All blank pages have been removed from this document.
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This publication prepared by the Dallas County Community College District Office of Public Information.

The Dallas County Community College District is an equal opportunity institution.
In 1987, the Texas Legislature passed House Bill 2182. This bill, which becomes effective with the 1989 Fall Semester, requires that all Texas public college and university students be tested for reading, writing and mathematics skills. This legislation applies to students enrolling in the Dallas Community Colleges - Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View, North Lake and Richland.

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

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

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

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

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

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

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

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

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

If you would like more information on the Texas Academic Skills Program, please contact the college's Counseling Center.
### Summer Sessions, 1989

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

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

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

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

### Spring Semester, 1990

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

- **May 28 (M)**: Memorial Day Holiday
- **May 30 (W)**: Registration (Richland Only)
- **May 31 (R)**: Registration (All Campuses)
- **June 4 (M)**: Classes Begin
- **June 7 (R)**: 4th Class Day
- **June 8 (F)**: Class Day (Only Friday Class Day)
- **July 4 (W)**: Fourth of July Holiday
- **July 5 (R)**: Final Exams
- **July 5 (R)**: Semester Closes
- **July 9 (M)**: Grades Due in Registrar's Office by 10:00 a.m.

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

- **July 11 (W)**: Registration (All Campuses)
- **July 12 (R)**: Classes Begin
- **July 13 (F)**: Class Day (Only Friday Class Day)
- **July 17 (T)**: 4th Class Day
- **August 2 (R)**: Last Day to Withdraw With A Grade of "W"
- **August 14 (T)**: Final Exams
- **August 14 (T)**: Semester Closes
- **August 16 (R)**: Grades Due in Registrar's Office by 10:00 a.m.

### Fall Semester, 1989

- **August 21 (M)**: Faculty Reports
- **August 21-24 (M-R)**: Registration Period (Varies by Campus)
- **August 25 (F)**: Faculty Professional Development
- **August 25 (F)**: Friday Only Classes Begin
- **August 26 (S)**: Saturday Only Classes Begin
- **August 28 (M-R)**: Classes Begin (M-R) Classes
- **September 1 (F)**: No Friday Only Classes
- **September 2 (S)**: No Saturday Only Classes
- **September 4 (M)**: Labor Day Holiday
- **September 9 (S)**: 12th Class Day
- **November 2 (R)**: Last Day to Withdraw With A Grade of "W"
- **November 23 (R)**: Thanksgiving Holidays Begin
- **November 27 (M)**: Classes Resume
- **December 8 (F)**: Final Exams for Friday Only Classes
- **December 9 (S)**: Final Exams for Saturday Only Classes
- **December 11-14 (M-R)**: Final Exams for M-R Classes
- **December 14 (R)**: Semester Closes
- **December 18 (M)**: Grades Due in Registrar's Office by 10:00 a.m.

### Spring Semester, 1990

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

- **May 28 (M)**: Memorial Day Holiday
- **May 30 (W)**: Registration (Richland Only)
- **May 31 (R)**: Registration (All Campuses)
- **June 4 (M)**: Classes Begin
- **June 7 (R)**: 4th Class Day
- **June 8 (F)**: Class Day (Only Friday Class Day)
- **July 4 (W)**: Fourth of July Holiday
- **July 5 (R)**: Final Exams
- **July 5 (R)**: Semester Closes
- **July 9 (M)**: Grades Due in Registrar's Office by 10:00 a.m.

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

- **July 11 (W)**: Registration (All Campuses)
- **July 12 (R)**: Classes Begin
- **July 13 (F)**: Class Day (Only Friday Class Day)
- **July 17 (T)**: 4th Class Day
- **August 2 (R)**: Last Day to Withdraw With A Grade of "W"
- **August 14 (T)**: Final Exams
- **August 14 (T)**: Semester Closes
- **August 16 (R)**: Grades Due in Registrar's Office by 10:00 a.m.
Dallas County Community College District
Board of Trustees

Dallas County Community College District Administrators

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In southwestern Dallas County, Mountain View College is the community learning center for thousands of people. The second of seven colleges in the Dallas County Community College District, Mountain View opened in the fall of 1970. It is located at 4849 West Illinois Avenue in the southwestern section of Oak Cliff in Dallas and serves residents of South Dallas, Oak Cliff, Duncanville, Cedar Hill and parts of Grand Prairie.

The various programs at Mountain View are designed to meet a broad range of educational needs. Students may elect to complete their first two years of study leading toward a bachelor's degree, or they may prepare for a career in an occupational or technical area. Many students attend Mountain View to train for advancement in their present employment or to train for an entirely new career opportunity. Non-credit courses also are available for people of all ages to gain personal enrichment, cultural awareness or to participate in productive leisure time activities.

The Mountain View student body is composed of people of all ages and all backgrounds. The College represents a cross section of the community which it serves. This rich opportunity to interact with many varied people is an important part of the educational process and is well established in the Mountain View tradition.

The Campus

The campus sits on the crest of a ridge that gives students an outstanding view of the downtown Dallas skyline to the north. Care has been taken to preserve the natural beauty of the 200-acre site. The long, flat-roofed buildings stretch out gracefully along both sides of a rocky ravine and natural creek which has been landscaped into a very pleasant interior courtyard and garden. Footpaths and stone terraces provide a beautiful area to walk, study or relax. An enclosed pedestrian bridge spans the ravine, giving easy access to all parts of the campus and providing a beautiful architectural focal point to the College.

Accreditation

Mountain View College is a member of:
The Southern Association of Colleges and Schools

Institutional Memberships

The American Association of Community and Junior Colleges
The League for Innovation in the Community College

Mountain View 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.

MOUNTAIN VIEW COLLEGE ADMINISTRATION

President ..................................................... W.H. Jordan ............................................. 333-8700
V.P. of Business Services ............................ Bob Brown ............................................. 333-8705
V.P. of Instruction ....................................... Linda Stegall ......................................... 333-8710
V.P. of Student Development ....................... John Nelson ............................................. 333-8696
Evening Administrator ............................... Dick Smith ............................................. 333-8610
Dean, Career & Continuing Ed .................. Don Perry ............................................. 333-8755
Dean, Educational Resources ...................... Ann Cunningham ...................................... 333-8664
Dean, Student Support Services .................. Donna Richards ...................................... 333-8606
Counseling .................................................... Donna Richards ...................................... 333-8699
Health/Disabled Students .......................... Donna Richards ...................................... 333-8606
Director of Admissions/Registrar .................. Jim Jones ............................................. 333-8705
Director of Business Operations .................. Jim Corvey ............................................. 333-8664
Director of Educational Computing ............. Don Gentsch .......................................... 333-8688
Director of Financial Aid ............................. Sharron Colburn ..................................... 333-8678
Director of Public Information ..................... Sharron Colburn ..................................... 333-8685
Director of Student Programs & Resources .... Guy Gooding .......................................... 333-8685

DIVISION CHAIRPERSONS

Business ..................................................... Tom Goza ............................................. 333-8616
Communications ........................................ David Wickham ...................................... 333-8624
Fine Arts/Social Science .............................. Bill Mugleston ........................................ 333-8632
Science/Mathematics/PEH ......................... Cliff Miller ............................................. 333-8649
Technology .................................................. Mike Warbritton ..................................... 333-8656
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**MOUNTAIN VIEW COLLEGE FACULTY AND STAFF**
Smith, Richard E. ........................................ Evening Administrator
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Teachers College, Columbia Univ., M.A., Ed.D.

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I. GENERAL INFORMATION

History of the Dallas County Community College District

The Dallas County Community College District comprises seven colleges located strategically throughout Dallas County. Together the colleges enroll approximately 75,000 students per semester and employ over 1,900 full-time faculty and staff members.

