in-depth assistance for such matters as legal concerns, financial aid, tutoring, job placement, medical problems, or psychological problems.

Tutoring Services

For students needing special temporary assistance in course work, tutoring services are available. Students are encouraged to seek services through self referral as well as through instructor referral.

Testing And Evaluation Center

The Testing Center administers various tests. Types of tests include:

1. Psychological tests of personality, vocational interests, and aptitudes.
2. Academic tests for college instructional programs. Many courses are individualized and self-paced, permitting students to be tested at appropriate times.
3. Assessment tests for appropriate class placement. These tests are very strongly recommended to insure student success.
4. Tests for selected national programs.

Health Center

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

Services for 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 include interpreters, notetakers, tutors, mobility assistants, loan of wheelchairs, readers for the blind, and tape recorders. 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 Office. The development of student organizations is determined by student interest. Categories of organizations include:

Co-curricular organizations pertinent to the educational goals and purposes of the College.

Social organizations to provide an opportunity for friendships and promote a sense of community among students.

Service organizations to promote student involvement in the community.

Pre-professional and academic organizations to contribute to the development of students in their career fields.

Intercollegiate Athletics

Participation on athletic teams is voluntary on a non-scholarship basis for students who meet requirements established by the Metro Athletic Conference. For more information regarding eligibility, rules, standards, and sports offered, contact the Physical Education Office.

Intramural Sports

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

Housing

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

Campus Security

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

VI. FINANCIAL AID

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

Students needing financial assistance are encouraged to complete an application well in advance of registration for the semester they wish to attend. The Financial Aid Needs Analysis Forms of the College Scholarship Service take 8-10 weeks to process. Early application allows the Financial Aid Office to prepare a realistic financial aid package.

Some of the grant, scholarship, loan and job programs available to students are outlined in the following paragraphs. Contact the Financial Aid Office for detailed information about any program and deadlines for applying. Some of the colleges have established priority deadlines for state grants and scholarships.

For financial aid purposes T.V. courses are considered to be the same as correspondence courses by the federal government. Enrollment in T.V. courses may effect your financial aid award, therefore, please contact your financial aid office if you intend to enroll in any of these classes.

Selective Service

Students who are born after December 31, 1959, and who are required under the Military Selective Service Act to register for draft are required to file a statement of compliance. Failure to comply constitutes ineligibility to receive any grants, loans, or work assistance under Title IV of the Higher Education Act of 1965.

Guaranteed Student Loans

The Higher Education Act of 1965 provided for student loans from private commercial lending agencies such as banks, savings and loan associations, credit unions and insurance companies. These loans are administered under the title of the Guaranteed Student Loan Program (GSLP). Under this program, the educational institution provides a statement of tuition and fees, room and board charges, books and personal expenses and certifies that the student is enrolled in good standing or accepted for enrollment. The student must find a lending institution and arrange for the loan.

Students from families with adjusted gross family incomes of less than $30,000 can borrow without demonstrating financial need. Students with family earnings of $40,000 or more must undergo a financial need test to determine if they are eligible to borrow. If need of $500 to $1000 is demonstrated, a student may borrow up to $1000. If need is over $1000, the student may borrow up to the amount of need not to exceed the program limit ($2500 for undergraduates, $5000 for graduate or professional students). The financial need analysis shall be performed by the school in which the student will be enrolled for the period covered by this loan application in accordance with rules and regulations required by the U.S. Department of Education.

Provisions of the Guaranteed Student Loan Program are subject to actions of the U.S. Congress. The Director of Financial Aid will be able to supply information on changes in this program.

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 it to the Financial Aid Office. The exact amount of the Pell Grant award will depend upon the aid index on the SAR and the number of hours for which the student enrolls. In order to be eligible, a student must enroll for at least six

credit hours each semester. Students must apply each year.

Supplemental Educational Opportunity Grant (SEOG)

The SEOG is a federal program to help pre-baccalaureate students with eligibility based solely on need. The amount of a SEOG award depends on the individual student's needs, the total number of applicants, and funds available. To be eligible, students must enroll for at least six credit hours, make satisfactory progress toward their educational goal and have financial need. Students must apply each year for the SEOG.

Texas Public Educational Grant (TPEG)

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

Texas Public Educational-State Student Incentive Grant (TPE- SSIG)

The TPE-SSIG is a state program. To qualify, students must enroll for at least six credit hours per semester, make satisfactory progress toward their educational goal, be a Texas resident, and have financial need. Grants are awarded by eligibility on a first-come, first-served basis. Student must apply each year for the TPE-SSIG.

Hinson-Hazlewood College Student Loan Program

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

Repayment begins six months after the student ceases to be enrolled for at least one-half the normal course load.

Repayment may extend up to 10 years, but a minimum payment of $50 a month is required.

Student Employment

The College Work/Study Program is a federal program to assist students through jobs both on and off campus. To be eligible, students must demonstrate financial need, be enrolled in six or more credit hours, and make satisfactory progress toward their educational goal. Students will generally work 20 hours per week. The Student Employment Program provides some jobs on campus for students who do not meet the financial need requirement of the College Work/Study Program. Students must be enrolled in six or more credit hours and make satisfactory progress toward their educational goal. Students will generally work 20 hours per week.

Social Security Administration

The Social Security Administration has offered benefits to students who met its criteria. However, 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

Vocational Rehabilitation

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

Veterans' Benefits Program

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

1. Class attendance is mandatory. Failure to attend class results in suspension from class.
2. A veteran student who plans to enroll in developmental courses must be tested and show a need in basic skills before enrolling in these courses.
3. A veteran student enrolled in television courses must be pursuing more on-campus credit hours than hours taken by television.
4. A veteran student who has successfully completed credit hours at another college or university must submit a transcript from that college or university before applying for V.A. benefits. The transcript is evaluated and credit granted when applicable.
5. A veteran student must enroll in courses required for a degree program. Information on degree requirements may be obtained from the Registrar's Office.
6. A veteran student who withdraws or who is dropped

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

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

Hazlewood Act

Under the Hazlewood Act certain veterans who have exhausted remaining educational benefits from the Veterans Administration can attend Texas state supported institutions and have some fees waived. To be eligible, students must have been residents of Texas at the time they entered the service, have an honorable discharge, 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 Requirement

Students who receive financial aid or V.A. benefits are required by government regulations to make measureable progress toward the completion of their course of study. For a detailed description of the requirements, contact the Financial Aid Office.

The 2.0 Grade Point average (GPA) Requirement

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

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

Academic Compliance

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

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

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

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

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

Short-Term Loans

The College offers students short-term loans. Normally, a loan would not exceed tuition, fees, and books, but check with the Financial Aid Office for further details. The loan must be repaid within 60 to 90 days or before the end of the semester in which the money is borrowed.

Job Placement Services

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

VII. 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 Dstrict, 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, stealing, 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 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.

(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) 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 expries. Students will be placed on disciplinary probation for engaging in activities such as the following: being intoxicated, misuse of I.D. card, creating a disturbance in or on campus facilities, and gambling.

(4) "Withholding of transcript 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 violtions 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.

DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

Technical/Occupational Programs Offered on Our Campuses, Spring 1984

Career Education Programs

	BHC	CVC	EFC	ECC	MVC	NLC	RLC
Accounting Associate	●	●	●	●	●	●	●
Advertising Art	●						
Air Conditioning & Refrigeration		●	●			●	
Animal Medical Technology		●					
Apparel Design				●			
Architectural Technology				●			
Architectural Drafting				●			
Auto Body Technology	●		●				
Automotive Parts, Sales & Service	●						
Automotive Technology Apprenticeship		●					
Automotive Technology	●	●	●				
Aviation Maintenance Technology					●		
Aviation Technology					●		
Air Cargo Transport					●		
Aircraft Dispatcher					●		
Airline Marketing					●		
Air Traffic Control					●		
Career Pilot					●		
Fixed Base Operations/Airport Management					●		
Building Trades						●	
Carpentry — Residential & Commercial						●	
Child Development Associate	●		●				
CDA Training Certificate	●		●				
Special Child	●		●				
Administrative	●		●				
Infant-Toddler	●		●				
Commercial Music		●					
Arranger/Composer/Copyist		●					
Music Retailing		●					
Performing Musician		●					
Recording Technology		●					
Construction Management & Technology							●
Data Processing							
Computer Information Systems	●	●	●	●	●	●	●
Computer Operations Technician				●			
Key Entry/Data Control Operator				●			
Programmer	●	●	●	●	●	●	●
Small Computer Systems Specialist				●			
Diesel Mechanics						●	
Distribution Technology						●	
Drafting & Design Technology			●	●	●		
Electronics Design Option			●				
Educational Paraprofessional/Assistant							●
Electrical Technology						●	
Electronics Technology			●		●		
Avionics					●		
Digital Electronics			●				
Engineering Technology					●		●
Electric Power					●		●
Electro-Mechanical					●		●
Fluid Power					●		●
Quality Control					●		●
Manufacturing Engineering							●
Mechanical Option							●
Financial Management							●
Fire Protection Technology				●			
Food Service				●			
Food Service Operations				●			
School Food Service				●			
Graphic Arts/Communications			●				
Horology					●		
Hotel-Motel Operations				●			
Interior Design				●			
Legal Assistant				●			
Machine Parts Inspection					●		
Machine Shop					●		
Major Appliance Repair		●					
Management Careers							
Administrative Management	●	●	●	●	●	●	●
Mid-Management	●	●	●	●	●	●	●
Purchasing Management			●			●	
Sales, Marketing & Retail Management	●	●					
Small Business Management		●		●	●	●	●
Medical							
Associate Degree Nursing	●			●			
Dental Assisting Technology				●			
Medical Assisting Technology				●			
Medical Laboratory Technology				●			
Medical Transcription				●			
Respiratory Therapy Technology				●			
Surgical Technology				●			
Vocational Nursing			●	●			
Motorcycle Mechanics		●					
Office Careers							
Accounting Certificate	●	●	●	●	●	●	●
Administrative Assistant	●	●	●	●	●	●	●
General Office Certificate	●	●	●	●	●	●	●
Insurance Certificate							●
Legal Secretary	●	●	●	●	●	●	●
Office Clerical	●	●	●	●	●	●	●
Professional Secretary	●	●	●	●	●	●	●
Records Management	●	●		●			
Optical Technology						●	
Ornamental Horticulture Technology							●
Florist Option							●
Greenhouse Florist Option							●
Landscape Gardener							●
Landscape Management Option							●
Landscape Nursery Option							●
Outboard Marine Engine Mechanics		●					
Pattern Design				●			
Precision Optics Technology						●	
Police Science Technology				●			
Postal Service Administration					●		
Radiologic Sciences				●			
Diagnostic Medical Sonography				●			
Nuclear Medicine Technology				●			
Radiography Technology				●			
Radiation Therapy Technology				●			
Real Estate						●	●
Retail Distribution and Marketing	●	●					
Commercial Design & Advertising		●					
Fashion Marketing	●	●					
Small Engine Mechanics		●					
Social Work Associate				●			
Human Services Certificate				●			
Solar Energy Technology						●	
Training Paraprofessionals for the Deaf				●			
Sign Language Certificate				●			
Transportation Technology				●			
Welding Technology				●		●	
Welding Engineering 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

(Associate Degree)

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

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

		CREDIT HOURS
SEMESTER I		
ACC 201	Principles of Accounting I	3
BUS 105	Introduction to Business	3
COM 131	Applied Composition and Speech* or	3
ENG 101	Composition and Expository Reading	
MTH 130	Business Mathematics or	3
MTH 111	Mathematics for Business and Economics	
OFC 160	Office Calculating Machines	3
		15
SEMESTER II		
ACC 202	Principles of Accounting II	3
COM 132	Applied Composition and Speech* or	3
ENG 102	Composition and Literature	
CS 175	Introduction to Computer Science	3
MGT 136	Principles of Management	3
‡OFC 172	Beginning Typing	3
		15
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
GVT 201	American Government	3
†Elective		3
		18
SEMESTER IV		
ACC 238	Cost Accounting or	3
ACC 239	Income Tax Accounting	
BUS 234	Business Law	3
ECO 202	Principles of Economics II	3
OFC 231	Business Communications	3
†Electives		3-6
		15-18
Minimum Hours Required:		63

†Electives -- A minimum of six credit hours must be selected from the following:

ACC 205	Business Finance	3
ACC 207	Intermediate Accounting II	3
ACC 238	Cost Accounting	3
ACC 239	Income Tax Accounting	3
ACC 703-713 803-813	Cooperative Work Experience	3
ACC 704-714 804-814	Cooperative Work Experience	4
BUS 143	Personal Finance	3
BUS 237	Organizational Behavior	3
CS 250	Contemporary Topics in Computer Science and Data Processing	3
CS 251	Special Topics in Computer Science and Data Processing	4
MGT 206	Principles of Marketing	3
PSY 105 PSY 131	Introduction to Psychology or Human Relations	3
SPE 105	Fundamentals of Public Speaking	
Any CS or DP Programming course		

*ENG 101 and ENG 102 may be substituted for COM 131 and COM 132 provided that SPE 105 is also taken.

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

AIR CONDITIONING AND REFRIGERATION

This program is designed to prepare the student for entry level employment in the air conditioning and refrigeration industry. Two options are available in this program: Residential Air Conditioning, and Commercial Refrigeration and Industrial Air Conditioning. The student will develop the skills and knowledge necessary to install, repair and maintain equipment related to these options.

Some air conditioning courses are completely individualized. This allows the students to progress at their own pace in order to fully comprehend theory and develop the necessary skills. 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.

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.

CERTIFICATE PROGRAM

A certificate may be obtained in one or both of the options in the air conditioning program. In order to qualify for a certificate, the student must successfully complete the courses listed for the specific option. The courses may be taken in any order desired after consultation with the instructor.

RESIDENTIAL AIR CONDITIONING

(Certificate)

The student will develop skills in diagnosing, checking, servicing, installing and repairing both electrical and mechanical components of residential cooling and heating systems; the student will also make load calculations, select equipment and design residential air distribution systems.

		CREDIT HOURS
SEMESTER I		
AC 150	Basic Principles of Electricity	3
AC 160	Basic Principles of Refrigeration	3
MTH 195	Technical Mathematics	3
PHY 131	Applied Physics	4
		13
SEMESTER II		
AC 155	Advanced Electrical Circuits	3
AC 165	Vapor Compression Systems	3
AC 170	Pipefitting Procedures	3
AC 175	Residential Load Calculations	3
		12
SEMESTER III		
AC 180	Residential Cooling Systems	3
AC 185	Residential Heating Systems	3
AC 240	Air Distribution Systems	3
AC 245	Residential Systems Service	3
AC 703	Cooperative Work Experience or	3
AC 704	Cooperative Work Experience or	(4)
†Elective		(3)
		15-16
Minimum Hours Required:		40

COMMERCIAL REFRIGERATION AND INDUSTRIAL AIR CONDITIONING

(Certificate)

The student will develop skills in diagnosing, servicing, checking, installing and repairing both electrical and mechanical components of commercial refrigeration and industrial air conditioning systems.

		CREDIT HOURS
SEMESTER I		
AC 150	Basic Principles of Electricity	3
AC 160	Basic Principles of Refrigeration	3
MTH 195	Technical Mathematics	3
PHY 131	Applied Physics	4
		13
SEMESTER II		
AC 155	Advanced Electrical Circuits	3
AC 165	Vapor Compression Systems	3
AC 170	Pipefitting Procedures	3
AC 190	Commercial Refrigeration Systems	3
AC 195	Commercial Refrigeration Systems Service	3
		15
SEMESTER III		
AC 260	Special Commercial Refrigeration Applications	3
AC 270	Industrial Air Conditioning Systems	3
AC 275	Industrial Air Conditioning Systems Service	3
AC 280	Hydronic Systems	3
AC 703	Cooperative Work Experience	3
AC 704	Cooperative Work Experience or	(4)
†Elective		(3)
		15-16
Minimum Hours Required:		43

RESIDENTIAL AIR CONDITIONING ASSOCIATE DEGREE PROGRAM

Students wishing to earn an Associate in Applied Arts and Sciences Degree with a major in Residential Air Conditioning or Commercial Refrigeration and Industrial Air Conditioning must complete all of the following courses.