The growth of the District into an educational system with such impact was not by chance. In May, 1965, voters created the Dallas County Junior College District and approved the $41.5 million bond issue to finance it. The next year the District’s first college, El Centro, began operation in downtown Dallas. Eastfield College and Mountain View College enrolled their first students in 1970, and the plans for a multi-campus district became a reality. Richland College became the District’s fourth college in 1972.

The voters of Dallas County approved the sale of an additional $85 million in bonds in September, 1972. This step provided for expansion of the four existing colleges and the construction of three more colleges. A key part of the expansion program was the remodeling and enlarging of El Centro College, a project completed in 1979. Construction of new facilities resulted in the opening of Cedar Valley College and North Lake College in 1977. Brookhaven College, the final campus in the seven-college master plan, opened in 1978. On December 10, 1987, the Dallas County Community College District broke ground for the $7 million Bill J. Priest Institute for Economic Development near downtown Dallas. The complex is scheduled for occupancy in February, 1989. All District services to the business community will be available through this central location.

District Philosophy And Goals

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

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

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

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

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

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

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

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

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

District Responsibilities

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

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

League for Innovation

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

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

Family Educational Rights And Privacy Act Of 1974

In compliance with the Family Educational Rights and Privacy Act of 1974, the College may release information classified as "directory information" to the general public without the written consent of the student. Directory information includes: (1) student name, (2) student address, (3) telephone number, (4) dates of attendance, (5) educational institution most recently attended, and (6) other information, including major field of study and degrees and awards received.

A student may request that all or any part of the directory information be withheld from the public by giving written notice to the Registrar's Office during the first 12 class days of a fall or spring semester or the first four class days of a summer session. If no request is filed, information is released upon inquiry. No telephone inquiries are acknowledged; all requests must be made in person. No transcript or academic record is released without written consent from the student stating the information to be given, except as specified by law.

II. IMPORTANT TERMS AND ABBREVIATIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Grades: See catalog section titled “Scholastic Standards.”

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

III. ADMISSIONS AND REGISTRATION

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

Admission Requirements

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

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

a. Graduates from an accredited high school or those who have earned a General Education Diploma (G.E.D.), who are 18 years of age or older, and whose high school class has graduated.

b. Graduates of an unaccredited high school who are 18 years of age or older.

c. Persons who do not hold a high school diploma or G.E.D. (but who are 18 years of age or older and whose high school class has graduated) may be admitted by giving evidence of an ability to profit from college instruction. Such admission will be on a probationary basis.

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

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

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

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

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

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

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

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

Contact the Admissions Office for information.

Application and Admission Procedures
Applications may be submitted any time prior to registration. Earlier application is desirable because the student's place in registration is determined by the date of the applicant's file; submitting admissions documents early also insures that there is adequate time for effective counseling and schedule planning. A later place in registration often means that the classes a student desires are already filled.

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

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

b. official transcripts: The following must be submitted: (1) for beginning college students an official transcript from the last high school attended; (2) for college transfer students, official transcripts for all previous college work attempted. The College accrediting agency requires transcripts, and the college uses them in program advisement.

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

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

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

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

Special Fees And Charges
Laboratory Fee: $2 to $8 a semester (per lab).

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

Physical Education Activity Fee: $5 a semester.
Dance Activity Fee: $5 a semester.
Bowling Class Fee: Student pays cost of lane rental.
Private Music Lesson Fee: $45 for one hour per week (maximum) for one course, $25 for one half-hour per week.
Audit Fee: The charge for auditing a course is the same as if the course were taken for credit, except that a student service fee is not charged.
Credit by Examination: A fee will be charged for each examination. This fee can change without prior notice.

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

#### Fall and Spring Sessions

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

### TUITION REQUIREMENTS FOR LONG TERM:

1. **Dallas County Residents***: $12.00 per credit unit through ten credit units and $10.00 for each additional credit unit over ten credit hours; minimum of $36.00.
2. **Out-of-District Residents**: $33.00 per credit unit through ten credit units and $12.00 for each additional credit unit over ten credit units; minimum of $100.00.
3. **Out-of-State Residents**: $67.00 per credit unit; minimum of $200.00.
4. **Out-of-Country Residents**: $67.00 per credit unit; minimum of $200.00.

### SUMMER SESSION

1. **Dallas County Residents***: $14.00 per credit unit through six credit units and $8.00 for each additional credit unit over six credit units; minimum of $36.00.
2. **Out-of-District Residents**: $46.00 per credit unit through six credit units and $10.00 for each additional credit unit over six credit units; minimum of $100.00.
3. **Out-of-State Residents**: $67.00 per credit unit; minimum of $200.00.
4. **Out-of-Country Residents**: $67.00 per credit unit; minimum of $200.00.

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

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

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

"A full-time District employee or his dependent who resides outside Dallas County is eligible for Dallas County tuition rates. An individual who would have been classified as a resident for the first five of the six years immediately preceding registration but who resided in another state for all or part of the year immediately preceding registration shall be classified as a resident student."

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

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

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

"The tuition schedule above is subject to change without notice by action of the District Board of Trustees or the State of Texas."
educational opportunities. When students enroll in a class, they reserve places that cannot be made available to other students until they officially drop the class. In addition, the original enrollment of students represents a sizable cost to the District regardless of continuance in that class. Therefore, a refund is made only under the following conditions:

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

   **Fall and Spring Semesters**
   - Prior to the first class day: 100%
   - During the first five class days: 80%
   - During the second five class days: 70%
   - During the third five class days: 50%
   - During the fourth five class days: 25%
   - After the fourth five class days: NONE

   **Summer Semesters**
   - Prior to the first class day: 100%
   - During the first, second, or third class day: 80%
   - During the fourth, fifth or sixth class day: 50%
   - After the sixth class day: NONE

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

   **Regular Session**
   - During the first twelve class days: 100%
   - After the twelfth class day: NONE

   **Summer Session**
   - During the first four class days: 100%
   - After the fourth class day: NONE

   The first "class day" is to be counted as the officially published date when the semester begins.

   Separate refund schedules may be established for optional fees such as intercollegiate athletics, cultural entertainment, parking, etc.

   Tuition and fees paid directly to the institution by a sponsor, donor, or scholarship shall be refunded to the source rather than directly to the student.

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

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

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

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

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

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

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

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

### Returned Checks

Checks returned to the Business Office must be paid with cash or a cashier’s check within the time limits prescribed by the notification letter. An additional fee is added for returned checks. If a check for tuition is returned by the bank for any reason, including stop payment, the College Business Office may submit the check to the Justice of the Peace for appropriate legal action and collection. The Vice President of Student Development may also implement disciplinary procedures. Students may be dropped from courses due to returned checks.

### Assessment and Advisement Procedures

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

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

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

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

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

### Change of Schedule

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

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

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

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

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

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

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

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

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

For more complete information on TASP or to obtain a copy of the TASP Registration Bulletin, contact the Testing/ Appraisal Center. Students must preregister to take TASP.

All test fees are borne by the student although financial aid may be available to offset the cost for students deemed eligible.

IV. ACADEMIC INFORMATION

Scholastic Standards: Grades And Grade Point Average
Final grades are reported for each student for every course according to the following grading system.

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

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

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Grade</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-hour course</td>
<td>A</td>
<td>8</td>
</tr>
<tr>
<td>3-hour course</td>
<td>B</td>
<td>9</td>
</tr>
<tr>
<td>4-hour course</td>
<td>B</td>
<td>12</td>
</tr>
<tr>
<td>3-hour course</td>
<td>C</td>
<td>6</td>
</tr>
<tr>
<td>Total Credit Hours:</td>
<td></td>
<td>35</td>
</tr>
<tr>
<td>Total Grade Points:</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

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

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

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

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

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

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

Students who do not complete course requirements may receive a "WX" grade when the instructor determines that reasonable progress has been made and when the student can re-enroll for course completion prior to the certification date in the next regular semester. If the student re-enrolls and completes the course requirements, the "WX" remains for the first enrollment; a performance grade is given for the second enrollment. If the student does not complete the course requirements, the "WX" is converted to a performance grade.