RESIDENTIAL AIR CONDITIONING

(Associate Degree)

		CREDIT HOURS
SEMESTER I		
AC 150	Basic Principles of Electricity	3
AC 160	Basic Principles of Refrigeration	3
MTH 195	Technical Mathematics	3
PHY 131	Applied Physics	4
		13
SEMESTER II		
AC 155	Advanced Electrical Circuits	3
AC 165	Vapor Compression Systems	3
AC 170	Pipefitting Procedures	3
AC 175	Residential Load Calculations	3
SS 131	American Civilization	3
		15
SEMESTER III		
AC 180	Residential Cooling Systems	3
AC 185	Residential Heating Systems	3
AC 240	Air Distribution Systems	3
BPR 177	Blueprint Reading	2
COM 131	Applied Composition and Speech	3
MAR 240	Professional Service Skills or	3
PSY 131	Human Relations	
		17
SEMESTER IV		
AC 245	Residential Systems Service	3
AC 250	Air Conditioning Equipment Selection	3
AC 255	Air Distribution System Design	3
AC 703	Cooperative Work Experience	3
AC 704	Cooperative Work Experience	(4)
†Elective		3-4
		15-17
Minimum Hours Required:		60

†Elective--must be selected from the following:

Three hours of electives are required for the Residential AC Certificate, Residential AC Asscociate in Applied Arts and Sciences Degree and the Commercial Refrigeration and Industrial AC Certificate.

AC 270	Industrial Air Conditioning Systems	3
AC 803	Cooperative Work Experience	3
AC 804	Cooperative Work Experience	4
ACC 131	Bookkeeping I	3
BUS 105	Introduction to Business	3
COM 132	Applied Composition and Speech	3
MAR 240	Professional Service Skills	3
MGT 136	Principles of Management	3
PSY 131	Human Relations	3

COMMERCIAL REFRIGERATION AND INDUSTRIAL AIR CONDITIONING

(Associate Degree)

		CREDIT HOURS
SEMESTER I		
AC 150	Basic Principles of Electricity	3
AC 160	Basic Principles of Refrigeration	3
BPR 177	Blueprint Reading	2
MTH 195	Technical Mathematics	3
PHY 131	Applied Physics	4
		15
SEMESTER II		
AC 155	Advanced Electrical Circuits	3
AC 165	Vapor Compression Systems	3
AC 170	Pipefitting Procedures	3
AC 190	Commercial Refrigeration Systems	3
SS 131	American Civilization	3
		15
SEMESTER III		
AC 195	Commercial Refrigeration Systems Service	3
AC 260	Special Commercial Refrigeration Applications	3
AC 265	Advanced Commercial Refrigeration Systems	3
AC 270	Industrial Air Conditioning Systems	3
COM 131	Applied Composition and Speech	3
		15
SEMESTER IV		
AC 275	Industrial Air Conditioning Systems Service	3
AC 280	Hydronic Systems	3
AC 285	Advanced Industrial Air Conditioning Systems	3
AC 290	Industrial Air Conditioning Control Systems	3
AC 703	Cooperative Work Experience	3
AC 704	Cooperative Work Experience	(4)
MAR 240	Professional Services Skills or	3
PSY 131	Human Relations	
		18-19
Minimum Hours Required:		63

BUILDING TRADES--RESIDENTIAL AND COMMERCIAL CARPENTRY

NLC 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. Two options are available in this program: Residential Carpentry and Commercial Carpentry.

Some carpentry courses are individualized. This allows the 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 student to take a portion of a course (module) without taking the complete course. Credit for prior training or experience may be granted.

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.

A certificate may be obtained in one or both of the options in carpentry. In order to qualify for a certificate, the student must successfully complete the following courses. Courses may be taken in any order after consultation with the instructor.

RESIDENTIAL CARPENTRY

(Certificate)

The Residential Carpentry Certificate is designed to prepare the student for entry level employment as a carpenter in all phases of residential 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	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

RESIDENTIAL CARPENTRY

(Associate Degree)

Students wishing to earn an Associate in Applied Arts and Sciences Degree with a major in residential 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 Composition and Speech	3
MTH 195	Technical Mathematics	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
COM 132	Applied Composition and Speech	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	Human Relations	3
		15-16
Minimum Hours Required:		60

COMMERCIAL CARPENTRY

(Certificate)

The Commercial Carpentry Certificate is designed to prepare the student for entry level employment as a carpenter in the construction industry related to commercial buildings.

		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	3
		15
SEMESTER II		
CAR 107	Construction Cost Estimating	3
CAR 108	Modern Construction Practices	3
CAR 109	Concrete Slabs in Commercial Building	3
CAR 208	Interior Finish I	3
		12
SEMESTER III		
CAR 204	Commercial Wall Forms	3
CAR 206	Vertical Piers and Columns	3
CAR 209	Interior Finish II-Commercial	3
		9
SEMESTER IV		
CAR 203	Stair Building	3
CAR 210	Horizontal Beam Form and Fire Encasement Forms	3
CAR 211	Properties of Concrete	1
CAR 703	Cooperative Work Experience or	3
CAR 704	Cooperative Work Experience	(4)
		10-11
Minimum Hours Required:		43

COMMERCIAL CARPENTRY

(Associate Degree)

Students wishing to earn an Associate in Applied Arts and Sciences Degree with a major in commercial 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 Composition and Speech	3
MTH 195	Technical Mathematics	3
		15
SEMESTER II		
CAR 107	Construction Cost Estimating	3
CAR 108	Modern Construction Practices	3
CAR 109	Concrete Slabs in Commercial Building	3
CAR 208	Interior Finish I	3
SS 131	American Civilization	3
		15
SEMESTER III		
CAR 204	Commercial Wall Forms	3
CAR 206	Vertical Piers and Columns	3
CAR 209	Interior Finish II-Commercial	3
BUS 105	Introduction to Business	3
COM 132	Applied Composition and Speech	3
		15
SEMESTER IV		
CAR 203	Stair Building	3
CAR 210	Horizontal Beam Form and Fire Encasement Forms	3
CAR 211	Properties of Concrete	1
CAR 703	Cooperative Work Experience or	3
CAR 704	Cooperative Work Experience	(4)
ACC 131	Bookkeeping I	3
PSY 131	Human Relations	3
		16-17
Minimum Hours Required:		61

COMPUTER INFORMATION SYSTEMS

(Associate Degree)

This program is designed to prepare students with entry level skills in computer information systems. The curriculum includes many of the basic data processing courses as well as the basic requirements for four-year programs.

Students who plan to obtain baccalaureate degrees should determine what school they wish to transfer to and then seek assistance of a counselor in planning their program to meet the requirements of the particular college to which they plan to transfer.

		CREDIT HOURS
SEMESTER I		
CS 175	Introduction to Computer Science	3
BUS 105	Introduction to Business	3
MGT 136	Principles of Management	3
MTH 111	Mathematics for Business and Economics I	3
ENG 101	Composition and Expository Reading	3
		15
SEMESTER II		
DP 133	COBOL Programming I	4
DP 138	Computer Program Logic and Design	3
ACC 201	Principles of Accounting I	3
ENG 102	Composition and Literature	3
MTH 112	Mathematics for Business and Economics II	3
		16

SEMESTER III		
DP 136	COBOL Programming II	4
DP 142	RPG Programming or DP 144 BASIC Programming or	3
CS 185	PASCAL Programming	
ACC 202	Principles of Accounting II	3
ECO 201	Principles of Economics I	3
†Elective		3
		16
SEMESTER IV		
DP 231	Assembly Language I	4
BUS 234	Business Law	3
ECO 202	Principles of Economics II	3
	Any DP/CS or Accounting course	3
†Elective		3
		16
Minimum Hours Required:		63

†Suggested Electives:
Any DP or CS course not listed (including DP 700-800 Cooperative Work Experience). Any 200 level Accounting course not listed.

PSY 105	Introduction to Psychology	3
PSY 131	Human Relations	3

NOTE: Students may obtain credit toward a degree for only one of each of the pairs of courses listed below:
DP 133 or CS 184
DP 231 or CS 186
DP 144 or CS 182
CS 175 or CS 174

DATA PROCESSING PROGRAMMER

(Associate Degree)

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

		CREDIT HOURS
SEMESTER I		
CS 175	Introduction to Computer Science	3
DP 137	Data Processing Mathematics or any Business Math*	3
BUS 105	Introduction to Business or	3
MGT 136	Principles of Management	
COM 131	Applied Composition and Speech or	3
ENG 101	Composition and Expository Reading	
PSY 131	Human Relations or	3
HD 105	Interpersonal Relationships or	
HD 107	Developing Leadership Behavior	
		15
SEMESTER II		
DP 120	Data Communications	3
DP 133	COBOL Programming I	4
DP 138	Computer Program Logic and Design	3
ACC 201	Principles of Accounting I†	3
COM 132	Applied Composition and Speech or	3
ENG 102	Composition and Literature	
		16
SEMESTER III		
DP 136	COBOL Programming II	4
DP 142	RPG Programming or DP 144 BASIC Programming or	3
CS 185	PASCAL Programming	
DP 233	Operating Systems and Communications	4
ACC 202	Principles of Accounting II	3
	Any approved DP or CS course	3-4
		17-18
SEMESTER IV		
DP 231	Assembly Language I	4
DP 232	Applied Systems	4
DP 236	Advanced COBOL Techniques or	4
DP 246	Data Base Systems	
†Elective		3-4
		15-16
Minimum Hours Required:		63

†Electives--must be selected from the following:

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
ENG 210	Technical Writing	3
MGT 136	Principles of Management	3
MGT 206	Principles of Marketing	3
MTH 202	Introductory Statistics	3

Any DP or CS course (including DP 700-800 Cooperative Work Experience.
Any 200 level Accounting course.

*MTH 111, MTH 112, MTH 130 or an equivalent business math course
†ACC 131 and ACC 132 may be substituted for ACC 201

NOTE: Students may obtain credit toward a degree for only one of each of the pairs of courses listed below:
DP 133 or CS 184
DP 231 or CS 186
DP 144 or CS 182
CS 175 or CS 174

DIESEL MECHANICS

(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 student 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.

		CREDIT HOURS
SEMESTER I		
DME 104	Caterpillar Diesel Engine	5
DME 125	Automatic Transmissions	2
DME 127	Shop Practices	2
BPR 177	Blueprint Reading or	2
BUS 105	Introduction to Business	(3)
ACC 131	Bookkeeping I	(3)
COM 132	Applied Composition and Speech	(3)
MTH 195	Technical Mathematics	3
Elective		3
		17-18
SEMESTER II		
DME 105	Cummins Diesel Engine	5
DME 123	Air Brake Systems	2
DME 124	Differentials and Drive Lines	2
DME 128	Standard Transmissions and Heavy Duty Clutches	3
DME 141	Caterpillar Engine Tune-Up and Fuel Systems	2
COM 131	Applied Composition and Speech	3
		17
SEMESTER III		
DME 106	Detroit Diesel Engine	5
DME 142	Cummins Engine Tune-Up and Fuel Systems	2
DME 143	Detroit Diesel Engine Tune-Up and Fuel Systems	2
PHY 131	Applied Physics	4
Elective		3
		16
SEMESTER IV		
DME 126	Heavy Truck Air Conditioning	2
DME 137	Fundamentals of Oxygen/Acetylene and Arc Welding	3
DME 147	Heavy Truck Electrical System	3
DME 148	Diesel Engine Air Induction Cooling and Lubricating System	2
DME 703	Cooperative Work Experience	3
SS 131	American Civilization	3
		16
Minimum Hours Required:		67

DIESEL MECHANICS

(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 127	Shop Practices	2
DME 123	Air Brake Systems	2
MTH 195	Technical Mathematics	3
		12
SEMESTER II		
DME 105	Cummins Diesel Engine	5
DME 124	Differentials and Drive Lines	2
DME 128	Standard Transmissions and Heavy Duty Clutches	3
DME 141	Caterpillar Engine Tune-Up and Fuel Systems	2
		12
SEMESTER III		
DME 106	Detroit Diesel Engine	5
DME 142	Cummins 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
		12
SEMESTER IV		
DME 148	Diesel Engine Air Induction Cooling and Lubrication Systems	2
DME 703	Cooperative Work Experience	3
DME 125	Automatic Transmissions	2
DME 126	Heavy Duty Truck Air Conditioning	2
DME 137	Fundamentals of Oxygen/Acetlylene and Arc Welding	3
		12
Minimum Hours Required:		48

DISTRIBUTION TECHNOLOGY

(Associate Degree)

The Distribution Technology Program is designed to prepare students for entry or advancement in the career field of wholesale distribution. This program focuses on the basic business techniques and understanding of the principles and techniques relating to distribution, warehousing, pricing, merchandising, operations, and management.

Successful completion of this program leads to the Associate in Applied Arts and Sciences Degree.

		CREDIT HOURS
SEMESTER I		
DT 130	Introduction to Distribution	3
BUS 105	Introduction to Business	3
COM 131	Applied Composition and Speech or	3
ENG 101	Composition and Expository Reading	
MGT 136	Principles of Management	3
MTH 130	Business Mathematics or	3
MTH 111	Mathematics for Business and Economics I	
		15
SEMESTER II		
ACC 201	Principles of Accounting I	3
BUS 234	Business Law	3
COM 132	Applied Composition and Speech or	3
ENG 102	Composition and Literature	
CS 175	Introduction to Computer Science	3
MGT 206	Principles of Marketing	3
		15
SEMESTER III		
DT 133	Transportation Management	3
DT 134	Wholesale Marketing	3
ECO 201	Principles of Economics I	3
MGT 230	Salesmanship	3
‡Electives		3
		15
SEMESTER IV		
DT 231	Purchasing, Pricing, and Inventory Management	3
DT 232	Warehouse Operations	3
BUS 237	Organizational Behavior	3
‡Electives		6
		15
Minimum Hours Required:		60

‡Technical electives — must be selected from the following:

DT 803, 813, 804, 814	Cooperative Work Experience	3-4
ACC 202	Principles of Accounting II	3
ECO 202	Principles of Economics II	3
GPY 102	Economic Geography	3
MGT 212	Special Problems in Business	1
MGT 233	Advertising and Sales Promotion	3
SPE 105	Fundamentals of Public Speaking	3

ELECTRICAL TECHNOLOGY

The Electrical Technology Program is designed to assist students in acquiring entry level skills in preparation for employment in the electrical construction and electrical related fields.

Certificate

Completion of all the 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	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 Composition and Speech	3
		15
Minimum Hours Required:		30

ELECTRICAL TECHNOLOGY

(Associate Degree Program)

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

		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	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 Composition and Speech	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)
CS 175	Introduction to Computer Science	3
		17-18
SEMESTER IV		
ELE 215	Electrical Motor Fundamentals	3
ELE 216	Motor Controls	3
ELE 217	Solid State Controls	2
ELE 218	Electrical Design	3
PSY 131	Human Relations	3
ELE 803	Cooperative Work Experience or	3
ELE 804	Cooperative Work Experience or	(4)
Elective		(3)
		17-18

MANAGEMENT CAREERS--ADMINISTRATIVE MANAGEMENT OPTION

(Associate Degree)

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

		CREDIT HOURS
SEMESTER I		
MGT 136	Principles of Management	3
BUS 105	Introduction to Business	3
COM 131	Applied Composition and Speech*	3
HUM 101	Introduction to the Humanities	3
†Elective		3
		15
SEMESTER II		
MGT 206	Principles of Marketing	3
ACC 201	Principles of Accounting I†	3
COM 132	Applied Composition and Speech*	3
CS 175	Introduction to Computer Science	3
MTH 111	Mathematics for Business & Economics I or	3
MTH 112	Mathematics for Business & Economics II or	
MTH 130	Business Mathematics	
		15
SEMESTER III		
ACC 202	Principles of Accounting II	3
BUS 234	Business Law	3
ECO 201	Principles of Economics II	3
PSY 131	Human Relations	3
†Elective		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
	Social Science or Humanities elective	3
†Elective		3
		18
Minimum Hours Required:		63

†Electives--may be selected from the following:

MGT 137	Principles of Retailing	3
MGT 153	Small Business Management	3
MGT 212	Special Problems in Business	1
MGT 230	Salesmanship	3
MGT 233	Advertising and Sales Promotion	3
OFC 160	Office Calculating Machines	3
OFC 172	Beginning Typing	3

*Students may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the division chair. Students must take Speech 105 as an elective when substituting ENG 101 and 102.

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

MANAGEMENT CAREERS-- MID-MANAGEMENT OPTION

(Associate Degree)

The Mid-Management Option is a cooperative plan with members of the business community whereby the student attends college classes in management and related courses and concurrently works at a regular, paid, part-time or full- time job in a sponsoring business firm. To enter the Mid-Management Option, students must make formal application and be interviewed by a member of the mid-management faculty before final acceptance will be granted.

		CREDIT HOURS
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
COM 131	Applied Composition and Speech*	3
		15
SEMESTER II		
MGT 151	Management Training	4
MGT 155	Management Seminar: Personnel Management	2
COM 132	Applied Composition and Speech*	3
CS 175	Introduction to Computer Science	3
HUM 101	Introduction to the Humanities	3
MTH 111	Mathematics for Business and Economics I or	3
MTH 112	Mathematics for Business and Economics II or	
MTH 130	Business Mathematics	
		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	Human Relations	3
		15
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
	Social Science elective or Humanities elective	3
†Elective		3
		15
Minimum Hours Required:		63

†Elective--may be selected from the following:

MGT 137	Principles of Retailing	3
MGT 153	Small Business Management	3
MGT 212	Special Problems in Business	1
MGT 230	Salesmanship	3
MGT 233	Advertising and Sales Promotion	3
OFC 160	Office Calculating Machines	3
OFC 172	Beginning Typing	3

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

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

MANAGEMENT CAREERS-- PURCHASING MANAGEMENT OPTION

(Associate Degree)

This option is designed to develop the fundamental skills and knowledge which enable individuals to assume technical and decision making positions within the purchasing function of profit and non-profit organizations.

		CREDIT HOURS
SEMESTER I		
MGT 136	Principles of Management	3
MGT 160	Principles of Purchasing	3
BUS 105	Introduction to Business	3
COM 131	Applied Composition and Speech*	3
MTH 111	Mathematics for Business and Economics I or	3
MTH 112	Mathematics for Business and Economics II or	
MTH 130	Business Mathematics	
		15
SEMESTER II		
MGT 220	Materials Management	3
ACC 201	Principles of Accounting I†	3
COM 132	Applied Composition and Speech I*	3
HUM 101	Introduction to the Humanities	3
†Elective		3
		15
SEMESTER III		
MGT 206	Principles of Marketing	3
MGT 280	Industrial Management	3
CS 175	Introduction to Computer Science	
ECO 201	Principles of Economics I	3
PSY 131	Human Relations	3
		15
SEMESTER IV		
MGT 224	Quality Assurance	3
BUS 234	Business Law	3
ECO 202	Principles of Economics II	3
	Social Science or Humanities elective	3
†Elective		3
		15
Minimum Hours Required:		60

†Electives--may be selected from the following:

ACC 202	Principles of Accounting II	3
BUS 237	Organization Behavior	3
MGT 230	Salesmanship	3
MGT 233	Advertising and Sales Promotion	3
MTH 202	Introductory Statistics	3
OFC 231	Business Communications	3
TRT 287	Physical Distribution Management I	3

*Students may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the division chair. Students must take SPE 105 as an elective when substituting ENG 101 and 102.

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

MANAGEMENT CAREERS--SMALL BUSINESS MANAGEMENT OPTION

(Associate Degree)

The Small Business Management Option is designed to assist owners and managers of small businesses in developing the skills and techniques necessary for operation. This option is also designed for students who plan to become owners or operators of small businesses.

		CREDIT HOURS
SEMESTER I		
MGT 136	Principles of Management	3
MGT 153	Small Business Management	3
COM 131	Applied Composition and Speech*	3
HUM 101	Introduction to the Humanities	3
†Elective		3
		15
SEMESTER II		
MGT 157	Small Business Bookkeeping and Accounting Practives†	3
COM 132	Applied Composition and Speech*	3
CS 175	Introduction to Computer Science	3
MTH 111	Mathematics for Business and Economics I or	3
MTH 112	Mathematics for Business and Economics II or	
MTH 130	Business Mathematics	
BUS 105	Introduction to Business	3
		15
SEMESTER III		
MGT 206	Principles of Marketing	3
MGT 211	Small Business Operations	3
ECO 201	Principles of Economics I	3
PSY 131	Human Relations	3
†Elective		3
		15
SEMESTER IV		
MGT 210	Small Business Capitalization, Acquisition and Finance	3
BUS 234	Business Law	3
ECO 202	Principles of Economics II	3
	Social Science and Humanities elective	3
†Elective		3
		15
Minimum Hours Required:		60

†Elective--may be selected from the following:

ACC 201	Principles of Accounting I	3
MGT 212	Special Problems in Business	1
OFC 160	Office Calculating Machines	3
OFC 172	Beginning Typing	3

*Students may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the division chair. Students must take Speech 105 as an elective when substituting ENG 101 and 102.
†Students may substitute ACC 201 for MGT 157.

OFFICE CAREERS--ADMINISTRATIVE ASSISTANT OPTION

(Associate Degree)

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

		CREDIT HOURS
SEMESTER I		
OFC 160	Office Calculating Machines*	3
‡OFC 172	Beginning Typing or	3
OFC 173	Intermediate Typing	
‡COM 131	Applied Composition and Speech	3
MTH 130	Business Mathematics	3
BUS 105	Introduction to Business	3
†Elective		3
		18
SEMSTER II		
*OFC 173	Intermediate Typing or	3
OFC 273	Advanced Typing Applications	(2)
OFC 162	Office Procedures	3
OFC 180	Principles of Word Processing‡	3
CS 175	Introduction to Computer Science	3
MGT 136	Principles of Management	3
*COM 132	Applied Composition and Speech	3
		17-18
SEMESTER III		
‡OFC 273	Advanced Typing Applications or	2
	†Elective	(3)
OFC 231	Business Communications	3
ACC 131	Bookkeeping I or	3
ACC 201	Principles of Accounting	
PSY 131	Human Relations or	3
PSY 105	Introduction to Psychology	
†Electives		6
		17-18
SEMESTER IV		
OFC 256	Office Management or	3
BUS 237	Organizational Behavior	
HUM 101	Introduction to the Humanities	3
†Electives		9
		15
Minimum Hours Required:		67

†Electives-must be taken from the following:

OFC	Any OFC course may be selected	3-4
OFC 803/804	Cooperative Work Experience	3
ACC 132	Bookkeeping II	3
ACC 202	Principles of Accounting II	3
BUS 143	Personal FInance	3
BUS 234	Business Law	3
BUS 237	Organizational Behavior	3
MGT 136	Principles of Management	3
MGT 242	Personnel Administration	3
CS 250	Contemporary Topics in Computer Science	3
CS 251	Special Topics in Computer Science	4
ECO 201	Principles of Economics I	3
SPE 105	Fundamentals of Public Speaking	3

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

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

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

†OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172. ‡OFC 181, OFC 182 and OFC 185 taken cumulatively will be equivalent to *OFC 180.

OFFICE CAREERS — LEGAL SECRETARY OPTION

(Associate Degree)

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

		CREDIT HOURS
SEMESTER I		
OFC 159	Beginning Shorthand or	
OFC 103	Speedwriting	4
OFC 160	Office Calculating Machines*	3
‡OFC 172	Beginning Typing or	3
OFC 173	Intermediate Typing	
‡COM 131	Applied Composition and Speech	3
MTH 130	Business Mathematics	3
		16
SEMESTER II		
OFC 166	Intermediate Shorthand or	4
OFC 104	Speedwriting Dictation	(3)
*OFC 173	Intermediate Typing or	3
OFC 273	Advanced Typing Applications	(2)
OFC 162	Office Procedures	3
ACC 131	Bookkeeping I or	3
ACC 201	Principles of Accounting I	
BUS 105	Introduction to Business	3
‡COM 132	Applied Composition and Speech	3
		17-19
SEMESTER III		
OFC 180	Principles of Word Processing‡*	3
OFC 167	Legal Terminology and Transcription	3
OFC 231	Business Communications	3
OFC 273	Advanced Typing Applications or	2
‡Elective		(3)
‡CS 175	Introduction to Computer Science	3
		14-15
SEMESTER IV		
OFC 282	Word Processing Applications	1
OFC 274	Legal Office Procedures	3
OFC 275	Secretarial Procedures or	3
OFC 803	Cooperative Work Experience or	
OFC 804	Cooperative Work Experience	(4)
OFC 285	Applied Machine Transcription	1
HUM 101	Introduction to the Humanties	3
PSY 131	Human Relations or	3
PSY 105	Introduction to Psychology	
		14-15

Minimum Hours Required: 61

‡Electives — must be taken from the following:

‡OFC	Any OFC Course may be selected	
OFC 803/804	Cooperative Work Experience	3-4
ACC 132	Bookkeeping II	3
ACC 202	Principles of Accounting II	3
BUS 143	Personal Finance	3
BUS 234	Business Law	3
BUS 237	Organizational Behavior	3
MGT 136	Principles of Management	3
MGT 242	Personnel Administration	3
CS 250	Contemporary Topics in Computer Science	3
CS 251	Special Topics in Computer Science and Data Processing	4
ECO 201	Principles of Economics I	3
‡SPE 105	Fundamentals of Public Speaking	3

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

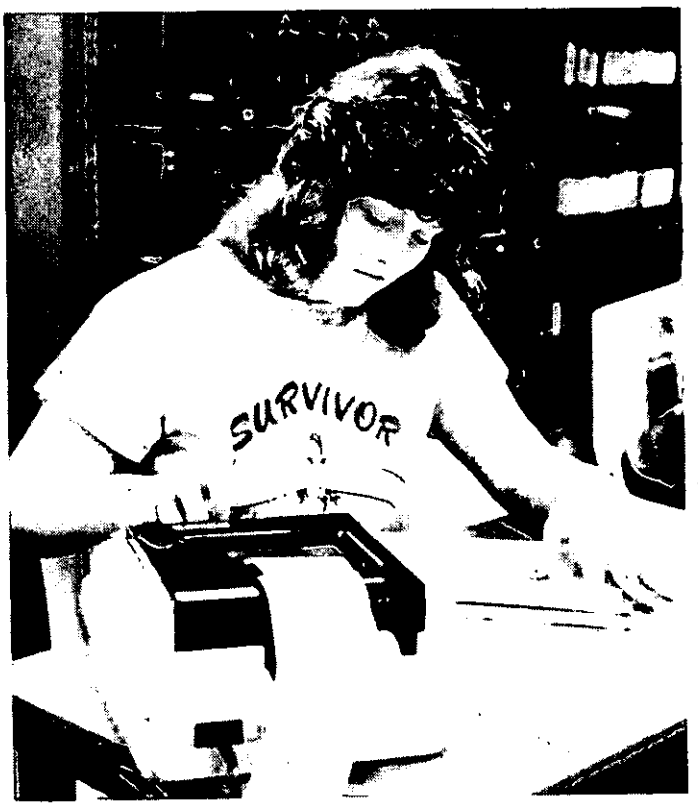
‡Students may substitute ENG 101 for COM 131 and ENG 102 for COM 132 with permission of the division chair. However, students must take SPE 105 as an elective when substituting ENG 101 and‡* ENG 102.

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

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

‡OFC 187, OFC 188 and OFC 189 taken cumulatively will be equivalent to OFC 166.

‡*OFC 181, OFC 182 and OFC 185 taken cumulatively will be equivalent to OFC 180.

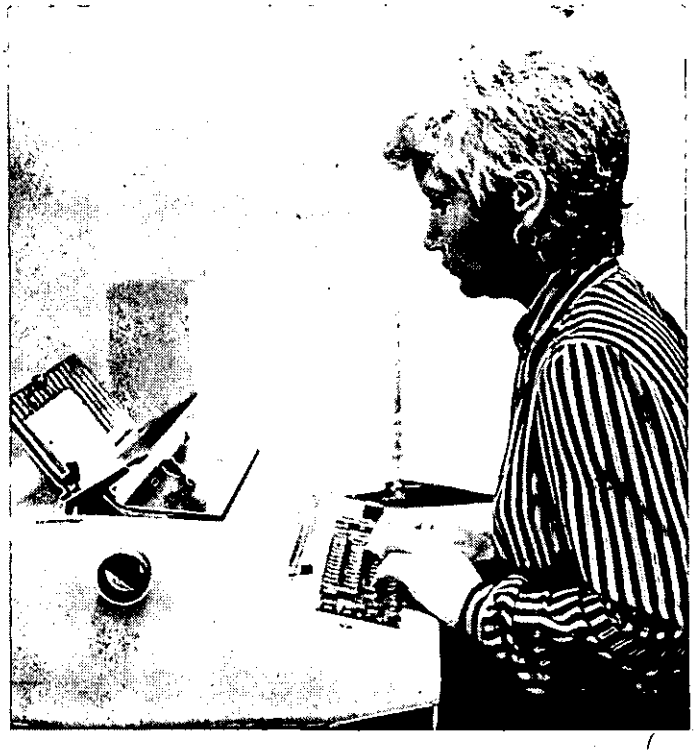


OFFICE CAREERS— PROFESSIONAL SECRETARY OPTION

(Associate Degree)

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

		CREDIT HOURS
SEMESTER I		
OFC 160	Office Calculating Machines*	3
OFC 159	Beginning Shorthand or	4
OFC 103	Speedwriting	
‡OFC 172	Beginning Typing or	3
OFC 173	Intermediate Typing	
‡COM 131	Applied Composition and Speech	3
MTH 130	Business Mathematics	3
		16
SEMESTER II		
OFC 166	Intermediate Shorthand‡ or	4
OFC 104	Speedwriting Dictation	(3)
*OFC 173	Intermediate Typing or	3
OFC 273	Advanced Typing Applications	(2)
OFC 162	Office Procedures	3
ACC 131	Bookkeeping I or	3
ACC 201	Principles of Accounting I	
BUS 105	Introduction to Business	3
‡COM 132	Applied Composition and Speech	3
		17-19



SEMESTER III		
OFC 180	Principles of Word Processing‡*	3
OFC 231	Business Communications	3
CS 175	Introduction to Computer Science	3
PSY 131	Human Relations or	3
PSY 105	Introduction to Psychology	
OFC 273	Advanced Typing Applications or	2
†Elective		(3)
		14-15
SEMESTER IV		
OFC 282	Word Processing Applications	1
OFC 275	Secretarial Procedures or	3
OFC 803	Cooperative Work Experience or	
OFC 804	Cooperative Work Experience	(4)
OFC 285	Applied Machine Transcription	1
HUM 101	Introduction to the Humanities	3
†Electives		6-7
		14-16
Minimum Hours Required:		61

†Electives — must be taken from the following:

†OFC	Any OFC Course may be selected	
OFC 803/804	Cooperative Work Experience	3-4
ACC 132	Bookkeeping II	3
ACC 202	Principles of Accounting II	3
BUS 143	Personal Finance	3
BUS 234	Business Law	3
BUS 237	Organizational Behavior	3
MGT 136	Principles of Management	3
MGT 242	Personnel Administration	3
CS 250	Contemporary Topics in Computer Science	3
CS 251	Special Topics in Computer Science and Data Processing	4
ECO 201	Principles of Economics I	3
‡SPE 105	Fundamentals of Public Speaking	3

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

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

*OFC 192, OFC 193 and OFC 194 taken cumulatively will be equivalent to OFC 160.
†OFC 176, OFC 177 and OFC 178 taken cumulatively will be equivalent to OFC 172.
‡OFC 187, OFC 188 and OFC 189 taken cumulatively will be equivalent to OFC 166.
‡*OFC 181, OFC 182 and OFC 185 taken cumulatively will be equivalent to OFC 180.

OFFICE CAREERS — GENERAL OFFICE

(Certificate)

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

		CREDIT HOURS
SEMESTER I		
OFC 160	Office Calculating Machines*	3
‡OFC 172	†Beginning Typing	3
COM 131	Applied Composition and Speech	3
MTH 130	Business Mathematics	3
†Electives		7
		19
SEMESTER II		
ACC 131	Bookkeeping I	3
BUS 105	Introduction to Business	3
CS 175	Introduction to Computer Science	3
†Electives		7
		16
Minimum Hours Required:		35

†Electives — must be taken from the following:

OFC 103	Speedwriting Theory	4
OFC 104	Speedwriting Dictation	3
OFC 159	Beginning Shorthand	4
OFC 162	Office Procedures	3
OFC 180	Principles of Word Processing‡*	3
OFC 166	Intermediate Shorthand‡	4
OFC 173	Intermediate Typing	3
OFC 231	Business Communications	3
ACC 132	Bookkeeping II	3
ACC 201	Principles of Accounting I	3
COM 132	Applied Composition and Speech	3
PSY 105	Introduction to Psychology or	3
PSY 131	Human Relations	
MGT 136	Principles of Management	3
BUS 234	Business Law	3
CS 250	Contemporary Topics in Computer Science	3
OFC 273	Advanced Typing Applications	2
OFC 275	Secretarial Procedures	3
OFC 803	Cooperative Work Experience or	3
OFC 804	Cooperative Work Experience	(4)

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

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

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

‡OFC 187, OFC 188 and OFC 189 taken cumulatively will be equivalent to OFC 166.

‡*OFC 181, OFC 182 and OFC 185 taken cumulatively will be equivalent to OFC 180.