Acceptable Scholastic Performance

College work is measured in terms of credit hours. The number of credit hours offered for each course is given with the course description.

Acceptable scholastic performance is the maintenance of a grade point average of 2.0 (on a 4.0 scale) or better. Students may not be graduated from any degree or certificate program unless they have a cumulative grade point average of 2.0 or better. Grade points and hours earned in courses numbered 99 and below, Art 199, College Learning Skills 100, Developmental Communications 120, Human Development 100 and 110, Library Skills 101, Music 199, and Theatre 199 cannot be used to meet graduation requirements.

Recommended Academic Load

The maximum academic load is 18 credit hours of course work per semester or five classes plus physical education. Students must receive permission of the appropriate college official to carry a heavier load. Employed students carrying a full load (12 credit hours or more) should not work more than 20 hours per week. Students working more hours should reduce their academic load proportionately. The recommended load limit for day or evening students who are employed full-time is 6 credit hours. The recommended load limit in a six-week summer session is 6 credit hours. A total of 14 credit hours is the maximum that may be earned in any 12-week summer period.

Classification Of Students

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

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

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

Full-time:
A student carrying 12 or more credit hours in a given semester.
Class Attendance
Students are expected to attend regularly all classes in which they are enrolled. Students have the responsibility to attend class and to consult with the instructor when an absence occurs.

Instructors are responsible for describing attendance policy and procedures to all students enrolled in their classes. If a student is unable to complete a course (or courses) in which he/she is registered, it is the student's responsibility to withdraw from the course by the appropriate date. (The date is published in the academic calendar each year and in each semester's class schedule.) If the student does not withdraw, he/she will receive a performance grade, usually a grade of "F."

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

Dropping A Course Or Withdrawing From College
To drop a class or withdraw from the College, students must obtain a drop or withdrawal form and follow the prescribed procedure. It is the student's responsibility to drop or withdraw. Failure to do so will result in receiving a performance grade, usually a grade of "F." Should circumstances prevent a student from appearing in person to withdraw from the College, the student may withdraw by mail by writing to the Registrar. No drop or withdrawal requests are accepted by telephone. Students who drop a class or withdraw from the College before the semester deadline receive a "W" (Withdraw) in each class dropped. The deadline for receiving a "W" is indicated on the academic calendar and the current class schedule. See "Refund Policy" for possible eligibility for a refund.

Academic Recognition
Full-time students who complete at least 12 hours of credit and earn a grade point average of 3.5-3.79 are listed on the Vice President's Honor Roll. Full-time students who complete at least 12 hours of credit and average 3.8-4.0 are placed on the President's Honor Roll. Part-time students who take 6-11 credit hours and maintain a 3.5 or higher grade point average are placed on the Academic Recognition List.

Scholastic Probation And Scholastic Suspension
Full-time and part-time students who have completed a total of 12 credit hours are placed on probation if they fail to maintain a 2.0 cumulative grade point average. Students may be removed from probation when they earn a 2.0 cumulative grade point average. Students on scholastic probation who achieve either a cumulative grade point average of 1.5 or above 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 mailed to the address on record of enrollment to each student at the end of each semester. The grade report contains a listing of all credit courses attempted within the DCCCD, as well as information on academic standing. Interim grade reports are issued for other-than-semester length classes.

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

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

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

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

Degree Requirements
The College confers the Associate in Arts and Sciences Degree and the Associate in Applied Arts and Sciences Degree upon students who have completed all requirements for graduation. Each degree candidate must earn the last 15 hours as a resident student in the District colleges or accrue 45 hours in residence. The last 15 credit hours required for graduation in any degree or certificate may not be earned through credit-by-examination except as approved by the College Vice President of Instruction.

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

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

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

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

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

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

Associate In Arts and Sciences Degree

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

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

(Associate In Applied Arts and Sciences Degree)

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

- English 101 OR Communications 131 (3 credit hours) [A CORE COURSE REQUIREMENT]
- Speech Communication 101 (3 credit hours) [A CORE COURSE REQUIREMENT]
- A math course numbered 100 or above (3 credit hours) [A CORE COURSE REQUIREMENT]
- A sophomore literature course (3 credit hours) to be chosen from English 201, 202, 203, 204, 205, 206, 215, OR 216
- Laboratory Science (8 credit hours) to be chosen from Astronomy, Biology, Chemistry, Geology, Physical Science, OR Physics. (For Astronomy to count as a lab science, the student must successfully complete Astronomy 101 in combination with 103 and Astronomy 102 in combination with 104)
- Humanities (3 credit hours) to be chosen from Art 104, a foreign language, Humanities 101, Literature, Music 104, Philosophy 102, OR Theatre 101
- Physical Education activity course (1 credit hour) (NOTE: Neither chronological age nor military service are acceptable excuses for waiving the physical education requirement.)
- Behavioral Science (3 credit hours) to be chosen from Anthropology, Human Development, Psychology, OR Sociology
- History 101 AND 102 (6 credit hours)
  (NOTE: Only three credit hours of History may be earned through credit-by-examination.)
- Government 201 AND 202 (6 credit hours)

(Note: Only three credit hours of Government may be earned through credit-by-examination.)
- Business (3 credit hours) to be chosen from Business, Accounting, Management 136, Computer Information Systems, OR Economics. Cooperative Work Experience courses may not be used to meet Common Learning requirements
- Electives (16 - 18 credit hours)

A maximum of 4 physical education activity hours may be counted as credit toward requirements for graduation. The G.P.A. for graduation is based on the credit earned for all DCCCD work completed and all transfer work. The following courses will not count toward graduation nor the G.P.A. for graduation: Courses numbered 099 and below, Art 199, College Learning Skills 100, Developmental Communications 120, Human Development 100, Human Development 110, Library Skills 101, Music 199 and Theatre 199.

All students planning to transfer to a four-year institution may complete their four semester requirements in physical education during their freshman and sophomore years. Students are urged to consult the catalogs of the institutions to which they may transfer for their special requirements. These catalogs should be used by students and advisors in planning programs.
Where a technical/occupational program heavily emphasizes a specific cluster as part of its requirements, students are encouraged to select from other clusters to satisfy this requirement. For example, students pursuing an A.A.S. degree in accounting must enroll in many courses from the Business cluster as part of their program requirements. Therefore, to meet Common Learning requirements, the 6-8 additional hours should be selected from the other three clusters: Behavioral/Social Sciences, Humanities, or Laboratory Science.

For some programs, more than 60 credit hours are required. All prescribed requirements for the specific technical/occupational program in which the student is enrolled must be completed. These programs may also have other criteria in addition to degree requirements. See the Technical/Occupational Programs section of the catalog for a more detailed explanation. A maximum of 4 physical education activity hours may be counted as credit toward graduation. The G.P.A. for an Applied Arts and Sciences Degree is based only on the hours used to meet degree requirements. The following courses will not count toward graduation nor the G.P.A. for graduation: Courses numbered 099 and below, Art 199, College Learning Skills 100, Developmental Communications 120, Human Development 100, Human Development 110, Library Skills 101, Music 199, and Theatre 199.

Certificate Career Programs

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

Procedure For Filing Degree And Certificate Plans And For Graduation

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

An annual graduation ceremony is held at the conclusion of the spring semester. Participation is ceremonial only and confers on a student no rights to a degree. December graduates may participate in the next commencement if they desire and July and August graduates may participate in the spring commencement if they desire, but neither is required to do so. The Registrar's Office should be notified if the student wishes to participate. Instructions for graduation are mailed to all candidates prior to commencement.

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

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

Waiving Of Scholastic Deficiency

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

Academic Transfer Programs

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

Earning An Associate Degree Prior To Transferring

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

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

Choosing A Major And Developing An Educational Plan

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

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

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

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

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

College Resources For Transfer Students

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

The Counseling Center

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

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

Course Selection Guides

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

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

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

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

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

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

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

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

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

**Technical/Occupational Programs**

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

Technical/occupational courses are accredited college courses which lead to a Certificate of Completion or an Associate in Applied Arts and Sciences Degree. These programs are established only after studies verify that employment opportunities exist in business and industry.