OFFICE CAREERS — GENERAL OFFICE

(Certificate — Accounting Emphasis)

		CREDIT HOURS
SEMESTER I		
OFC 160	Office Calculating Machines*	3
‡OFC 172	Beginning Typing†	3
ACC 131	Bookkeeping I or	3
ACC 201	Principles of Accounting I	
COM 131	Applied Composition and Speech	3
MTH 130	Business Mathematics	3
†Elective		3
		18
SEMESTER II		
‡*ACC 132	Bookkeeping II or	3
†Elective		
BUS 105	Introduction to Business	3
CS 175	Introduction to Computer Science	3
†Electives		8
		17
Minimum Hours Required:		35

†Electives — Must be taken from the following:

OFC 103	Speedwriting Theory	4
OFC 104	Speedwriting Dictation	3
OFC 159	Beginning Shorthand	4
OFC 162	Office Procedures	3
OFC 180	Principles of Word Processing‡†	3
OFC 166	Intermediate Shorthand‡	4
OFC 173	Intermediate Typing	3
OFC 231	Business Communications	3
ACC 132	Bookkeeping II	3
ACC 201	Principles of Accounting I	3
COM 132	Applied Composition and Speech	3
PSY 105	Introduction to Psychology or	3
PSY 131	Human Relations	
MGT 136	Principles of Management	3
BUS 234	Business Law	3
CS 250	Contemporary Topics in Computer Science	3
OFC 273	Advanced Typing Applications	2
OFC 275	Secretarial Procedures	3
OFC 803	Cooperative Work Experience or	3
OFC 804	Cooperative Work Experience	(4)

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

‡*Required if ACC 131 was taken previously.

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

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

‡OFC 187, OFC 188 and OFC 189 taken cumulatively will be equivalent to OFC 166.

‡†OFC 181, OFC 182 and OFC 185 taken cumulatively will be equivalent to OFC 180.

OFFICE CAREERS — GENERAL OFFICE

(Certificate — Office Clerical Emphasis)

		CREDIT HOURS
SEMESTER I		
OFC 160	Office Calculating Machines*	3
OFC 162	Office Procedures	3
‡OFC 172	Beginning Typing	3
COM 131	Applied Composition and Speech	3
MTH 130	Business Mathematics	3
†Elective		3
		18
SEMESTER II		
OFC 180	Principles of Word Processing‡†	3
OFC 173	Intermediate Typing	3
OFC 231	Business Communications	3
ACC 131	Bookkeeping I	3
BUS 105	Introduction to Business	3
CS 175	Introduction to Computer Science	3
		18
Minimum Hours Required:		36

†Electives — Must be taken from the following:

OFC 103	Speedwriting Theory	4
OFC 104	Speedwriting Dictation	3
OFC 159	Beginning Shorthand	4
OFC 166	Intermediate Shorthand‡	4
OFC 231	Business Communications	3
ACC 132	Bookkeeping II	3
ACC 201	Principles of Accounting I	3
COM 132	Applied Composition and Speech	3
PSY 105	Introduction to Psychology or	3
PSY 131	Human Relations	
MGT 136	Principles of Management	3
BUS 234	Business Law	3
CS 250	Contemporary Topics in Computer Science	3
OFC 273	Advanced Typing Applications	2
OFC 275	Secretarial Procedures	3
OFC 803	Cooperative Work Experience or	3
OFC 804	Cooperative Work Experience	(4)

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

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

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

‡OFC 187, OFC 188 and OFC 189 taken cumulatively will be equivalent to OFC 166.

‡†OFC 181, OFC 182 and OFC 185 taken cumulatively will be equivalent to OFC 180.

OPTICAL TECHNOLOGY

(Certificate)

The Optical Technology Program is designed to prepare students for entry level employment in the optical manufacturing or optical dispensing field.

Graduates should be able to operate machines, read optical specifications, perform quality control checks, and be able to communicate with customers. Students may specialize in either optical manufacturing or optical dispensing.

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.

		CREDIT HOURS
SEMESTER I		
OPT 101	Ophthalmic Materials	3
OPT 102	Ophthalmic Grinding and Polishing	3
OPT 103	Optical Lens Design and Measurements	3
OPT 104	Optical Lens and Frame Selection	3
MTH 195	Technical Mathematics	3
		15
SEMESTER II		
OPT 205	Anatomy and Physiology of the Eye	3
OPT 206	Introduction to Contact Lenses	3
OPT 207	Bifocals and Trifocals Lenses	3
PHY 131	Applied Physics	4
		13
SUMMER SEMESTERS I & II (12 weeks)		
OPT 703	Cooperative Work Experience	3
SEMESTER III		
OPT 208	Ophthalmic Laboratory Equipment	3
OPT 209	Ophthalmic Dispensing Ethics	3
OPT 211	Optic Principles	3
OPT 803, 813	Cooperative Work Experience	3
		12
Minimum Hours Required:		43

OPTICAL TECHNOLOGY

(Associate Degree)

		CREDIT HOURS
SEMESTER I		
OPT 101	Ophthalmic Materials	3
OPT 102	Ophthalmic Grinding and Polishing	3
COM 131	Applied Composition and Speech or	3
ENG 101	Composition and Expository Reading	
MTH 195	Technical Mathematics	3
PSY 131	Human Relations	3
		15
SEMESTER II		
OPT 103	Optical Lens Design and Measurements	3
OPT 104	Optical Lens and Frame Selection	3
BUS 105	Introduction to Business	3
GVT 201	American Government or	3
HST 101	History of the United States	
PHY 131	Applied Physics	4
		16
SUMMER SEMESTERS I & II (12 weeks)		
OPT 703	Cooperative Work Experience	3
SEMESTER III		
OPT 205	Anatomy and Physiology of the Eye	3
OPT 206	Introduction to Contact Lenses	3
OPT 207	Bifocals and Trifocals Lenses	3
OPT 208	Ophthalmic Laboratory Equipment	3
OPT 803	Cooperative Work Experience	3
		15
SEMESTER IV		
Lab Majors		
OPT 209	Ophthalmic Dispensing Ethics	3
OPT 211	Optic Principles	3
OPT 813	Cooperative Work Experience	3
†Elective		3
		12
SEMESTER IV		
Dispensing Majors		
OPT 210	Ophthalmic Fitting	3
OPT 212	Measurements	3
OPT 213	Dispensing Occupational Eyewear	3
OPT 813	Cooperative Work Experience	3
		12
Minimum Hours Required:		61

PRECISION OPTICS TECHNOLOGY

(Associate Degree)

The Precision Optics Technology Program is designed to prepare students for employment in the precision optics manufacturing field.

		CREDIT HOURS
SEMESTER I		
POP 101	Introduction to Precision Optics Technology	3
POP 104	Industrial Shop Safety	3
BPR 177	Blueprint Reading	2
COM 131	Applied Composition & Speech	3
MTH 195	Technical Mathematics	3
		14
SEMESTER II		
POP 102	Precision Optics Machining I	3
POP 103	Precision Optics Machining II	3
POP 107	Precision Optics Handling and Cleaning	2
MTH 196	Technical Mathematics	3
PHY 131	Applied Physics	4
		15
SEMESTER III		
POP 105	Precision Optics Machining III	3
POP 106	Thin Film Optical Coatings	4
POP 201	Basic Precision Optics Theory	3
HST 102	History of the United States	3
†Elective		3
		16
SEMESTER IV		
POP 203	Precision Optics Quality Control	3
POP 204	Precision Optics Assembly	3
POP 205	Advanced Precision Optics Processes	3
POP 703	Cooperative Work Experience	3
PSY 131	Human Relations	3
		15
Minimum Hours Required:		60

REAL ESTATE

(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.

		CREDIT HOURS
SEMESTER I		
COM 131	Applied Composition and Speech or	3
ENG 101	Composition and Expository Reading	
BUS 105	Introduction to Business	3
MTH 130	Business Mathematics or	3
MTH 111	Mathematics for Business and Economics I	
RE 130	Real Estate Principles	3
RE 131	Real Estate Finance	3
		15
SEMESTER II		
COM 132	Applied Composition and Speech or	3
ENG 102	Composition and Literature	
RE 133	Real Estate Marketing	3
RE 135	Real Estate Appraisal	3
RE 136	Real Estate Law	3
†Elective (Psychology, Sociology, or Human Development)		3
		15
SEMESTER III		
ECO 201	Principles of Economics I	3
RE 230	Real Estate Office Management	3
RE 250	Real Estate Internship I*	4
RE 254	Real Estate Seminar I*	2
†Elective		3
		15
SEMESTER IV		
GVT 201	American Government	3
ACC 201	Principles of Accounting I	3
†Elective		9
		15
Minimum Hours Required:		60

*Preliminary interview by real estate coordinator required.
RE 250 and RE 254 must be taken concurrently.
RE 251 and RE 255 must be taken concurrently.

†Recommended electives:

†RE 233	Commercial 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
SPE 105	Fundamentals of Public Speaking	3

RECIPROCAL TUITION AGREEMENT

DCCCD PROGRAMS

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

Program	Campus
Advertising Art	BHC
Animal Medical Technology	CVC
Apparel Design	ECC
Aviation Technology	MVC
Air Cargo	
Air Traffic Control	
Aircraft Dispatcher	
Airline Marketing	
Career Pilot	
Fixed Base Operations	
Avionics	MVC
Automotive Parts	BHC
Automotive Machinist	BHC
Building Trades	NLC
Carpentry	
Electrical	
Commerical Design & Advertising	CVC
Commercial Music	CVC
Construction Management	RLC
Diesel Mechanics	NLC
Distribution Technology	NLC
Engineering Technology	RLC
Food Service Operations	ECC
Graphic Communications	EFC
Horology	MVC
Hotel/Motel Operations	ECC
Human Services	EFC
Interior Design	ECC
Motorcycle Mechanics	CVC
Optical Technology	NLC
Outboard Marine	
Engine Mechanics	CVC
Pattern Design	ECC
Purchasing Management	EFC, NLC
Retail Management	BHC, CVC
Solar Energy Technology	NLC
Vocational Nursing	ECC

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	NW
Cast Metals Technology	NE
Civil/Construction Technology	NE
Dental Hygiene	NE
Emergency Medical Technology	NE
Industrial Supervision	S
Long Term	
Health Card Administration	NE
Media Technology	NE
Medical Records Technology	NE
Nondestructive	
Evaluation Technology	S
Physical Therapist Assistant	NE
Property Tax Appraisal	NE
Radio-TV Repair	S

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

STUDENTS CONSIDERING TRANSFER TO A FOUR-YEAR INSTITUTION

All courses which make up DCCCD technical/occupational programs are credit courses lending to an associate degree. Some courses are transferable to four-year institutions. Students who plan to transfer are advised to consult with a counselor to develop a technhical/occupational course plan which best meets the degree requirements of the chosen four-year college or university.

Course Descriptions

Including General Education & Career Program Courses

- **All courses listed in this catalog are not available at every college.** This 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.

- **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.

DEFINITION OF TERMS

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

1. Concurrent Enrollment
   (a) Enrollment by the same student in two different colleges of the District at the same time, or (b) enrollment by a high school senior in a high school and one of the District colleges at the same time, or (c) enrollment by a student in two related courses in the same semester.
2. Contact Hours – The number of clock hours a student spends in a given course during the semester.
3. Credit Hours (CR.) – College work is measured in units called credit hours A credit hour value is assigned to each course and is normally equal to the number of hours the course meets each week. Credit hours are sometimes refered to as semester hours.
4. Elective – A course chosen by the student that is not required for a certificate or degree.
5. Flexible Entry Course – A course that permits beginning or ending dates other than the beginning or ending of the semester. Consult the class schedule for further information.
6. Laboratory Hours (Lab.) – The number of clock hours in the fall or spring semester the student spends each week in the laboratory or other learning environment.
7. Lecture Hours (Lec.) – The number of clock hours in the fall or spring semester the student spends each week in the classroom.
8. Major – The student's main emphasis of study (for example, Automotive Technology, Psychology, etc.)
9. Performance Grades – Grades assigned point values, including A, B, C, D, and F.
10. Prerequisite – A course that must be successfully completed or a requirement such as related life experiences that must be met before enrolling in another course.

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

ACCOUNTING

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

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

(ACC) 201 Principles Of Accounting I (3)
This course covers the theory and practice of measuring and interpreting financial data for business units. Topics include depreciation, inventory valuation, credit losses, the operating cycle, and the preparation of financial statements. (This course is offered on campus and may be offered via television.) (3 Lec.)

(ACC) 202 Principles Of Accounting II (3)
Prerequisite: Accounting 201. Accounting procedures and practices for partnerships and corporations are studied. Topics include cost data and budget controls. Financial reports are analyzed for use by creditors, investors, and management. (3 Lec.)

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

(ACC) 204 Managerial Accounting (3)
Prerequisite: Accounting 202. This course is a study of accounting practices and procedures used to provide information for business management. Emphasis is on the preparation and internal use of financial statements and budgets. Systems, information, and procedures used in management planning and control are also covered. (3 Lec.)

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

(ACC) 238 Cost Accounting (3)
Prerequisite: Accounting 202. The theory and practice of accounting for a manufacturing concern are presented. The measurement and control of material, labor, and factory overhead are studied. 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 Science 175. 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.)

AIR CONDITIONING/ REFRIGERATION

(AC) 150 Basic Principles Of Electricity (3)
This is a comprehensive course that includes air conditioning/refrigeration 151, 152, and 153. Students may register in the comprehensive course or any of the inclusive courses. This course is a study of the principles of electricity as applied in simple circuits and circuit components. Included are basic electrical units and test instruments. Laboratory fee. (90 Contact Hours)

(AC) 151 Basic Electrical Units (1)
Basic electrical units are covered. Volts, ohms, amperes and watts are calculated and measured. Laboratory fee. (30 Contact Hours)

(AC) 152 Simple Circuits (1)
This course focuses on simple circuits. Topics include the interpretation of simple schematic and combination circuits with resistive loads. Laboratory fee. (30 Contact Hours)

(AC) 153 Circuit Components (1)
Components of circuits are examined. Circuits are constructed using switches, relays, solenoids, basic control and protective devices. (30 Contact Hours)

(AC) 155 Advanced Electrical Circuits (3)
This is a comprehensive course that includes Air Conditioning/Refrigeration 156 and 157. Students may register in the comprehensive course or either of the inclusive courses. Advanced electrical circuits are presented. Basic electrical principles are applied to the construction and diagnosis of complex electrical circuits and alternating current motors. Laboratory fee. (90 Contact Hours)

(AC) 156 Complex Circuits (2)
This course is an advanced study of complex circuits. Included are the construction and interpretation of complex schematics and the construction and diagnosis of complex electrical circuits with resistive inductive and capacitive loads. Laboratory fee. (60 Contact Hours) 7

(AC) 157 A.C. Motor Fundamentals (1)
Magnetic principles as applied in AC motors are covered. Wiring, diagnosis, and service of AC motors are included, as well as starting and protective devices commonly used in the air conditioning industry. (30 Contact Hours)

(AC) 160 Basic Principles Of Refrigeration (3)
This is a comprehensive course that includes Air Conditioning/Refrigeration 161, 162, and 163. Students may register in the comprehensive course or any of the inclusive courses. Principles of physics as applied to refrigeration systems are studied. Topics include thermodynamics, gas laws, heat transfer, and properties of air and refrigerants. Laboratory fee. (90 Contact Hours)

(AC) 161 Elementary Physics And Thermodynamics (1)
This course presents the principles of thermodynamcis, physics, and gas laws as applied to basic refrigeration systems. Laboratory fee. (30 Contact Hours)

(AC) 162 Heat Transfer And Air Properties (1)
Principles of heat flow and heat transfer are covered. Included are simple load calculations, air properties and basic psychrometric chart construction. (30 Contact Hours)

(AC) 163 Refrigerant Properties (1)
Common refrigerant types are identified. Basic refrigerant properties are compared and the pressure-enthalpy diagram is constructed. (30 Contact Hours)

(AC) 165 Vapor Compression Systems (3)
This course covers the various features of vapor compression systems. The major components, their function, and relationship are examined. Also presented are the four processes of the vapor compression and system service, including evacuation and charging. (90 Contact Hours)

(AC) 170 Pipefitting Procedures (3)
This is a comprehensive course that includes Air Conditioning/Refrigeration 171 and 172. Students may register in the comprehensive course or either of the inclusive courses. Piping practices are studied. Topics include pipe size selection and techniques of soldering, silver-soldering and silver- brazing. Leak detection, and repair methods are also covered. Laboratory fee. (90 Contact Hours)

(AC) 171 Pipe And Fittings (2)
This course presents piping practices. Topics include the identification and selection of correct pipe sizes and fittings and the construction of piping circuits using proper soft-solder, silver-solder, and silver-brazing techniques. Laboratory fee. (60 Contact Hours)

(AC) 172 Leak Detection And Repair (3)
The location and repair of refrigeration system leaks are covered. Correct repair methods and materials are emphasized. Laboratory fee. (30 Contact Hours)

(AC) 175 Residential Load Calculations (3)
This is a comprehensive course that includes Air Conditioning/Refrigeration 176, 177, and 178. Students may register in the comprehensive course or any of the inclusive courses. This course is a study of heating and cooling load calculations for psychrometric chart construction and interpretation. Laboratory fee. (90 Contact Hours)

(AC) 176 Cooling Load Calculations (1)
Cooling load calculations for residences are presented. Topics include the identification of heat sources, calculation of heat transfer coefficients and calculation of the cooling load. Emphasis is on energy conservation. Laboratory fee. (30 Contact Hours)

(AC) 177 Heating Load Calculations-Residential (1)
Heating load calculations for residences are presented. Topics include the identification of sources of heat loss, calculation of heat transfer coefficients, and calculation of the heating load. Emphasis is on energy conservation. Laboratory fee. (30 Contact Hours)

(AC) 178 Air Properties-Residential (1)
Measurement of residential air properties is covered. Included are the plotting and interpretation of psychrometric charts and identification of methods of humidity control. Laboratory fee. (30 Contact Hours)

(AC) 180 Residential Cooling Systems (3)
This is a comprehensive course that includes Air Conditioning/Refrigeration 181, 182, and 183. Students may register in the comprehensive course or any of the inclusive courses. This course presents principles of refrigeration for residential cooling systems. Emphasis is on compressors, condensers, evaporators, metering devices, electrical components, and the reverse cycle system (heat pump). Laboratory fee. (90 Contact Hours)

(AC) 181 Refrigeration Systems-Residential (1)
Types of cooling systems for residences are covered. Major components are included, such as compressors, evaporators, condensers, and metering devices with emphasis on acceptable piping practices. Laboratory fee. (30 Contact Hours)

(AC) 182 Electrical Systems-Residential Cooling (1)
The components of the electrical system for residential cooling are presented. Topics include electrical control devices, protective devices and AC motors. Laboratory fee. (30 Contact Hours)

(AC) 183 Reverse Cycle Systems (1)
This course is a study of the residential heat pump and its use in summer/winter air conditioning. The electrical and mechanical system is included. Laboratory fee. (30 Contact Hours)

(AC) 185 Residential Heating Systems (3)
This is a comprehensive course that includes Air Conditioning/Refrigeration 186, 187, and 188. Students may register in the comprehensive course or any of the inclusive courses. Principles and procedures used in residential heating systems are studied. Emphasis is on the gas and electric warm- air furnace. Included are the mechanical and electrical components of the heating systems. Laboratory fee. (90 Contact Hours)

(AC) 186 Warm-Air Furnace-Gas (1)
The gas warm-air furnace is examined. Included are the diagnosis and service of heat exchangers, burner assemblies and gas valves. The combustion process, vent systems and safety procedures are also studied. Laboratory fee. (30 Contact Hours)

(AC) 187 Warm-Air Furnace-Electric (1)
The electric warm-air furnace is examined. Included are

the principles and practices of resistance heating, the components of the system, and their relationship. Laboratory fee. (30 Contact Hours)

(AC) 188 Electrical Systems-Heating (1)
The electric heating systems are examined. Included are the identification and diagnosis of individual components of the electrical system and the relationship of the components to the system. Laboratory fee. (30 Contact Hours)

(AC) 190 Commercial Refrigeration Systems (3)
This is a comprehensive course that includes Air Conditioning/Refrigeration 191, 192, and 193. Students may register in the comprehensive courses or in any of the inclusive courses. This course is a study of commercial refrigeration systems. Topics include system components such as flow-control and pressure control devices, defrost systems and humidity control. Laboratory fee. (90 Contact Hours)

(AC) 191 Introduction To Commercial Refrigeration Systems (1)
Commercial refrigeration systems are presented. Emphasis is on systems common to light commercial fixtures. Laboratory fee. (30 Contact Hours)

(AC) 192 System Components-Commercial Refrigeration (1)
Major components of commercial systems are studied. Included are compressors, flow control, pressure control devices and the relationship of the components to the total system. Laboratory fee. (30 Contact Hours)

(AC) 193 Defrost Systems And Humidity Control (1)
This course covers the diagnosis, service, repair and replacement of components of defrost systems. Air properties and humidity control are included. Laboratory fee. (30 Contact Hours)

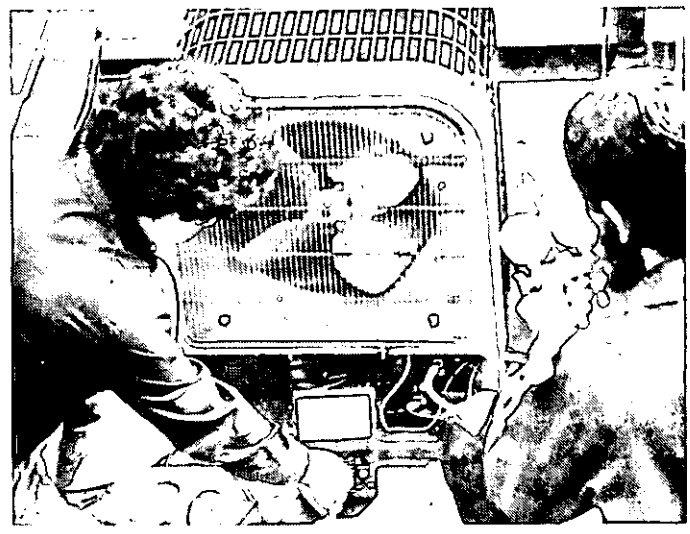
(AC) 195 Commercial Refrigeration Systems Service (3)
This is a comprehensive course that includes Air Conditioning/Refrigeration 196, 197, and 198. Students may register in the comprehensive course or in the inclusive courses. This course presents the service of commercial refrigeration systems. Topics include the principles and practices for fixture installations, pipe-fitting procedures, leak detection and repair, evacuation and system charging for peak performance, system lubrication at low temperatures, and diagnosis and service of electrical system components. Laboratory fee. (90 Contact Hours)

(AC) 196 Installation Procedures-Commercial Refrigeration (1)
Principles and practices for fixture installation are studied. Included are pipe-fitting procedures with emphasis on oil return. Laboratory fee. (30 Contact Hours)

(AC) 197 System Service And Repair-Commercial Refrigeration (1)
System leaks are located and repaired. Also included are system evacuation and the refrigerant charge for peak performance. The diagnosis and service of system components such as compressors, evaporators, condensers, metering devices and defrost mechanisms, are covered. Laboratory fee. (30 Contact Hours)

(AC) 198 Electrical Systems Service-Commercial Refrigeration (1)
This course focuses on the servicing of electrical systems in commercial refrigeration. Included are the diagnosis, service, repair and replacement of components of electrical systems. Laboratory fee. (30 Contact Hours)

(AC) 240 Air Distribution System-Residential (3)
This is a comprehensive course that includes Air Conditioning/Refrigeration 241, 242 and 243. Students may register in the comprehensive course or any of the inclusive courses. Principles and practices of acceptable air distribution systems are presented. Topics include flow patterns, velocity volume and stratification for heating and cooling applications. Filter service, electronic air cleaners and humidifiers are also studied. Laboratory fee. (90 Contact Hours)



(AC) 241 Air Distribution-Cooling (1)
Air distribution for residential cooling is studied. Topics include air flow, velocity, volume, flow patterns, methods of air distribution and system balance for best performance. Laboratory fee. (30 Contact Hours)

(AC) 242 Air Distribution-Heating (1)
Air distribution for residential heating is studied. Topics include air flow, velocity, volume, flow patterns, methods of air distribution and system balance for best performance. Laboratory fee. (30 Contact Hours)

(AC) 243 Electronic Air Cleaners And Humidifiers (1)
This course examines the principles of electronic air cleaners and humidifiers. Included are the service and adjustment of air cleaners and humidifiers and their use in environmental conditioning. Laboratory fee. (30 Contact Hours)

(AC) 245 Residential Systems Service (3)
This is a comprehensive course that includes Air Conditioning/Refrigeration 246 and 247. Students may register in the comprehensive course or either of the inclusive courses. The servicing of residential air conditioning systems is presented. Topics include the service, adjustment, repair and replacement of system components. Installation

procedures are also covered. Laboratory fee. (90 Contact Hours)

(AC) 246 Systems Service And Repair-Residential (2)
This course focuses on the diagnosis, service, repair and replacement of air conditioning system components. Included are leak detection and repair, evaluation and charging procedures and adjustment of systems for peak performance. Laboratory fee. (60 Contact Hours)

(AC) 247 Installation Procedures-Residential (1)
This course focuses on the installation of air conditioning systems. Included is the application of correct piping principles. Laboratory fee. (30 Contact Hours)

(AC) 250 Air Conditioning Equipment Selection (3)
This is a comprehensive course that includes Air Conditioning/Refrigeration 251 and 252. Students may register in the comprehensive course or in either of the inclusive courses. Selection of the proper air conditioning equipment is presented. Topics include the calculations of residential cooling and heating loads using approved forms and the selection of equipment required for the calculated loads. Laboratory fee. (90 Contact Hours)

(AC) 251 Advanced Load Calculations (2)
This course focuses on the calculation of residential cooling and heating loads using the approved forms. Laboratory fee. (60 Contact Hours)

(AC) 252 Process Equipment Selection (1)
This course focuses on the selection of residential air conditioning equipment to meet the calculated loads. Included is selection of the condensing unit, evaporator coil, and warm-air furnace (or heat pump). Emphasis is on energy conservation. Laboratory fee. (30 Contact Hours)

(AC) 255 Air Distribution Systems Design (3)
This course is a comprehensive course that includes Air Conditioning/Refrigeration 256 and 257. Students may register in the comprehensive course or either of the inclusive courses. The custom design of air distribution systems according to the particular needs of the structure is covered. Included are advanced psychrometrics, duct design, diffuser selection and air-flow patterns. Laboratory fee. (90 Contact Hours)

(AC) 256 Advanced Phychrometrics-Residential (1)
This course is the specific study of advanced psychrometrics for residential use. Included are use of the psychrometric chart in air mixtures problems, apparatus dew point and by-pass factor selection, air properties and the determination of actual system performance. Laboratory fee. (30 Contact Hours)

(AC) 257 Air Distribution Equipment Selection (2)
This course is the specific study of equipment selection as indicated by calculated heating and cooling loads. Topics include the selection of air distribution duct systems, diffusers and air-flow patterns. Emphasis is on energy conservation. Laboratory fee. (60 Contact Hours)

(AC) 260 Special Commercial Refrigeration Applications (3)
This is a comprehensive course that includes Air Conditioning/Refrigeration 261, 262, and 263. Students may register in the comprehensive course or in any of the inclusive courses. Commercial refrigeration principles are applied to special cases. Included are ice makers (flakers and cubers), beverage coolers and special display cases. Laboratory fee. (90 Contact Hours)

(AC) 261 Ice Makers-Flakers (1)
This course focuses on ice makers (flakers). Topics include the diagnosis, service, repair and replacement of components of ice makers (flakers). Emphasis is on mechanical and control systems. Laboratory fee. (30 Contact Hours)

(AC) 262 Ice Makers-Cubers (1)
This course focuses on ice makers (cubers). Topics include the diagnosis, service, repair and replacement of components of ice makers (cubers). Emphasis is on harvest methods and control systems. Laboratory fee. (30 Contact Hours)

(AC) 263 Beverage Coolers And Special Display Cases (1)
This course focuses on beverage coolers and special display cases. Topics include the diagnosis and service of beverage coolers, water fountains, dairy cases and special display cases that require close temperature and/or humidity ranges. Laboratory fee. (30 Contact Hours)

(AC) 265 Advanced Commercial Refrigeration Systems (3)
This is a comprehensive course that includes Air Conditioning/Refrigeration 266 and 267. Students may register in the comprehensive course or in either of the inclusive courses. Advanced commercial refrigeration systems are presented. Included are multiple compressors, evaporators, condensers and metering devices. Product and structural loads are calculated and analyzed. Laboratory fee. (90 Contact Hours)

(AC) 266 Multiple Systems (1)
This course covers multiple systems. Included are the diagnosis, service, repair and replacement of components of the multiple compressor, evaporator, condenser, and metering device system. Emphasis is on control systems. Laboratory fee. (30 Contact Hours)

(AC) 267 Product And Structural Load Analysis (2)
This course covers the calculation and analysis of product and structural loads. The relationship of these loads to the total environmental system is included. Laboratory fee. (60 Contact Hours)

(AC) 270 Industrial Air Conditioning Systems (3)
This is a comprehensive course that includes Air Conditioning/Refrigeration 271, 272, and 273. Students may register in the comprehensive course or in any of the inclusive courses. Industrial air conditioning systems are surveyed. Topics include the principles and operation of water-cooled condensing systems, water-treatment, water towers and piping. Also included are centrifugal and reciprocating compression systems. Absorption system principles are applied to industrial air conditioning. Laboratory fee. (90 Contact Hours)

(AC) 271 Water-Cooled Condensing System (1)
This course examines water-cooled condensing systems, water towers and water treatment. Applicable principles, pipe-sizing and piping practices are covered. Laboratory fee. (30 Contact Hours)

(AC) 272 Centrifugal And Reciprocating Compressor Systems (1)
This course examines the principles and operation of centrifugal and large reciprocating compressor systems. Emphasis is on the compressor components. Laboratory fee. (30 Contact Hours)

(AC) 273 Principles Of Absorption Systems (1)
This course examines the principles of absorption systems. Topics include the identification of components, operational theory of absorption systems and advantages and disadvantages of industrial absorption systems. Laboratory fee. (30 Contact Hours)

(AC) 275 Industrial Air Conditioning Service (3)
This is a comprehensive course that includes Air Conditioning/Refrigeration 276, 277, and 278. Students may register in the comprehensive course or any of the inclusive courses. The servicing of industrial air conditioning systems is presented. Included are the service, repair and replacement of capacity control systems and lubrication systems. Also covered are principles and practices of refrigerant circuit piping, leak detection and repair, evacuation and system charging for best performance, and preventive maintenance and schedules. (90 Contact Hours)

(AC) 276 Capacity Control And Lubrication Systems (1)
This course focuses on the adjustment, service, repair, and replacement of components of capacity control systems. Lubrication systems and oil pressure control devices are included. Laboratory fee. (30 Contact Hours)

(AC) 277 Refrigerant Circuit Service (1)
This course focuses on refrigerant circuit service. Included are leak detection and repairs, evacuation, charging procedures for best system performance and piping principles and practices. Laboratory fee. (30 Contact Hours)

(AC) 278 Preventive Maintenance Procedures (1)
This course focuses on system components requiring preventive maintenance. The preparation of preventive maintenance schedules is covered. Laboratory fee. (30 Contact Hours)

(AC) 280 Hydronic Systems (3)
This is a comprehensive course that includes Air Conditioning/Refrigeration 281 and 282. Students may register in the comprehensive course or in either of the inclusive courses. Hydronic air conditioning systems are studied. Water chiller, and low-pressure boiler systems are included. Laboratory fee. (90 Contact Hours)

(AC) 281 Water Chillers (1)
This course covers specifically the principles of operation and service of systems using water chillers as a secondary refrigerant. Control and protective devices are included. Laboratory fee. (30 Contact Hours)

(AC) 282 Low-Pressure Boilers (2)
This course covers specifically low-pressure boilers. Included are the combustion process, burner assemblies, fuel circuit devices, heat exchanger control and protection devices. The electrical system is also studied. Laboratory fee. (60 Contact Hours)

(AC) 285 Advanced Industrial Air Conditioning Systems (3)
This is a comprehensive course that includes Air Conditioning/Refrigeration 286, 287, and 288. Students may register in the comprehensive course or in any of the inclusive courses. Advanced industrial air conditioning systems are presented. Applied psychrometrics in air mixtures, coil by-pass factors, evaporator coil dew point, total system load are included. Multi-zone systems, air distribution systems, and air balancing are covered. Laboratory fee. (90 Contact Hours)

(AC) 286 Advanced Psychrometrics-Industrial Air Conditioning (1)
use of the psychrometric chart and air-measuring instruments in air mixtures, evaporator coil performance, calculating total system load and balancing system components. Laboratory fee. (30 Contact Hours)

(AC) 287 Multi-Zone Systems (1)
This course examines multi-zone systems. Topics include components of the multi-zone system, operation and diagnostic procedures, and balancing system performance. Laboratory fee. (30 Contact Hours)

(AC) 288 Air Distribution Systems And Air Balancing (1)
This course examines air distribution systems and air balancing. Principles of industrial air conditioning distribution systems, flow patterns, face and by-pass dampers are included as well as air balancing for total system performance. Laboratory fee. (30 Contact Hours)

(AC) 290 Industrial Air Conditioning Control Systems (3)
Control systems for industrial air conditioning are presented. Included are the diagnosis, service, repair and replacement of components of electrical, pneumatic, and electronic control systems. Emphasis is on control system principles. Laboratory fee. (90 Contact Hours)

(AC) 703, 713, 803, 813 (3)
(See Cooperative Work Experience)

(AC) 704, 714, 804, 814 (4)
(See Cooperative Work Experience)

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 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) 116 Introduction To Jewelry I (3)
Prerequisites: Art 110, Art 111, or demonstrated competence approved by the instructor. The basic techniques of fabrication and casting of metals are presented. Emphasis is on original design. Laboratory fee. (2 Lec., 4 Lab.)