The College attempts to match the community's labor requirements with the ambitions and goals of its students. This realistic approach to occupational education is made possible by the excellent cooperation of local industry, business, and public agencies who increasingly depend on District colleges to supply skilled personnel.

A continuous liaison is maintained with prospective employers to help place graduates and to keep the training programs current with job requirements. Recommendations for adding new programs to the College offerings are made periodically and are based on community studies that identify additional needs.

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

**Credit By Examination**

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

The student pays an examination fee for each course examination. This fee must be paid prior to taking the examination and is not refundable. The College's credit by examination program is coordinated with similar programs of four-year institutions. Final acceptance of credit by examination for specific degree purposes is determined by the degree-granting institution. Students planning to use credit by examination to meet degree requirements at other institutions should check the requirements of the receiving institution.

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

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

**Non-Traditional Learning**

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

1. The student must be currently enrolled in the College to receive equivalent credit for non-traditional learning.
2. Credit for specific courses offered by the College may be granted for non-traditional learning experiences after proper assessment of those experiences. Credit will be awarded on a course by course basis only. The student must be enrolled in the College that is assessing the learning experiences.
3. A student is required to complete at least 12 semester hours of course work with the District, 6 of which are in the student's major occupational area, prior to awarding of equivalent credits for non-traditional activities. The "CR" grade is awarded for non-traditional course work accepted for credit.
4. Credit may be granted for occupational courses approved by the Coordinating Board of Colleges and Universities.
5. The number of equivalent credits awarded may not exceed the total number of credits required for the student's specific associate degree objective. No graduation, residency, degree or program requirements will be waived as a result of credits earned as provided by this policy.

Students desiring to take advantage of this opportunity should consult with the College Advocate for Non-Traditional Learning for additional information. Students making application for assessment of prior learning through life experiences are required to enroll in a human development course to facilitate the process.
High School Articulation/2+2 Agreements

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

Flexible Entry Courses

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

Telecourses

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

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

Cooperative Work Experience

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

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

To enroll in a cooperative education course, students must:

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

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

International Studies

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

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

Human Development Courses

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

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

Campuses also offer special topics courses relevant to life issues. In addition, Speech Communications 101, a course combining aspects of interpersonal communications and public speaking, is required for DCCCD associate degrees.

Developmental Studies

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

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

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

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

Learning Resources Center and Library Obligations

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

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

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

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

Servicemen's Opportunity College

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

Continuing Education Programs

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

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

Courses are offered as seminars, workshops and institutes — the type of course is determined by the nature of the material, instructional approach, and the needs of the students. Usually there are no entrance requirements or examinations; however, some courses may have age restrictions and others may require a certain amount of experience in the subject field for enrollment. Admission is on a first-come, first-served basis. Registration is quick and easy, and may even be accomplished by phone. Continuing Education classes are held on the campus of each college and in a variety of locations throughout the community. Classes and activities are conducted throughout the week, both during the day and evening hours, and also on Saturday and Sunday.

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

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

Continuing Education Units (CEU's)

College credit may be awarded for some courses related to DCCCD vocational/technical/occupational programs. Special enrollment criteria and other restrictions apply before consideration can be given to student requests for Continuing Education/credit transfers. Inquire at the Continuing Education Office for more specific information. For those vocational/technical courses for which no college credit is awarded, Continuing Education Units (CEU's) are transcripted upon successful completion of the course. In all recognized educational circles, one CEU is equal to "ten contact hours of participation in an organized Continuing Education or extension experience under responsible sponsorship, capable direction, and qualified instruction." The CEU is a means of recording and accounting for Continuing Education activities and meeting the certification requirements of certain professional organizations.

The Business and Professional Institute

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

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

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

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

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

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

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

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

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

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

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

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

Tutoring Services
For students needing special assistance in coursework, tutoring services are available. Students are encouraged to seek services through self referral as well as through instructor referral.
Testing/Appraisal Center

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

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

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

Health Center

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

Placement Services

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

Special Services

The Special Services Office offers a variety of support services to enable students with disabilities to participate in the full range of college experiences. Services are arranged to fit the individual needs of the student and may include sign language interpreters, notetakers, tutors, mobility assistants, and loan of wheelchairs, audio tape recorders, talking calculators and audio tests (for those students with visual impairments or learning disabilities). Academic, career and personal counseling are also available. Students with special needs should contact the office at least one month before registration. The office will provide students with an orientation session and registration information. For additional information, contact the Special Services Office or the Counseling Center.

Student Organizations

Information about participation in any organization may be obtained through the Student Programs and Resources Office. The development of student organizations is determined by student interest. Categories of organizations include:

- Co-curricular organizations pertinent to the educational goals and purposes of the College.
- Social organizations to provide an opportunity for friendships and promote a sense of community among students.
- Service organizations to promote student involvement in the community.
- Pre-professional and academic organizations to contribute to the development of students in their career fields.

Intercollegiate Athletics

Participation on athletics teams is voluntary on a non-scholarship basis for students who meet requirements established by the Metro Athletic Conference. Some sports are associated with the National Junior College Athletic Association. For more information regarding eligibility, rules, standards, and sports offered, contact the Physical Education Office.
Intramural Sports
The College provides a campus intramural program for students and encourages participation. For additional information contact the intramural director in the Physical Education Office or the Student Programs and Resources Office.

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

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

VII. FINANCIAL AID

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

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

1. The Department of Education will randomly select some applicants and require that information reported on the FAF or Pell Grant application be verified for accuracy. If the student's application is one that is selected, the student will be required to provide additional documents before financial assistance can be awarded.

2. All eligible non-citizens must submit a copy of an INS card as proof of immigration status before financial assistance can be awarded.

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

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

Deadlines for Applying
Application for financial assistance received by the following dates will be given first priority:

   Academic Year — July 1
   Spring Only — November 1
   Summer Sessions — May 1

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

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

Grants
Pell Grant
The Pell Grant is a federally funded program designed to help undergraduate pre-baccalaureate students continue their education. The purpose of this program is to provide eligible students with a "foundation" of financial aid to assist with the cost of attending college. A time limit on a student's eligibility does exist depending on the student's undergraduate program of study.

All students applying for financial assistance through the College must apply for a Pell Grant. This is generally done through the FAF application discussed earlier. Other types of financial aid may be awarded if the student applies and qualifies. Eligibility for Pell Grant is based on financial need and satisfactory academic progress. Applications and additional information concerning the Pell Grant Program are available in the Financial Aid Office and in the counseling offices of most high schools. The application process takes approximately 8-10 weeks. In response to the Pell Grant application, a Student Aid Report (SAR) will be mailed directly to the student. The student should immediately review the SAR to make sure it is correct and bring all copies to the Financial Aid Office. The exact amount of the Pell Grant award will depend upon the aid index on the SAR and the number of hours for which the student enrolls. In order to be eligible, a student must enroll for at least 6 credit hours each semester. Students must apply each year.

Supplemental Educational Opportunity Grant (SEOG)
The SEOG program provides assistance for eligible undergraduate students who show exceptional financial need, are making satisfactory academic progress toward their educational goal and are enrolled for at least six credit hours. The maximum award for an academic year is $4,000; however, the actual amount of the grant may be limited to less than this, depending on the availability of funds at the school, the student's family financial condition and other financial aid the student is receiving. Priority is
given to students receiving Pell Grant. Students must apply each year for the SEOG.

**Texas Public Educational Grant (TPEG)**
The TPEG Program was enacted by the 64th Texas legislature to assist needy students attending state-supported colleges in Texas. To be eligible students must show financial need and be making satisfactory academic progress toward their educational goal. The actual amount of the grant will vary depending on the availability of funds at the school, the student's family financial condition and other financial aid the student is receiving. This grant is available to students enrolled in credit and some non-credit courses. Students must apply each year for the TPEG.