(ART) 117 Introduction to Jewelry II (3)
Prerequisite: Art 116. This course continues Art 116. Advanced fabrication and casting techniques are presented. Emphasis is on original design. Laboratory fee. (2 Lec., 4 Lab.)

(ART) 118 Creative Photography For The Artist I (3)
Prerequisites: Art 110, Art 114, or demonstrated competence approved by the instructor. Creative use of the camera is studied. Photosensitive materials are examined as a means of making expressive graphic images. Emphasis is 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) 122 Advertising Design (3)
Prerequisite: Art 110, Art 111, Art 115, or demonstrated competence approved by the instructor. Advertising concepts are presented. Emphasis is on the development of logo designs, magazine ads, TV story boards, posters, letterheads and envelopes. (2 Lec., 4 Lab.)

(ART) 199 Art Seminar (1)
Area artist, critics and art educators speak with students about the work exhibited in the gallery and discuss current

art styles and movements. They also discuss specific aspects of being artists in contemporary society. 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) 211 Commercial Art II (3)
Prerequisite: Art 210. This course continues Art 210. Added emphasis is on layout and design concepts. Work with simple art form reproduction techniques and the development of a professional portfolio are also included. Laboratory fee. (2 Lec., 4 Lab.)

(ART) 212 Advertising Illustration (3)
Prerequisite: Art 210. Problems of the illustrator are investigated. elements used by the illustrator are explored. Problem-solving projects are conducted. (2 Lec., 4 Lab.)

(ART) 213 Commercial Design Group (3)
Prerequisite: Art 210. Students operate a design studio and work directly with clients to solve their particular visual communication needs. They create graphic art products, such as brochures, identity programs and posters. Printed samples for portfolios may be acquired. (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) 220 Printmaking I (3)
Prerequisites: Art 110, Art 111, Art 115, or demonstrated competence approved by the instructor. Basic printmaking processes are introduced. Included are planographic, intaglio, stencil and relief processes. Laboratory fee. (2 Lec., 4 Lab.)

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

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

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

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

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

BIOLOGY

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

(BIO) 102 General Biology (4)
This course is a continuation of Biology 101. Topics include Mendelian and molecular genetics, evolutionary mechanisms, and plant and animal development. The energetics and regulation of ecological communities are also studied. Laboratory fee. (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) 216 General Microbiology (4)
Prerequisites: Biology 102 or Biology 121 or demonstrated competence approved by the instructor. Microbes are studied. Topics include growth, reproduction, nutrition, genetics and ecology of micro-organisms. Laboratory activities constitute a major part of the course. Laboratory fee. (3 Lec., 4 Lab.)

(BIO) 217 Field Biology (4)
Prerequisite: Eight hours of biological science or demonstrated competence approved by the instructor. Local plant and animal life are surveyed in relationship to the environment. Aquatic and terrestrial communities are studied with reference to basic ecological principles and techniques. Emphasis is upon classification, identification, and collection of specimens in the field. This course may be repeated for credit. (3 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. Second course of a two course sequence. Structure and function as related to the human circulatory, respiratory, urinary, digestive, reproductive, and endocrine systems. Emphasis is placed on the interrelationships of these systems. Laboratory fee. (3 Lec., 3 Lab.)

(BIO) 224 Environmental Biology (4)
Prerequisite: Six hours of biology. The principles of aquatic and terrestial 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) 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 vertebrate class is 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. (I Lec., 3 Lab., 64 Contact Hours)

(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., 64 Contact Hours)

BUSINESS

(BUS) 105 Introduction To Business (3)
This course provides an overall picture of business operations. Specialized fields within business organizations are analyzed. The role of business in modern society is identified. (This course is offered on campus and may be offered via television.) (3 Lec.)

(BUS) 234 Business Law (3)
This course presents the historical and ethical background of the law and current legal principles. Emphasis is on contracts, property, and torts. (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 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 roof 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 (3)
(See Cooperative Work Experience)

(CAR) 704, 714, 804, 814 (4)
(See Cooperative Work Experience)

CHEMISTRY

(CHM) 101 General Chemistry (4)
Prerequisites: Developmental Mathematics 093 or equivalent and any one of the following: high school chemistry, Chemistry 115, or equivalent. This course is for science and science-related majors. It covers the laws and theories of matter. The laws and theories are used to understand the properties of matter, chemical bonding, chemical reactions, the physical states of matter, and changes of state. The fundamental principles are applied to the solution of quantitative problems relating to chemistry. Laboratory fee. (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 solutions and colloids, chemical kinetics and equilibrium, electrochemistry, and nuclear chemistry. Qualitative inorganic analysis is also included. Laboratory fee. (3 Lec., 3 Lab.)

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

(CHM) 116 Chemical Sciences (4)
Prerequisite: Chemistry 115 or demonstrated competence approved by the instructor. This course is for non-science majors. It covers organic chemistry and biochemistry. The important classes of organic compounds are surveyed. The concept of structure is the central theme. Biochemistry topics include carbohydrates, proteins, lipids, chemistry of heredity, disease and therapy, and plant biochemistry. Laboratory fee. (3 Lec., 3 Lab.)

(CHM) 201 Organic Chemistry I (4)
Prerequisite: Chemistry 102. This course is for science and science-related majors. It introduces organic chemistry.

The fundamental types of organic compounds are presented. Their nomenclature, classification, reactions, and applications are included. The reactions of aliphatic and aromatic compounds are discussed in terms of modern electronic theory. Emphasis is on reaction mechanisms, stereo-chemistry, transition state theory, and organic synthesis. Laboratory fee. (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 include aliphatic and aromatic systems, polyfunctional compounds, amino acids, proteins, carbohydrates, sugars, and heterocyclic and related compounds. Instrumental techniques are used to identify compounds. Laboratory fee. (3 Lec., 4 Lab.)

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

COLLEGE LEARNING SKILLS

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

COMMUNICATIONS

(COM) 131 Applied Composition And Speech (3)
Communication skills are studied as a means of preparing for one's vocation. Practice in writing letters, applications, resumes, and short reports is included. (3 Lec.)

(COM) 132 Applied Composition And Speech (3)
Prerequisite: Communications 131 or demonstrated competence approved by the instructor. The study of communication processes is continued. Emphasis is on written persuasion directly related to work. Expository techniques in business letters and documented reports are covered. Practice in oral communication is provided. (3 Lec.)

COMPUTER SCIENCE

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

(CS) 175 Introduction To Computer Science (3)
This course is an introduction to the fundamentals of information processing machines. Topics include history of computers, vocabulary, cultural impact, development of basic algorithms, number systems, and applications of elementary programming logic made through the use of the BASIC programming language. Laboratory fee. (3 Lec.)

(CS) 181 Introduction To FORTRAN Programming (3)
Prerequisites: Computer Science 174 or 175 and Math 101 or demonstrated competence approved by the instructor. This course is an introduction to computer techniques using the FORTRAN language. Emphasis is on applications used to solve numeric problems in engineering, physical science, and mathematics. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 182 Introduction To BASIC Programming (3)
Prerequisites: Computer Science 174 or 175 or demonstrated competence approved by the instructor. This course is an introduction to the BASIC programming language. Proficiency will be developed as the student codes and executes several BASIC programs using interactive computer equipment. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 183 Introduction To PL/1 Programming (3)
Prerequisites: Computer Science 174 or 175 or demonstrated competence approved by the instructor. This course covers the numeric and non-numeric applications of PL/1 programming. Computing techniques will be developed in such areas as program design, basic aspects of string processing, recursion, internal search/sort methods, and simple data structures. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 184 Introduction To COBOL Programming (3)
Prerequisites: Computer Science 174 or 175 or demonstrated competence approved by the instructor. This course is an introduction to the COBOL programming language. Topics will include algorithmic processes, problem solving methods, programming style, flow charts, and various files processing techniques. Emphasis is on the language, its flexibility and power rather than on applications. Laboratory fee. (2 Lec., 2 Lab.)

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

(CS) 186 Introduction To Assembly Language (3)
Prerequisites: Computer Science 174 or 175 and three additional semester hours of computer programming or demonstrated competence approved by the instructor based on equivalent experience. This course is an introduction to ASSEMBLY language programming. Topics will include machine representation of data and instructions, logical input/output control systems, subroutine and addressing concepts, and presentation of selected macro instructions. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 250 Contemporary Topics In Computer Science (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. Topics may include introduction to micro/mini computer systems, programming languages, or other advanced data processing concepts such as CICS. May be repeated as topics vary. (3 Lec.)

(CS) 251 Special Topics In Computer Science (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 science and data processing are studied. Such topics may include advanced programming language concepts in BASIC, RPG II and RPG III, and PASCAL, or advanced data entry concepts. May be repeated as topics vary. Laboratory fee. (3 Lec., 3 Lab.)

COOPERATIVE WORK EXPERIENCE

701, 711, 801, 811 (1)

702, 712, 802, 812 (2)

703, 713, 803, 813 (3)

704, 714, 804, 814 (4)
Prerequisite: Completion of two courses in the student's major or instructor or coordinator approval. These courses consist of seminars and on-the-job experience. Theory and instruction received in the courses of the students' major curricula are applied to the job. Students are placed in work-study positions in their technical occupational fields. Their skills and abilities to function successfully in their respective occupations are tested. These work internship courses are guided by learning objectives composed at the beginning of each semester by the students, their instructors or coordinators, and their supervisors at work. The instructors determine if the learning objectives are valid and give approval for credit.

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) 150 Beginning Ballet I (3)
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. (I Lec., 3 Lab.)

(DAN) 151 Beginning Ballet II (3)
Prerequisite: Dance 150. This course is a continuation of Dance 150. Emphasis is on expansion of combinations at the barre. Connecting steps learned at centre are added. Jumps and pirouettes are introduced. Laboratory fee. (I Lec., 3 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.)

DATA PROCESSING

(DP) 120 Data Communications (3)
Prerequisite: Computer Science 175. Topics include vocabulary, configuration of data communications networks, including terminals, multiplexors, modems and communications facilities. Network protocols and teleprocessing monitors are overviewed. (3 Lec.)

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

(DP) 133 COBOL Programming I (4)
Prerequisite: Computer Science 175 or demonstrated competence approved by the instructor. Concurrent or prior enrollment in Data Processing 138 is advised. Knowledge of typewriter keyboard recommended. This course introduces programming skills using the COBOL language. Skills in problem analysis, design tools, coding, testing, and documentation are developed. Laboratory fee. (3 Lec., 4 Lab.)

(DP) 136 COBOL Programming II (4)
Prerequisites: Data Processing 133 and Data Processing 138 or demonstrated competence approved by the instructor. The study of COBOL language continues. Included are levels of totals, group printing concepts, table build and search techniques, elementary sort techniques, disk file organization concepts, matching records, and file maintenance concepts using disk. Laboratory fee. (3 Lec., 4 Lab.)

(DP) 137 Data Processing Mathematics (3)
Prerequisites: One year of high school algebra or Developmental Math 091 or demonstrated competence approved by the instructor. This course introduces the principles of computer computation. Topics include the number system, fundamental processes, number bases, and the application of mathematics to typical business problems and procedures. (3 Lec.)

(DP) 138 Computer Program Logic And Design (3)
Prerequisite: Computer Science 175 or the demonstrated competence approved by the instructor. This course presents basic logic needed for problem solving with the computer. Topics include design tools, techniques for basic logic operations, structured charting, table search and build techniques, types of report printing, conditional tests, multiple record types, and sequential file maintenance. (3 Lec.)

(DP) 139 Operations Technician (3)
Prerequisite: Credit or concurrent enrollment in Computer Science 175 or the demonstrated competence approved by the instructor. The interrelationships among computer systems, hardware, software, and personnel are covered. The role of personnel in computer operations, data entry, scheduling, data control, and librarian functions is included. Other topics include the importance of job documentation, standards manuals, and error logs. The relationship between operating procedures and the operating system is described. Job control language and system commands are also stressed. The flow of data between the user and the data processing department, and the relationship between operations and the other functional areas within the data processing department are covered. An introduction to word processing is presented. Laboratory fee. (2 Lec., 4 Lab.)

(DP) 231 Assembly Language I (4)
Prerequisite: Data Processing 136 or demonstrated competence approved by the instructor. This course focuses on basic concepts and instructions using a current assembler language. Decimal features and fixed point operations using registers are emphasized. Selected macro instructions, table handling, editing printed output, and reading memory dumps are included. Laboratory fee. (3 Lec., 4 Lab.)

(DP) 232 Applied Systems (4)
Prerequisite: Data Processing 136 or demonstrated competence approved by the instructor. This course introduces and develops skills to analyze existing systems and to design new systems. Emphasis is on a case study involving all facets of system design from the original source of data to final reports. Design tools and documentation are included. Laboratory fee. (3 Lec., 4 Lab.)

(DP) 233 Operating Systems And Communications (4)
Prerequisite: Data Processing 133 or demonstrated competence approved by the instructor. Concepts and technical knowledge of an operating system, JCL, and utilities are presented. The internal functions of an operating system are analyzed. Training is given in the use of JCL and utilities. The emphasis of the operating system depends on the computer system used. Laboratory fee. (3 Lec., 4 Lab.)

(DP) 236 Advanced COBOL Techniques (4)
Prerequisites: Data Processing 136 or demonstrated competence approved by the instructor. This course provides advanced contemporary programming techniques using the COBOL language. Random and sequential updating of disk files, table handling, report writer, memory dump analysis, and the use of the internal sort verb, and call and copy techniques are presented. Laboratory fee. (3 Lec., 4 Lab.)

(DP) 241 Teleprocessing (4)
Prerequisites: Data Processing 120 and Data Processing 136 or demonstrated competence approved by the instructor. This course covers teleprocessing monitors and introduces the concepts required to program in an on-line/real-time environment. Topics include the nature of on-line/real-time applications, 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., 3 Lab.)

(DP) 243 Computer Center Management (3)
Prerequisites: Computer Science 175 or Data Processing 139 or demonstrated competence approved by the instructor. The management of a computer center is examined. Topics include analyzing, planning, organizing and controlling installations. The organization, production orientation, control, and personnel of the data processing department are covered. The effects of these functions on information and on-line systems are explored. Methods for computer selection and evaluation are described. (3 Lec.)

(DP) 245 Assembly Language II (4)
Prerequisite: Data Processing 231 or demonstrated competence approved by the instructor. Advanced programming skills will be developed using a current assembler language. Topics include indexing, indexed and sequential file organization, table search methods, data and bit manipulation techniques, macro writing, sub-program linkages, advanced problem analysis, and debugging techniques. Floating point operations are introduced. Laboratory fee. (3 Lec., 4 Lab.)

(DP) 246 Data Base Systems (4)
Prerequisites: Data Processing 136 or demonstrated competence approved by the instructor. This course is an introduction to applications program development in database environment with emphasis on loading, modifying, and querying a database using a higher-level language. Discussion and application of data structures; indexed and direct file organizations; storage devices, data analysis, design, and implementation; and data administration are included. Laboratory fee. (3 Lec., 4 Lab.)

DEVELOPMENTAL MATHEMATICS

(DM) Developmental Mathematics
Developmental Mathematics Courses offer a review of mathematics skills. Developmental Mathematics 093 satisfies prerequisites for Mathematics 101, 104, 111, and 115. Developmental Mathematics 091 satisfies prerequisites for Mathematics 130, 139, 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, percent, and basic operations with fractions. (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 Nursing (1)
This course is designed to develop an understanding of the measurements and terminology in medicine and calculations used in problems dealing with solutions and dosages. It is designed primarily for students in the nursing program. (I 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 addition, subtraction, multiplication, and division of whole numbers, fractions, decimals and percentages and to strengthen basic skills in mathematics. It is the most basic mathematics course and includes an introduction to algebra. (3 Lec.)

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

(DM) 093 Intermediate Algebra (3)
Prerequisite: One year of high school algebra or Developmental Mathematics 091. This course is comparable to the second-year algebra course in high school. It includes terminology of sets, properties of real numbers, fundamental operations of polynomials and fractions, products, factoring, radicals, and rational exponents. Also covered are solutions of linear, fractional, quadratic and systems of linear equations, and graphing. (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 English 102 and the sophomore-level literature courses. See the catalog descriptions in reading for full course content.

(DR) 090 Techniques Of Reading/Learning (3)
Comprehension, vocabulary development, and study skills are the focus of this course. Emphasis is on learning how to learn. Included are reading and learning experiences to strengthen the total educational background of each student. Meeting individual needs is stressed. (3 Lec.)

(DR) 091 Techniques Of Reading And Learning (3)
This course is a continuation of developmental reading 090. Meeting individual needs is stressed. (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. Emphasis is on organization skills and research paper styles, and individual writing weaknesses.

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

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

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

DIESEL MECHANICS

(DME) 104 Caterpillar Diesel Engine (5)
The complete overhaul of a Caterpillar Diesel Engine is conducted which includes the removal, disassembly, servicing, and assembly of each major component. Laboratory fee. (150 Contact Hours)

(DME) 105 Cummins Diesel Engine (5)
A Cummins Diesel Engine is completely overhauled which includes 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 which includes 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) 124 Differentials And Drive Lines (2)
Differentials are examined. Included are removal, disassembly, repair, reassembly, and installation. 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)
Shop practices is designed to acquaint the student with hand and power tools used in the repair of diesel engines and diesel powered equipment. The use of hand and power tools, precision measuring tools, pullers and cleaning equipment are taught. 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) 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 operation of the diesel engine is studied which includes engine air induction, cooling, and lubrication systems. Course emphasis is on troubleshooting and servicing. Laboratory fee. (60 Contact Hours)

(DME) 703, 713, 803, 813 (3)
(See Cooperative Work Experience)

(DME) 704, 714, 804, 814 (4)
(See Cooperative Work Experience)

DISTRIBUTION TECHNOLOGY

(DT) 130 Introduction To Distribution (3)
This course studies the place of wholesale distribution among producers, institutional and industrial customers, and ultimate consumers. The role of the wholesale distributor in the channels of distribution is examined, and wholesaling functions are surveyed. This course is also appropriate for existing new employees in entry-level positions with a demonstrated capacity for advancement. (3 Lec.)

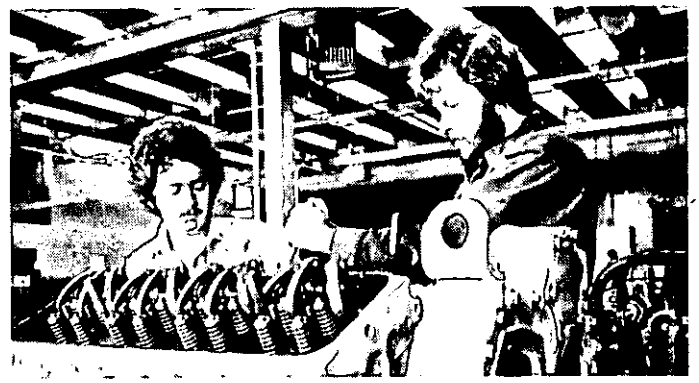
(DT) 133 Transportation Management (3)
Students will study the role of the transportation function within the physical distribution system. Special emphasis will be placed upon modern planning and control techniques associated with the design and operation of efficient and cost effective transportation systems. Carrier services, pricing structures, documentation, liability, claims and regulation of transportation will also be included. (3 Lec.)

(DT) 134 Wholesale Marketing (3)
Prerequisite: Management 206. This course concentrates upon wholesale marketing principles and procedures. The present and predicted wholesale marketing environment is presented through study of the wholesale functions of marketing and the personnel performing and managing the activities. (3 Lec.)

(DT) 231 Purchasing, Pricing, And Inventory Management (3)
Prerequisites: Mathematics 130 and Business 234. The planning and implementation of wholesale distribution strategies are introduced. Purchasing strategies, typical "buy plans" integrating sales forecasts, lead time and storage, and distribution capabilities are investigated. Alternate price and discounting tactics, inventory management systems (cardex, computer, etc.), inventory levels, and cost controls are evaluated. (3 Lec.)

(DT) 232 Warehouse Operations (3)
The planning, operation, and management of personnel, facilities and materials used in the handling and distributing of goods in warehouses are examined. Warehouse layout, selection of fixtures and equipment, and the training of warehouse personnel are experienced through field visits and practical exercises. (3 Lec.)

(DT) 803, 813 (3)
(See Cooperative Work Experience)



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 antitrust policy, business deregulation, social security, wage and price controls, budget deficits, economic growth, medical care, nuclear power, farm policy, labor unions, foreign trade, and economic stabilization. This course is not intended for economics or business administration majors. (3 Lec.)

(ECO) 201 Principles Of Economics I (3)
Sophomore standing is recommended. The principles of macroeconomics are presented. Topics include economic organization, national income determination, money and banking, monetary and fiscal policy, 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 on international economics and contemporary economic problems. (3 Lec.)

ELECTRICITY

(ELE) 105 Introduction Of Electrical Technology (2)
This course focuses upon 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 upon types of low voltage electrical circuits. Theory, installation, and testing of low voltage circuits such as bells, chimes, and alarm systems are presented. Laboratory fee. (2 Lec., 2 Lab.)

(ELE) 116 General Electrical Wiring (3)
Practices in general wiring with emphasis upon safety and procedure are presented. Topics include materials selection, splicing, switches, receptacles, and lighting circuits applied to 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 upon 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) 215 Electrical Motor Fundamentals (3)
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. (3 Lec., 1 Lab.)

(ELE) 216 Motor Controls (3)
This course focuses upon 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) 217 Solid State Controls (2)
Solid state digital logic concepts and applications for motor controls are presented. System diagnostic procedures are covered. Laboratory fee. (2 Lec., 1 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 upon major student projects. Laboratory fee. (2 Lec., 4 Lab.)

(ELE) 703, 713, 803, 813 (3)
(See Cooperative Work Experience)

(ELE) 704, 714, 804, 814 (4)
(See Cooperative Work Experience)

ENGINEERING

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

(EGR) 105 Engineering Design Graphics (3)
Graphic fundamentals are presented for engineering communications and engineering design. Topics include standard engineering graphical techniques, auxiliaries, sections, graphical analysis, and pictorial and working drawings. Laboratory fee. (2 Lec., 4 Lab.)

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

(EGR) 108 Computer Methods In Engineering (3)
Prerequisite: Credit or concurrent enrollment in Mathematics 126. Fundamental methods of numerical analysis with applications by computer programming are presented. Topics include computer programming, recursion formulas, successive approximations, error analysis, 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.

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

(ENG) 101 Composition And Expository Reading (3)
The development of skills is the focus of this course. Skills in writing and in the critical analysis of prose are included. (This course is offered on campus and may be offered via television.) (3 Lec.)

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

(ENG) 201 British Literature (3)
Prerequisite: English 102. Significant works of British literature are studied. The Old English Period through the 18th century is covered. (3 Lec.)

(ENG) 202 British Literature (3)
Prerequisite: English 102. Significant works of British literature are studied. The Romantic Period to the persent is covered. (3 Lec.)

(ENG) 203 World Literature (3)
Prerequisite: English 102. Significant works of continental Europe are studied. The Greek Classical Period through the Renaissance is covered. (3 Lec.)

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

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

(ENG) 206 American Literature (3)
Prerequisite: English 102. Significant works of American writers from Walt Whitman to the present are studied. (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 102 or Communications 131 and 132. The technical style of writing is introduced. Emphasis is on the writing of technical papers, reports, proposals, progress reports, and descriptions. (3 Lec.)

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

(ENG) 216 Studies In Literature (3)
Prerequisite: English 102. Selections in literature are read, analyzed, and discussed. Selections are organized by theme, interdisciplinary content or major author. Course titles and descriptions are available each semester prior to registration. This course may be repeated for credit. (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
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) 202 Introduction To Rock And Mineral Identification (3)
Prerequisites: Geology 101 and Geology 102. This course introduces crystallography, geochemistry, descriptive mineralogy, petrology, and phase equilibria. Crystal models and hand specimens are studied as an aid to rock and mineral identification. Laboratory fee. (1 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. The course satisfies requirements for Texas State Teacher's Certification. (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 satisfies requirements for Texas State Teacher's Certification. (This course is offered on campus and may be offered via television.) (3 Lec.)

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

HISTORY

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

(HST) 102 History Of The United States (3)
The history of the United States is surveyed from the reconstruction era to the present day. The study includes social, economic, and political aspects of American life. The development of the United States as a world power is followed. (This course is offered on campus and may be offered via television.) (3 Lec.)

(HST) 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) 102 Special Topics In Human Development (1)
This is a course intended to help the student succeed in college. Topics such as stress management, communications training for the handicapped, career exploration techniques, or educational concerns of adult students may be included. This course may be repeated for credit. (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 increase self-awareness and learn to relate more effectively to others. Students are made aware of their feelings, values, attitudes and behaviors. The course content focuses on developing communication skills such as assertiveness, verbal and non-verbal behavior, listening, and conflict resolution. (3 Lec.)

(HD) 106 Personal And Social Growth (3)
This course focuses on the interaction between the individual and society. Societal influences, adjustment to social change, personal roles, and problem-solving are stressed. Components of a healthy personality, alternative behaviors, and lifestyles that demonstrate a responsibility to self and society are studied. (3 Lec.)

(HD) 110 Assessment Of Prior Learning (1)
Prerequisite: Limited to students in Technical/Occupational programs. The 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 of 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, followup stories, and sidebars. Students are required to write for the campus newspaper. (2 Lec., 3 Lab.)

(JN) 104 Student Publications (1)
Prerequisite: The 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: The 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: The 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) 201 Feature Writing (3)
Prerequisite: Six hours of journalism or demonstrated competence approved by the instructor. This course covers research, interviewing techniques, and the development of feature stories for use in newspapers and magazines. (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. (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) 153 Small Business Management (3)
The student will be studying the fundamental approaches to planning, establishing and operating a small business. The day- to-day operation of the business and reporting procedures will be studied as well as exploring the concepts of general management. (48 Contact Hours)

(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) 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.)

(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) 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.)

(MGT) 233 Advertising And Sales (3)
This course introduces the principles, practices, and media of persuasive communication. Topics include buyer behavior, use of advertising media, and methods of stimulating salespeople and retailers. The management of promotion programs is covered, including goals, strategies, evaluation, and control of promotional activities. (3 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) 280 Industrial Management (3)
Prerequisite: Management 136. This course is an overview of the relationship of industrial functions. The philosophy and practices of management are included. Topics cover plant location and layout, process design, equipment selection, and methods analysis. Work measurement, materials control, production planning and control, quality control, cost control, and industrial relations are also presented. (3 Lec.)

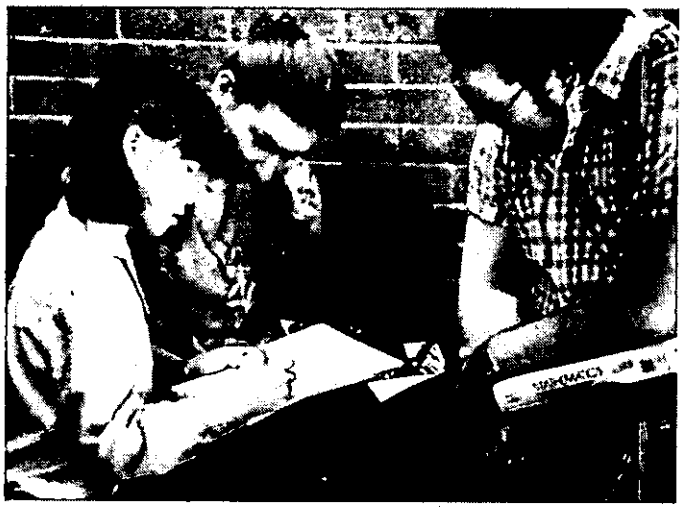
MATHEMATICS

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

(MTH) 101 College Algebra (3)
Prerequisite: Two years of high school algebra or Developmental Mathematics 093. This course is a study of

functions and relations, absolute values, variation, quadratic equations, complex numbers, functions of two variables, systems of equations and inequalities, elementary aspects of the theory of equations, progressions, the binomial theorem, and algebraic proof. (3 Lec.)

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



(MTH) 106 Elementary Functions And Coordinate Geometry III (5)
Prerequisites: Two years of high school algebra and one semester of trigonometry. This course is a study of the algebra of functions. It includes polynomial, rational, exponential, logarithmic and trigonometric functions, functions of two variables, complex numbers, vectors and analytic geometry which includes conics, transformation of coordinates, polar coordinates, and parametric equations. (5 Lec.)

(MTH) 111 Mathematics For Business And Economics I (3)
Prerequisite: Two years of high school algebra or Developmental Mathematics 093. This course includes equations, inequalities, matrices, linear programming, and linear, quadratic, polynomial, rational, exponential, and logarithmic functions. 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 sequences and limits, differential calculus, integral calculus, and appropriate applications. (3 Lec.)

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

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

(MTH) 117 Fundamental Concepts Of Mathematics For Elementary Teachers (3)
This course includes the structure of the real number system, geometry, and mathematical analysis. 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 105 or 106 or 121 or the equivalent. This course is a study of limits, continuity, derivatives, and integrals of algebraic and trancendental functions, with applications. (5 Lec.)

(MTH) 130 Business Mathematics (3)
Prerequisite: One year of high school algebra or Developmental Mathematics 091 or the equivalent. This course is intended primarily for students in specialized occupational programs. It is a study of simple and compound interest, bank discount, payrolls, taxes, insurance, mark up and mark down, corporate securities, depreciation, and purchase discounts. (3 Lec.)

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

(MTH) 195 Technical Mathematics (3)
Prerequisite: One year of high school algebra or Developmental Mathematics 091 or the equivalent. This course is designed for technical students. It covers a general review of arithmetic, the basic concepts and fundamental facts of plane and solid geometry, computational techniques and devices, units and dimensions, the terminology and concepts of elementary algebra, functions, coordinate systems, simultaneous equations, and stated problems. (3 Lec.)

(MTH) 196 Technical Mathematics (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 transformation. (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.)

MUSIC

(MUS) 101 Freshman Theory (4)
Musicianship skills are developed. Emphasis is on tonal and rhythmic perception and articulation. The essential elements of music are presented, and sight-singing, keyboard, and notation are introduced. (3 Lec., 3 Lab.)

(MUS) 102 Freshman Theory (4)
Prerequisite: Music 101 or demonstrated competence approved by the instructor. This course introduces part-writing and harmonization with triads and their inversions. Also included are the classification of chords, seventh chords, sight-singing, dictation, and keyboard harmony. (3 Lec., 3 Lab.)

(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) 108 English Diction (1)
The phonetic sounds of the English language are studied. Included is selected vocabulary. This course is primarily for voice majors. (2 Lab.)

(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) 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. Fee required. Private music may be repeated for credit. (1 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: The 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) 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) 176 Symphonic Wind Ensemble (1)
In the symphonic wind ensemble students study and perform stylistic literature of all periods. This course may be repeated for credit. (3 Lab.)

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

(MUS) 195 Introduction To Synthesizer (2)
The elements of electronically produced music are studied. Emphasis is on the musical aspects of synthesized sound. Topics include theory, basic waveforms, frequency and frequency modulation, amplitude modulation, envelope generators, filters, white noise, pink noise, and patch diagramming. (2 Lec.)

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

(MUS) 201 Sophomore Theory (4)
Prerequisite: Music 101 and 102 or demonstrated competence approved by the instructor. This course is a continuation of the study of theory. Topics include larger forms, thematic development, chromatic chords such as the Neopolitan sixth and augmented sixth chords, and diatonic seventh chords. Advanced sight-singing, key-

board harmony, and ear training are also included. (3 Lec., 3 Lab.)

(MUS) 202 Sophomore Theory (4)
Prerequisite: Music 201 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Music 201. Topics include the sonata-allegro form and the ninth, eleventh, and thirteenth chords. New key schemes, impressionism, melody, harmony, tonality and formal processes of 20th century music are also included. Sight-singing, keyboard harmony, and ear training are developed further. (3 Lec., 3 Lab.)

(MUS) 203 Composition (3)
Prerequisite: Music 101 and 102 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) 204 Guitar Pedagogy (2)
Guitar method books are surveyed. Emphasis is on the strengths and weaknesses of each method. Structuring lessons and optimizing each individual teacher-student relationship are also discussed. (2 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. Fee required. Private music may be repeated for credit. (1 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. Fee required. (1 Lec.)

OFFICE CAREERS

(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, electronic display calculators, and electronic printing calculators are included. Emphasis is on developing the touch system for both speed and accuracy. Laboratory fee. (3 Lec.)

(OFC) 162 Office Procedures (3)
Prerequisite: Office Careers 172 or one year of typing in high school. The duties, responsibilities, and personal qualifications of the office worker are emphasized. Topics include filing, reprographics, mail, telephone, financial transactions, and job applications. (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. Laboratory fee. (3 Lec., 2 Lab.)

(OFC) 167 Legal Terminology And Transcription (3)
Prerequisite: Completion of Office Careers 173 or typing speed of 50 words per minute. 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 Typewriting (3)
This course is for students with no previous training in typewriting. Fundamental techniques in typewriting are developed. The skills of typing manuscripts, business letters, and tabulations are introduced. Laboratory fee. (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) 231 Business Communications (3)
Prerequisites: Credit in Office Careers 172 or one year of typing in high school; credit in Communications 131 or English 101. This practical course includes a study of letter forms, the mechanics of writing and the composition of various types of communications. A critical analysis of the appearance and content of representative business correspondence is made. (3 Lec.)