**Texas Public Educational-State Student Incentive Grant (TPE-SSIG)**
The TPE-SSIG Program is a state grant that is matched with federal funds to provide financial assistance to needy students attending state-supported colleges in Texas. No more than 10% of the funds may be awarded to non-resident students. To qualify, students must enroll for at least 6 credit hours per semester, make satisfactory academic progress toward their educational goal, and have financial need. The maximum grant for an academic year is $2,500; however, the actual amount of the grant award may be less depending on the availability of funds and the degree of financial need. Grants are awarded by eligibility on a first-come, first-served basis. Students must apply each year for the TPE-SSIG.

**Scholarships**

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

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

**Loans**

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

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

1. After July 1, 1988, the interest rate for first time borrowers will increase from 8% to 10% in the fifth year of repayment. The interest rate will be 8% per month, and the loan must be repaid within 10 years. Details of the Stafford Loan Program are found in the loan application. Students are required to sign the Stafford Loan Agreement.

2. Under the Supplemental Loans to Students (SLS) Program, independent undergraduate students may be eligible to borrow up to $4,000 per academic year. Details of the SLS Program are found in the loan application.

3. The current interest rate is variable. The interest rate is variable on the amount of the Stafford Loan. The interest rate will remain constant throughout the lifetime of the loan. The interest rate will remain the same throughout the lifetime of the loan. The minimum payment will be $50 per month over a 5 to 10 year period depending on the total amount borrowed.

4. Under the PLUS Program, parents may now borrow up to $4,000 per year for each dependent undergraduate student with the loan maximum for each eligible student of $20,000.

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

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

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

**Employment**

**College Work-Study Program (CWSP)**

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

**Student Assistants Employment Program (Non-Work-Study)**

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

**Off-Campus Employment**

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

**Tuition Exemption Programs**

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

**Vocational Rehabilitation**

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

**Bureau of Indian Affairs**

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

**Veteran's Benefits Program**

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

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

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

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

Academic Progress Requirements

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

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

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

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

1. PURPOSE

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

2. POLICIES, RULES, AND REGULATION

a. Interpretation of Regulations

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

b. Inherent Authority

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

c. Student Participation

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

d. Standards of Due Process

Students who allegedly violate provisions of this code are entitled to fair and equitable proceedings under this code. The focus of inquiry in disciplinary proceedings shall be the guilt or innocence of those accused of violating disciplinary regulations. Formal rules of evidence shall not be applicable, nor shall deviations from prescribed procedures necessarily invalidate a decision or proceeding, unless significant prejudice to a student respondent or the college may result.

e. Prohibited Conduct

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

f. Definitions

In this code:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(a) College Catalog
(b) Board of Trustees Policies and Administrative Procedures Manual
(c) Student Handbook
(d) Any other official publication.

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

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

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

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

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

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

g. Prohibited Conduct

The following misconduct is subject to disciplinary action:

(1) intentionally causing physical harm to any person on college premises or at college-sponsored activities, or inten-
tionally or recklessly causing reasonable apprehension of such harm or hazing.

(2) unauthorized use, possession, or storage of any weapon on college premises or at college-sponsored activities.

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

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

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

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

(7) intentionally furnishing false information to the college.

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

(9) unauthorized use of computer hardware or software.

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

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

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

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

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

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

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

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

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

(Appropriate personnel at a college may be designated by college or District officials to notify students of dishonored checks, library fines, nonpayment of loans, and similar debts. Such personnel may temporarily "lock"admission or readmission of a student until the matter is resolved. If the matter is not settled within a reasonable time, such personnel shall refer the matter to the VPSD for appropriate action under this code. Such referral does not prevent or suspend proceedings with other appropriate civil or criminal remedies by college personnel.)

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

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

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

3. DISCIPLINARY PROCEEDINGS

a. Administrative Disposition

(1) Investigation, Conference and Complaint

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

(i) Dismiss the allegation 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 alleged violation for use in disciplinary hearings along with a list of witnesses and documentary evidence supporting the allegation.

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

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

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

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

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

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

(2) Summons

(a) The VPSD shall summon a student regarding an alleged violation of this code by sending the student a letter. The letter shall be sent by certified mail, return receipt requested, addressed to the student at his or her last known address as it appears in the records of the Registrar's Office or shall be delivered personally to the student.

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The letter shall direct a student to appear at a specific time and place not less than five (5) working days after the date of the letter. The letter shall describe briefly the alleged violation and cite the published college regulation or policy which allegedly has been violated.

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

(3) Disposition

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

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

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

Administrative disposition means:

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

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

b. Student Discipline Committee

(1) Composition: Organization

(a) When a student refuses administrative disposition of a violation, the student is entitled to a hearing before the Student Discipline Committee. The hearing request must be made to the VPSP in writing, on or before the such (5th) working day after the date of refusal of administrative disposition. The committee shall be composed of equal numbers of students, administrators and faculty of the college. The committee and its chair shall be appointed by the President for each hearing on a rotating basis or on a basis of availability. The committee chair will be selected from the administration or faculty.

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

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

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

(2) Notice

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

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

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

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

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

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

(3) Preliminary Matters

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

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

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

(i) The name of each witness he or she wants summoned and a description of all documentary and other evidence possessed by the college which he or she wants produced.
(ii) An objection that, if sustained by the chairman of the Student Disciplinary Committee, would prevent the hearing;
(iii) The name of the legal counsel, if any, who will appear with the student;
(iv) A request for a separate hearing, if any, and the grounds for such a request.
(4) Procedure

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

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

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

(i) Persons present: the complainant, the VPSD and the student with a parent or guardian if desired.
(ii) Before the hearing begins, the VPSD or the student may request that witnesses remain outside the hearing room.
(iii) The VPSD shall read the complaint;
(iv) The VPSD shall inform the student of his or her rights, as stated in the notice of hearing;
(v) The VPSD shall present the college's case;
(vi) The student may present his or her defense;
(vii) The VPSD and the student may present rebuttal evidence and argument;
(viii) The committee, by majority vote, shall determine the guilt or innocence of the student regarding the alleged violation.

(x) The committee shall state in writing each finding of a violation of a published college regulation or policy. Each committee member concurring in the finding shall sign the statement. The committee may include in the statement its reasons for the finding. The committee shall notify the student in the same manner as the notice of hearing. A determination of guilt shall be followed by a supplemental proceeding in which either party may submit evidence or make statements to the committee concerning the appropriate penalty to be imposed. The past disciplinary record of a student shall not be submitted to the committee prior to the supplemental proceeding. The committee shall determine a penalty by majority vote and shall inform the student, in writing, of its decision as in (ix) above.

(5) Evidence

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

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

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

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

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

(6) Record

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

(7) Petition for Administrative Review

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

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

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

APPENDIX A - SANCTIONS

1. Authorized Disciplinary Penalties:

The VPSD or the Student Discipline Committee may impose one or more of the following penalties for violation of a Board policy, College regulation, or administrative rule:

a. Admonition
b. Warning probation
c. Disciplinary probation
d. Withholding of transcript of degree
e. Bar against readmission
f. Restitution
g. Suspension of rights or privileges
h. Suspension of eligibility for official athletic and nonathletic extracurricular activities
i. Denial of degree
j. Suspension from the college
k. Expulsion from the college

2. Definitions:

The following definitions apply to the penalties provided above:

a. An "Admonition" means a written reprimand from the VPSD to the student on whom it is imposed.

b. "Warning probation" means 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.

c. "Disciplinary probation" means further violations may result in suspension. Disciplinary probation may be imposed for any length of time up to one calendar year and the student shall be automatically removed from probation when the imposed period expires. Students may be placed on disciplinary probation for engaging in activities as illustrated by, but not limited to the following: being intoxicated, misuse of I.D. card, creating a disturbance in or on college premises and gambling.

d. "Withholding of transcript of degree" may be imposed upon a student who fails to pay a debt owed the college or who has a disciplinary case pending final disposition or who violates the oath of residency. The penalty terminates on payment of the debt or the final disposition of the case or payment of proper tuition.

e. "Bar against readmission" may be imposed on a student who has left the College on enforced withdrawal for disciplinary reasons.

f. "Restitution" means reimbursement for damage to or misappropriation of property. Reimbursement may take the form of appropriate service to repair or otherwise compensate for damages.

g. "Disciplinary suspension" may be either or both of the following:

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

(2) "Suspension of eligibility for official athletic and nonathletic 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 nonathletic 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 as illustrated by, but not limited to the following: having intoxicating beverages in any college facility, with the exception of specific beverage related courses within the El Centro food service program; destroying 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.

h. "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.

i. "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 noncredit, for scholastic work at or through the college.

j. "Expulsion" is permanent severance from the college. This policy shall apply uniformly to all 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.