(OFC) 266 Advanced Shorthand (4)
Prerequisites: Office Careers 166 or two years of shorthand in high school, Office Careers 174 or two years of typing in high school. Emphasis is on building dictation speed. Producing mailable, typed transcriptions under timed conditions is also stressed. Vocabulary and extensive

production work capabilities are developed. Laboratory fee. (3 Lec., 2 Lab.)

(OFC) 273 Advanced Typing Applications (2)
Decision-making and production of all types of business materials under time 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)
Prerequisites: Office Careers 173 or typing speed of 50 words per minute; Office Careers 166 or shorthand dictation of 80 words per minute. 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 180 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 letters and other business communications. May be repeated for credit with the consent of the instructor. Laboratory fee. (2 Lab.)

(OFC) 285 Applied Machine Transcription (1)
Prerequisites: Office Careers 180 or 173 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 (3)
(See Cooperative Work Experience)

(OFC) 714, 804, 814 (4)
(See Cooperative Work Experience)

OPTICAL TECHNOLOGY

(OPT) 101 Ophthalmic Materials (3)
The history and development of glass and plastic are reviewed. Basic optical terminology and ophthalmic lens types are introduced. Lens curvature, powers thickness, and prisms are calculated. Adaptation of lenses in the opticianary and the use of optical charts and graphs are also covered. (3 Lec.)

(OPT) 102 Ophthalmic Grinding And Polishing (3)
The functions of optical lens grinding and lens polishing machines are presented. Computations are made for grinding lenses, and the use of optical tools and gauges is studied. Methods are covered for laying out and marking single vision and multifocal lens blanks. Grinding and polishing spherical and cylindrical surfaces are practiced, and the lens generating machine is operated. Laboratory fee. (2 Lec., 2 Lab.)

(OPT) 103 Optical Lens Design And Measurements (3)
This course covers lens design and the correction of visual deficiencies according to the refractionist's prescription. Topics include spectacle frame measurements and sizes, methods used to prepare lenses prior to edging, neutralization and duplication of lenses by use of the lensometer/vertometer, and optical standards and tolerances. (3 Lec.)

(OPT) 104 Optical Lens And Frame Selection (3)
The preparation of lenses and frames is covered. Laboratory orders are prepared prior to edging lenses. Ophthalmic lenses are neutralized and duplicated by means of the vertometer/lensometer. Spectacle frames and patterns are identified. Proper tools and lens blanks are selected. Hand edging, and fitting spherical lenses into plastic and metal frames are also covered. Laboratory fee. (2 Lec., 2 Lab.)

(OPT) 205 Anatomy And Physiology Of The Eye (3)
The anatomy of the eye and its structures are studied. Included are the lid, cornea, lens, and retina. Also included are refractive errors and their correction, accommodation and convergence, presbyopia and aphakia, common eye diseases, binocular vision, and eye muscle imbalances. (3 Lec.)

(OPT) 206 Introduction To Contact Lenses (3)
The history, theory, and basic design of contact lenses are presented. Fundamental fitting rules and techniques are covered. Fluorescein patterns, evaluation of the fit of contact lenses and the keratometer fitting procedure are also covered. (3 Lec.)

(OPT) 207 Bifocals And Trifocals Lenses (3)
All aspects of bifocals and trifocals lenses are examined. Processes include cutting and fitting of bifocals and trifocals into plastic and metal frames, handling plastic lenses, and drilling and mounting rimless glasses. Reconstructing and neutralizating lenses and glasses to analyze and duplicate unknown eyeglass prescriptions. Laboratory fee. (2 Lec., 2 Lab.)

(OPT) 208 Ophthalmic Laboratory Equipment (3)
Various equipment is introduced and used. Processes include automatic edging and blocking, interpretating and analyzing shop orders, preparing compound lenses, creating prisms through decentration to fit prescription specification, and operation of lens-hardening machines. Minor repairs to frames and temples and soldering of metal frames are also included. Laboratory fee. (2 Lec., 2 Lab.)

(OPT) 209 Opthalmic Dispensing Ethics (3)
The ethics, practices, and responsibilities of the ophthalmic worker are explored. Topics include the determination of patient needs, prescription analysis, and interpretation of single vision, multifocal and prism lenses. Considerations in making glasses for occupational use are also discussed, and tinted lenses and their uses are included. (3 Lec.)

(OPT) 210 Ophthalmic Fitting (3)
The psychology of dispensing eyewear is discussed. Style and fashion eyewear are included. Visual problems of the aphakic patient are explored. Consideration is given to the effects of illumination, size of type, and working distance on visual performance. (3 Lec.)

(OPT) 211 Optic Principles (3)
This course examines optic principles. Topics include vibrations, properties of waves, wave motion, geometric and physical optics, Hugen's principle, Young's double-slit experiment, and optical instruments. (3 Lec.)

(OPT) 212 Ophthalmic Measurement (3)
Ocular measurements are covered. Included are the uses of various measuring instruments. The principle and techniques of fitting and adjusting spectacles by means of optical pliers and other equipment are also included. Completed spectacles are evaluated for accuracy and quality. Laboratory fee. (2 Lec., 2 Lab.)

(OPT) 213 Dispensing Occupational Eyewear (3)
Dispensing procedures for bifocals and complex prescriptions are studied. Techniques of fitting and adjusting plastic, metal, and rimless spectacles are presented. Occupational eyewear and aids for patients with subnormal vision are also included. Magnifiers, loupes, and projection devices are demonstrated. Laboratory fee. (2 Lec., 2 Lab.)

(OPT) 703, 713 (3)
(See Cooperative Work Experience)

(OPT) 803, 813 (3)
(See Cooperative Work Experience)

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) 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) 210 Studies In Philosophy (3)
Prerequisite: Three hours of philosophy and the demonstrated competence approved by the instructor. A philosophical problem, movement, or special topic is studied. The course topic changes each semester. This course may be repeated for credit. (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) 120 Commercial Photography I (4)
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. (3 Lec., 3 Lab.)

(PHO) 121 Commercial Photography II (4)
This course is a continuation of Photography 120. Publicity photography, architectual 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. (3 Lec., 3 Lab.)

PHYSICAL EDUCATION

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

(PEH) 101 Fundamentals Of Health (3)
This course is for students majoring or minoring in physical education or having other specific interest. Personal health and community health are studied. Emphasis is on the causes of mental and physical health and disease transmission and prevention. (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) 115 Physical Fitness (1)
The student's physical condition is assessed. A program of exercise for life is prescribed. Much of the course work is carried on in the physical performance laboratory. A uniform is required. This course may be repeated for credit. Laboratory fee. (3 Lab.)

(PEH) 118 Beginning Golf (1)
Basic skills, rules and strategies of golf are taught. Equipment is furnished. Laboratory fee. (3 Lab.)

(PEH) 119 Beginning Tennis (1)
This course is designed for the beginner. Tennis fundamentals are taught and played. A uniform is required. 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) 131 Weight Training And Conditioning (1)
Instruction and training in weight training and conditioning techniques are offered. A uniform is required. The course may be repeated for credit. 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) 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) 218 Intermediate Golf (1)
Prerequisite: The demonstrated competence approved by the instructor. Skills and techniques in golf are developed beyond the "beginner" stage. Green fee paid by student. Laboratory fee. (2 Lab.)

(PEH) 219 Intermediate Tennis (1)
Prerequisite: The demonstrated competence approved by the instructor. Skills and techniques in tennis are developed beyond the "beginner" stage. A uniform is 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). 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 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) 110 Introductory Photographic Science (4)
Prerequisites: Photography 110, Art 113, or demonstrated competence approved by the instructor, and access to a camera with variable speed and aperature. This course introduces the physical and chemical principles which form the basis for photographic technology. Topics covered include the production of light, its measurement and control, principles of optics and the formation of images, the basic chemistry of black and white and color processes, film structure and characteristics, filter characteristics, lasers, and holography. Laboratory fee. (3 Lec. 3 Lab.)

(PHY) 111 Introductory General Physics (4)
Prerequisite: Two years of high school algebra, including trigonometry, or the equivalent. This course is for predental, 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.)

PRECISION OPTICS TECHNOLOGY

(POP) 101 Introduction To Precision Optics Technology (3)
This course introduces the student to the precision optics industry. The student examines the impact of precision optics in our present day society and studies the terminology, types of optical materials, basic optical systems, and processing technology. (3 Lec.)

(POP) 102 Precision Optics Machining I (3)
Skills required for milling, blocking, core drilling, generating and sawing precision optical elements are identified and developed. Classroom instruction and actual machine operation are included. Laboratory fee. (2 Lec., 2 Lab.)

(POP) 103 Precision Optics Machining II (3)
Prerequisite: Previous completion or concurrent enrollment in Precision Optics Technology 102 or the equivalent. This course is a continuation of Precision Optics Machining I. Skill development for pell grinding, loose abrasive grinding, polishing and edging operations are included. Laboratory fee. (2 Lec., 2 Lab.)

(POP) 104 Industrial Shop Safety (3)
This course is designed to develop a safety awareness, good safety attitudes and the ability to detect unsafe conditions and practices. The course covers materials handling and storage, industrial housekeeping, personal protective

equipment, machines and power tools, fire prevention and first aid. (3 Lec.)

(POP) 105 Precision Optics Machining III (3)
Prerequisite: Precision Optics Technology 103 or the equivalent. This course is a continuation of Optical Machining I & II advancing into the theory involved in each fabrication operation. The course also covers the methods and tooling required for the different lens types. Laboratory fee. (2 Lec., 2 Lab.)

(POP) 106 Thin Film Optical Coatings (4)
This course includes principles and applications of thin film coatings emphasizing fundamental concepts, notation, machine operation, and clean room requirements. Laboratory fee. (3 Lec., 3 Lab.)

(POP) 107 Precision Optics Handling And Cleaning (2)
This course is designed to give the student a full understanding of the handling and cleaning of optical elements throughout the entire fabrication process. The hardness and stain factor of each glass type, cleaning processes for both fabrication and coating, symbolization, equipment usage and packaging are included. Laboratory fee. (1 Lec., 3 Lab.)

(POP) 201 Basic Precision Optics Theory (3)
This course includes basic theory of lens design, properties of wares and ware motion, refraction and reflection, Hugen's principle, and a functional understanding of optical instrument design. (3 Lec.)

(POP) 203 Precision Optics Quality Control (3)
The faction of a standard quality control organization with a detailed look into the sampling and reporting requirements to insure quality standards is covered. The student gains a working knowledge of the required equipment and quality specification standards employed throughout the optical industry. (3 Lec.)

(POP) 204 Precision Optics Assembly (3)
This course is a study of the basic principles and concepts of precision optical assembly. The student gains the theory and skills necessary to use the tooling and equipment to set and bond the various optical elements. Laboratory fee. (2 Lec., 2 Lab.)

(POP) 205 Advanced Precision Optics Processes (3)
This course includes an intensive study in advanced optical fabrication and coating processes dealing with exotic glass materials and ultra high precision optical elements. Laboratory fee. (2 Lec., 2 Lab.)

(POP) 703 (3)
(See Cooperative Work Experience)

PSYCHOLOGY

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

(PSY) 131 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 105. This course is a study of human growth, development, and behavior. Emphasis is on psychological changes during life. Processes of life from prenatal beginnings through adulthood and aging are included. (This course is offered on campus and may be offered via television.) (3 Lec.)

(PSY) 205 Psychology Of Personality (3)
Prerequisite: Psychology 105. Important factors of successful human adjustment such as child/parent relationships, adolescence, anxiety states, defense mechanisms, and psychotherapeutic concepts are considered. Methods of personality measurement are also included. (3 Lec.)

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

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

READING

(RD) 101 Effective College Reading (3)
Comprehension techniques for reading fiction and nonfiction are presented. Critical reading skills are addressed. Analysis, critique, and evaluation of written material are included. Reading comprehension and flexibility of reading rate are stressed. Advanced learning techniques are developed in listening, note-taking, underlining, concentrating, and reading specialized academic areas. (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 on 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 determinant 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) 230 Real Estate Office Management (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-valued 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. (16 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. Also, the student 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 experiences. (2 Lec.)

RELIGION

(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 foundations of group life. Topics include institutions, social change, processes, and problems. (3 Lec.)

(SOC) 102 Social Problems (3)
This course is a study of social problems which typically include: crime, poverty, minorities, deviancy, 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) 207 Social Psychology (3)
Students may register for either Psychology 207 or Sociology 207 but may receive credit for one. Theories of individual behavior in the social environment are surveyed. Topics include the socio-psychological process, attitude formation and change, interpersonal relations, and group processes. (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.)

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. 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. 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 Introduction To Spanish Literature (3)
Prerequisite: Spanish 202 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Spanish 203. It includes readings in Spanish literature, history, culture, art, and civilization. (3 Lec.)

SPEECH

(SPE) 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.)

(SPE) 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.)

(SPE) 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. The mechanics of speech are studied. Emphasis is on improving voice and pronunciation. (3 Lec.)

(SPE) 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.)

(SPE) 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.)

(SPE) 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.)

(SPE) 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.)

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

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

(THE) 103 Stagecraft I (3)
The technical aspects of play production are studied. Topics include set design and construction, stage lighting, makeup, costuming, and related areas. (2 Lec., 3 Lab.)

(THE) 104 Stagecraft II (3)
Prerequisite: Theatre 103 or demonstrated competence approved by the instructor. This course is a continuation of theatre 103. Emphasis is on individual projects in set and lighting design and construction. The technical aspects of play production are explored further. (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, pantomime, interpretation, characterization, and stage movement are included. Both individual and group activities are used. Specific roles are analyzed and studied for stage presentation. (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 complex characterization, ensemble acting, stylized acting, and acting in period plays. (2 Lec., 3 Lab.)

(THE) 108 Movement For The Stage (3)
Movement is studied as both a pure form and as a part of the theatre arts. It is also presented as a technique to control balance, rhythm, strength, and flexibility. Movement in all the theatrical forms and in the development of characterization is explored. This course may be repeated for credit. (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) 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) 203 Broadcasting Communications I (3)
The nature and practice of broadcasting are covered. Basic techniques of radio and television studio operations are introduced. (3 Lec., 2 Lab.)

(THE) 204 Broadcasting Communications II (3)
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., 2 Lab.)

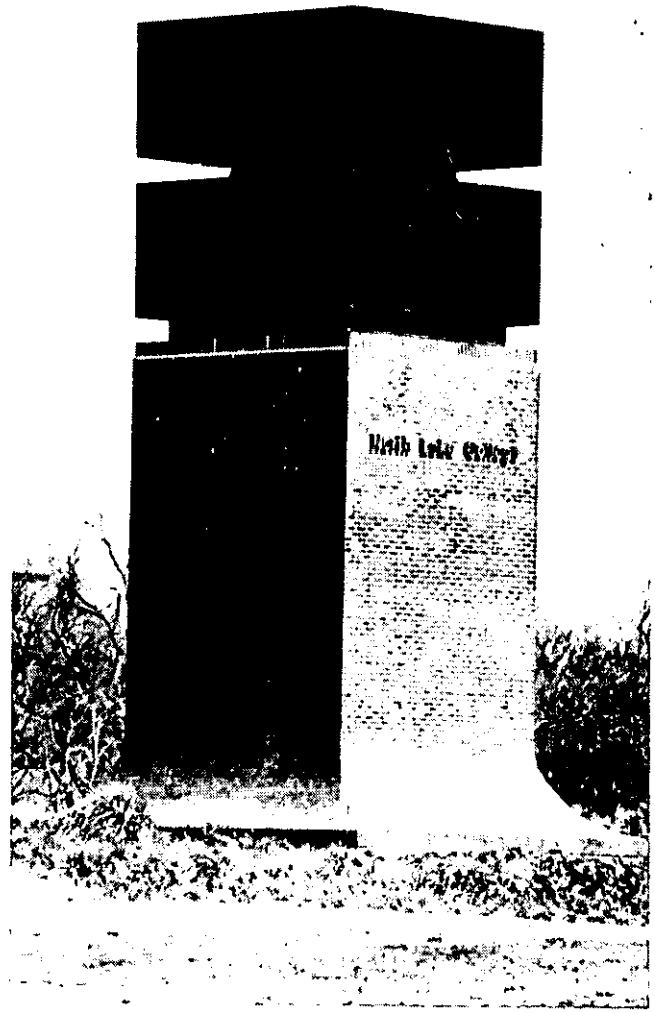
(THE) 205 Scene Study I (3)
Prerequisite: Theatre 106 and 107. This is a continuation of Theatre 107. Emphasis is on developing dramatic action through detailed study of the script. Students deal with stylistic problems presented by the staging of period plays and the development of realism. Rehearsals 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)
Prerequisite: 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) 235 Costume History (3)
Fashion costume and social customs are examined. The Egyptian, Greek, Roman, Gothic, Elizabethan, Victorian, and Modern periods are included. (3 Lec.)



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