APPENDIX B - HAZING

1. Personal Hazing Offense

a. A person commits an offense if the person:

(1) engages in hazing;

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

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

(4) has firsthand knowledge of the planning of a specific hazing incident involving a student in an educational institution, or firsthand knowledge that a specific hazing inci-
student has occurred, and knowingly fails to report said knowledge in writing to the VPSD or other appropriate official of the institution.

b. The offense for failing to report hazing incident is a misdemeanor punishable by a fine not to exceed $1,000, confinement in county jail for not more than 180 days, or both such fine and confinement.

c. Any other hazing offense which does not cause serious bodily injury to another is a misdemeanor punishable by a fine of not less than $500 nor more than $1,000, confinement in county jail for not less than 90 days nor more than 180 days, or both such fine and confinement.

d. Any other hazing offense which causes serious bodily injury to another is a misdemeanor punishable by a fine of not less than $1,000 nor more than $5,000, confinement in county jail for not less than one year nor more than two years, or both fine and confinement.

e. Any other hazing offense which causes the death of another is a misdemeanor punishable by a fine of not less than $5,000 nor more than $10,000, confinement in county jail for not less than one year nor more than two years, or both fine and confinement.

2. Organization Hazing Offense

a. An organization commits an offense if the organization condones or encourages hazing or if an officer or any combination of members, pledges, or alumni of the organization consents or assists in the commission of hazing.

b. The above offense is a misdemeanor punishable by a fine of not less than $5,000 nor more than $10,000. If a court finds that the offense caused personal injury, property damage, or other loss, the court may sentence the organization to pay a fine of not less than $5,000 nor more than double that amount lost or expenses incurred because of such injury, damage, or loss.

c. Any activity involving consumption of a food, liquid, alcoholic beverage, liquor, drug, or any other substance which subjects the student to an unreasonable risk of harm or which adversely affects the mental or physical health or safety of the student.

d. Any activity that intimidates or threatens the student with ostracism, that subjects the student to extreme mental stress, shame, or humiliation, or that adversely affects the mental health or dignity of the student or discourages the student from entering or remaining registered in an educational institution, or that may reasonably be expected to cause a student to leave the organization or the institution rather than submit to acts described in the subsection;

e. Any activity that induces, causes, or requires the student to perform a duty or task which involves a violation of the Penal Code.

3. Consent Not a Defense

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

4. Immunity from Prosecution

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

5. Definition

"Hazing" means any intentional, knowing, or reckless act, occurring on or off the campus of an educational institution, by one person alone or acting with others, directed against a student that endangers the mental or physical health or safety of a student for the purpose of pledging, being initiated into affiliating with, holding office in, or maintaining membership in any organization whose members are or include students at an educational institution. The term includes but is not limited to:

a. any type of physical brutality, such as whipping, beating, striking, branding, electronic shocking, placing of a harmful substance on the body, or similar activity;

b. any type of physical activity, such as sleep deprivation, exposure to the elements, confinement in a small place, calisthenics, or any other activity that subjects the student to an unreasonable risk of harm or that adversely affects the mental or physical health or safety of the student.

c. Immunity from Prosecution

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

d. Immunity from Prosecution

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

e. Consent Not a Defense

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

f. Definition

"Hazing" means any intentional, knowing, or reckless act, occurring on or off the campus of an educational institution, by one person alone or acting with others, directed against a student that endangers the mental or physical health or safety of a student for the purpose of pledging, being initiated into affiliating with, holding office in, or maintaining membership in any organization whose members are or include students at an educational institution. The term includes but is not limited to:

a. any type of physical brutality, such as whipping, beating, striking, branding, electronic shocking, placing of a harmful substance on the body, or similar activity;

b. any type of physical activity, such as sleep deprivation, exposure to the elements, confinement in a small place, calisthenics, or any other activity that subjects the student to an unreasonable risk of harm or that adversely affects the mental or physical health or safety of the student.

6. Exclusion To Procedures

Sexual Harassment:

All students and employees shall report complaints of sexual
harassment to the VPSD or college President. A complaint includes sexual harassment that a student may suffer from another student or employee, or that an employee may suffer from a student.

6. Appeal Committee

Procedures:

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

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

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

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

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

CAMPUS PARKING AND DRIVING REGULATIONS


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

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

c. Permits:

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

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

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

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

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

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

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

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

d. Driving on the wrong side of the roadway.

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

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

g. Parking trailers or boats on campus.

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

i. Failure to display a parking permit.

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

k. Reckless driving.

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

m. Violation of any state law regulating vehicular traffic.

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

a. Handicapped parking.

b. Fire lanes.

c. Courtyards.

d. "No Parking" zones.

e. Areas other than those designated for vehicular traffic.

f. Other unauthorized areas as designated by sign.

4. Citations:

a. Types: Citations shall be of two types:

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

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

b. Disposition

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

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

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

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

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

8. Miscellaneous: The District nor any of its colleges or employees are responsible for damage to or theft of a vehicle or its contents while on the college campus.
RECI PROCA LIC TUITION AGREEMENT

DCCCD PROGRAMS

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

<table>
<thead>
<tr>
<th>Program</th>
<th>Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising Art</td>
<td>BHC</td>
</tr>
<tr>
<td>Animal Medical Technology</td>
<td>CVC</td>
</tr>
<tr>
<td>Apparel Design</td>
<td>ECC</td>
</tr>
<tr>
<td>Aviation Technology</td>
<td>MVC</td>
</tr>
<tr>
<td>Air Cargo</td>
<td>MVC</td>
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<tr>
<td>Air Traffic Control</td>
<td>MVC</td>
</tr>
<tr>
<td>Aircraft Dispatcher</td>
<td>MVC</td>
</tr>
<tr>
<td>Airline Marketing</td>
<td>MVC</td>
</tr>
<tr>
<td>Career Pilot</td>
<td>MVC</td>
</tr>
<tr>
<td>Fixed Base Operations</td>
<td>MVC</td>
</tr>
<tr>
<td>Avionics</td>
<td>MVC</td>
</tr>
<tr>
<td>Electrical Technology</td>
<td>NLC</td>
</tr>
<tr>
<td>Commercial Music</td>
<td>CVC</td>
</tr>
<tr>
<td>Diesel Mechanics</td>
<td>NLC</td>
</tr>
<tr>
<td>Engineering Technology</td>
<td>RLC</td>
</tr>
<tr>
<td>Food and Hospitality Service</td>
<td>ECC</td>
</tr>
<tr>
<td>Human Services</td>
<td>EFC</td>
</tr>
<tr>
<td>Interior Design</td>
<td>ECC</td>
</tr>
<tr>
<td>Machine Shop</td>
<td>MVC</td>
</tr>
<tr>
<td>Pattern Design</td>
<td>ECC</td>
</tr>
<tr>
<td>Physical Fitness Technology</td>
<td>NLC</td>
</tr>
<tr>
<td>Social Work Associate</td>
<td>EFC</td>
</tr>
<tr>
<td>Vocational Nursing</td>
<td>ECC</td>
</tr>
</tbody>
</table>
## Career Education Programs

### Accounting Associate
- **Air Conditioning & Refrigeration — Residential**
- **Animal Medical Technology**
- **Apparel Design**
- **Architectural Technology**
- **Associate Degree Nursing**
  - LVN Option
- **Auto Body Technology**
- **Automotive Career Technician**
- **Automotive Technology**
  - Dealership-Sponsored Technician
- **Electronic Quality Control**
- **Construction Management & Technology**
  - **Construction Technology**
  - **Criminal Justice**
- **Dental Assisting Technology**
- **Diesel Mechanics**
- **Digital Electronics Technology**
  - Drafting & Computer Aided Design
  - **Electronic Design**
- **Educational Personnel**
  - **Bilingual/ESL**
  - **Educational Assistant**
- **Electrical Technology**
- **Electronic Telecommunications**
- **Electronics Technology**
- **Avionics**
- **Engineering Technology**
  - **Electro-Mechanical**
  - **Electronic Controls**

### Advertising Art

### Air Conditioning & Refrigeration Technology

### Animal Medical Technology

### Apparel Design

### Architectural Technology

### Associate Degree Nursing
  - LVN Option

### Auto Body Technology

### Automotive Career Technician

### Automotive Technology
  - Dealership-Sponsored Technician

### Aviation Technology
  - **Career Pilot**
  - **Air Cargo Transport**
  - **Air Traffic Control**
  - **Aircraft Dispatcher**
  - **Airline Marketing**
  - **Fixed Base Operations/Airport Management**

### Child Development Associate
  - **Administrative**
  - **CDA Training Certificate**
  - **Infant-Toddler**
  - **Special Child Certificate**

### Commercial Music
  - **Arranger/Composer/Copyist**
  - **Music Retailing**
  - **Performing Musician**
  - **Recording Technology**

### Computer Information Systems
  - **Business Computer Assistant**
  - **Business Computer Information Systems**
  - **Business Computer Programmer**
  - **Computer Center Specialist**
  - **Computer Operations Technician**
  - **Personal Computer Support**
  - **Construction Management & Technology**
  - **Construction Technology**
  - **Criminal Justice**
  - **Dental Assisting Technology**
  - **Diesel Mechanics**
  - **Digital Electronics Technology**
  - **Drafting & Computer Aided Design**
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  - **Electronic Telecommunications**
  - **Electronics Technology**
  - **Avionics**
  - **Engineering Technology**
    - **Electro-Mechanical**
    - **Electronic Controls**

### Electronic Technology

### Entertainment Technology

### Fashion Marketing

### Financial Management

### Fire Protection Technology

### Food And Hospitality Service

### Graphic Communications
  - **Graphic Arts**
  - **Interior Design**

### Interpreter Training Program

### Sign Language Studies

### Legal Assistant

### Machine Parts Inspection

### Machine Shop

### Management Careers
  - **Administrative Management**
  - **Mid-Management**
  - **Postal Service Administration**
  - **Sales, Marketing & Retail Management**
  - **Small Business Management**
  - **Transportation and Logistics Management**
  - **Medical Laboratory Technology**
  - **Medical Transcription**
  - **Motorcycle Mechanics**
  - **Office Careers**
    - **Administrative Assistant**
    - **Legal Secretary**
  - **General Office Certificate**
  - **Office Information Systems Specialist**
  - **Ornamental Horticulture Technology**
  - **Greenhouse Florist**
  - **Landscape Management**
  - **Landscape Nursery**
  - **Florist**
  - **Landscape Gardener**
  - **Outboard Marine Engine Mechanics**
  - **Pattern Design**
  - **Physical Fitness Technology**
  - **Radiologic Sciences**
    - **Diagnostic Medical Sonography**
    - **Radiography Technology**
  - **Real Estate**
  - **Respiratory Care, Levels I and II**
  - **Small Engine Mechanics**
  - **Social Work Associate**
  - **Human Services**
  - **Surgical Technology**
  - **Surgical Technology for Graduate R. N.**
  - **Video Technology**
  - **Vocational Nursing**
  - **Welding Technology**

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

<table>
<thead>
<tr>
<th>BHC — Brookhaven College</th>
<th>EFC — Eastfield College</th>
<th>MVC — Mountain View College</th>
<th>RLC — Richland College</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVC — Cedar Valley College</td>
<td>ECC — El Centro College</td>
<td>NLC — North Lake College</td>
<td>&quot;</td>
</tr>
</tbody>
</table>
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 66 credit hours as outlined below. Students desiring a less comprehensive program that includes some bookkeeping procedures and practices should consider the General Office Certificate. The General Office Certificate is available in the Office Careers Program.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>ACC 201 Principles of Accounting I .................. 3</td>
</tr>
<tr>
<td>BUS 105 Introduction to Business .................... 3</td>
</tr>
<tr>
<td>ENG 101 Composition I .................................. 3</td>
</tr>
<tr>
<td>MTH 130 Business Mathematics or MTH 111 Mathematics for Business and Economics ................. 3</td>
</tr>
<tr>
<td>OFC 160 Office Calculating Machines .................. 3</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>SEMESTER II</td>
</tr>
<tr>
<td>ACC 202 Principles of Accounting II .................. 3</td>
</tr>
<tr>
<td>ENG 102 Composition II .................................. 3</td>
</tr>
<tr>
<td>CIS 103 Introduction to Computer Information Systems ................................................. 3</td>
</tr>
<tr>
<td>MGT 136 Principles of Management ..................... 3</td>
</tr>
<tr>
<td>OFC 172 Beginning Typing* ................................ 3</td>
</tr>
<tr>
<td>SC 101 Introduction to Speech Communication ........... 3</td>
</tr>
<tr>
<td>18</td>
</tr>
<tr>
<td>SEMESTER III</td>
</tr>
<tr>
<td>ACC 203 Intermediate Accounting I .................... 3</td>
</tr>
<tr>
<td>ACC 204 Managerial Accounting ......................... 3</td>
</tr>
<tr>
<td>ACC 250 Microcomputer-Based Accounting Applications .......................................................... 3</td>
</tr>
<tr>
<td>ECO 201 Principles of Economics I ..................... 3</td>
</tr>
<tr>
<td>+ Elective                                            ................................ 3</td>
</tr>
<tr>
<td>ACC 703 Cooperative Work Experience or ACC 704 Cooperative Work Experience or + + Elective .......... 3-4</td>
</tr>
<tr>
<td>18-19</td>
</tr>
<tr>
<td>SEMESTER IV</td>
</tr>
<tr>
<td>ACC 238 Cost Accounting or ACC 239 Income Tax Accounting ......................................................... 3</td>
</tr>
<tr>
<td>BUS 234 Business Law ...................................... 3</td>
</tr>
<tr>
<td>ECO 202 Principles of Economics II .................... 3</td>
</tr>
<tr>
<td>OFC 231 Business Communications ........................ 3</td>
</tr>
<tr>
<td>+ + Elective ..................................................... 15</td>
</tr>
</tbody>
</table>

Minimum Hours Required ........................................... 66

+ Elective—must be selected from the following:

| ART 104 | Introduction to Anthropology ....................... 3 |
| ACC 205 | Business Finance ....................................... 3 |
| ACC 207 | Intermediate Accounting II ............................ 3 |
| ACC 238 | Cost Accounting ........................................ 3 |
| ACC 239 | Income Tax Accounting ................................... 3 |
| ACC 703 | Cooperative Work Experience ......................... 3 |
| ACC 704 | Cooperative Work Experience ......................... 4 |
| ACC 713 | Cooperative Work Experience ......................... 3 |
| ACC 714 | Cooperative Work Experience ......................... 4 |
| BUS 143 | Personal Finance ....................................... 3 |
| MGT 237 | Organizational Behavior ................................ 3 |
| CIS 252 | Contemporary Topics in Computer Information Systems .......................................................... 3 |
| CIS 265 | Special Topics in Computer Information Systems .... 4 |
| MKT 206 | Principles of Marketing ................................ 3 |
| ++ Elective—must be selected from the following: |
| ART 104 | Art Appreciation ........................................ 3 |
| ENG 201 | British Literature ...................................... 3 |
| ENG 202 | British Literature ...................................... 3 |
| ENG 203 | World Literature ........................................ 3 |
| ENG 204 | World Literature ........................................ 3 |
| ENG 205 | American Literature ................................... 3 |
| ENG 206 | American Literature ................................... 3 |
| HUM 101 | Introduction to the Humanities ...................... 3 |
| MUS 104 | Music Appreciation ..................................... 3 |
| PHI 102 | Introduction to Philosophy ............................. 3 |
| THE 101 | Introduction to the Theatre ......................... 3 |

Foreign Language

++ Electives—may be selected from the following:

<table>
<thead>
<tr>
<th>Any CIS or CS Programming Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 205</td>
</tr>
<tr>
<td>ACC 207</td>
</tr>
<tr>
<td>ACC 238</td>
</tr>
<tr>
<td>ACC 239</td>
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<td>ACC 703</td>
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<td>ACC 704</td>
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<tr>
<td>ACC 713</td>
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<tr>
<td>ACC 714</td>
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<tr>
<td>BUS 143</td>
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<tr>
<td>MGT 237</td>
</tr>
<tr>
<td>CIS 252</td>
</tr>
<tr>
<td>CIS 265</td>
</tr>
<tr>
<td>MKT 206</td>
</tr>
</tbody>
</table>

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

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
Because of the varied and interrelated aviation career options available, Mountain View's Aviation Technology Program is designed to allow students to take a group of core courses which includes selected aviation, business, English, mathematics and human relations courses and then proceed with specialized courses in the specific career option they wish to enter.

The Associate of Applied Arts and Sciences degree options are (1) Career Pilot including flight instructor certificate, multi-engine rating, flight engineer and air transport pilot ground school and type-rating for small, multi-engine, turbo-jet powered airplane; (2) Air Cargo Transport; (3) Airline Marketing; (4) Fixed Base Operations/Airport Management; (5) Aircraft Dispatcher and (6) Air Traffic Control. A one-year certificate program is available in Aircraft Dispatcher.

**AVIATION TECHNOLOGY -- CAREER PILOT OPTION**

*(Associate Degree)*

The Career Pilot Option provides students with flight training and ground school through the commercial certificate. All ground school instruction and flight training conform to Part 61 and 141 of the Federal Aviation Administration Regulations. Prior to admission to the program, registration and payment of fees, consultation with and approval by an Aviation Technology Instructor is necessary. Simulator fees, flight fees and fees for pre- and post-flight briefing are in addition to the regular tuition charge.

Students completing this option may find employment opportunities as an airline pilot, corporate pilot, flight engineer, flight instructor and other general aviation positions. It is recommended that students in the Career Pilot Option schedule flight training during the summer months in addition to the Spring and Fall semesters to aid in completing the program within a two-year period.

**CREDIT HOURS**

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVT 110 Introduction to Aviation</td>
<td>3</td>
</tr>
<tr>
<td>AVT 121 Ground School Private</td>
<td>3</td>
</tr>
<tr>
<td>AVT 122 Aviation Law</td>
<td>3</td>
</tr>
<tr>
<td>AVT 135 Flight Basic*</td>
<td>2</td>
</tr>
<tr>
<td>AVT 210 FAA Regulations</td>
<td>3</td>
</tr>
<tr>
<td>AVT 226 Meteorology</td>
<td>3</td>
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<tr>
<td></td>
<td><strong>17</strong></td>
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</table>

**SEMESTER II**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVT 123</td>
<td>Ground School Commercial</td>
<td>.3</td>
</tr>
<tr>
<td>AVT 128</td>
<td>Aero Engines and Systems</td>
<td>.3</td>
</tr>
<tr>
<td>AVT 137</td>
<td>Flight Private Pilot*</td>
<td>.1</td>
</tr>
<tr>
<td>AVT 220</td>
<td>Aero Dynamics</td>
<td>.3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>Composition I</td>
<td>.3</td>
</tr>
<tr>
<td>+ Mathematics Elective</td>
<td></td>
<td><strong>3</strong></td>
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<tr>
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**SEMESTER III**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>AVT 221</td>
<td>Advanced Navigation</td>
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</tr>
<tr>
<td>AVT 224</td>
<td>Ground School Instrument</td>
<td>.3</td>
</tr>
<tr>
<td>AVT 266</td>
<td>Flight Commercial I*</td>
<td>.2</td>
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<tr>
<td>AVT 266</td>
<td>Flight Commercial II*</td>
<td>.3</td>
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<tr>
<td>PSY 131</td>
<td>Applied Psychology and Human</td>
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<tr>
<td></td>
<td>Relations or</td>
<td></td>
</tr>
<tr>
<td>PSY 101</td>
<td>Introduction to Psychology</td>
<td>.3</td>
</tr>
<tr>
<td>CIS 103</td>
<td>Introduction to Computer Information</td>
<td></td>
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<tr>
<td></td>
<td>Systems</td>
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</table>

**SEMESTER IV**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVT 212</td>
<td>Airport Management</td>
<td>.3</td>
</tr>
<tr>
<td>AVT 267</td>
<td>Flight Commercial III - Instrument*</td>
<td>.3</td>
</tr>
<tr>
<td>AVT 268</td>
<td>Flight Commercial IV*</td>
<td>.3</td>
</tr>
<tr>
<td>AVT 250</td>
<td>Flight Instructor Ground School or (2)</td>
<td></td>
</tr>
<tr>
<td>AV 129</td>
<td>Introduction to Aircraft Electronic Systems</td>
<td>.3</td>
</tr>
<tr>
<td>SC 101</td>
<td>Introduction to Speech Communication</td>
<td>.3</td>
</tr>
<tr>
<td></td>
<td><strong>14-15</strong></td>
<td></td>
</tr>
</tbody>
</table>

Minimum Hours Required: **64**

+ Mathematics Elective—must be selected from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH 101</td>
<td>College Algebra</td>
<td>.3</td>
</tr>
<tr>
<td>MTH 111</td>
<td>Mathematics for Business and Economics</td>
<td>.3</td>
</tr>
<tr>
<td>MTH 130</td>
<td>Business Mathematics</td>
<td>.3</td>
</tr>
<tr>
<td>MTH 195</td>
<td>Technical Mathematics I</td>
<td>.3</td>
</tr>
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<td></td>
<td><strong>3</strong></td>
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</tr>
</tbody>
</table>

*Flight courses are flexible enrollment and may be taken in sequence regardless of semester.

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

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>Flight Instructor Certificate</td>
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<tr>
<td>AVT 250 Flight Instructor Ground School .. 2</td>
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<tr>
<td>AVT 251 Flight Instructor - Airplane* .. 2</td>
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<tr>
<td>AVT 252 Instrument Flight Instructor Ground School .. 3</td>
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<tr>
<td>AVT 253 Flight Instructor - Airplane Instrument* .. 1</td>
</tr>
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<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Engine Rating</td>
</tr>
<tr>
<td>AVT 254 Flight Advanced I* .. 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>Flight Engineer</td>
</tr>
<tr>
<td>AVT 263 Flight Engineer Ground School .. 3</td>
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<tr>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>Air Transport Pilot</td>
</tr>
<tr>
<td>AVT 264 Air Transport Pilot Ground School .. 3</td>
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</tbody>
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<table>
<thead>
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</thead>
<tbody>
<tr>
<td>Type-Rating (small, multi-engine, turbo-jet)</td>
</tr>
<tr>
<td>AVT 255 Type-Rating Turbo-Jet Ground School .. 3</td>
</tr>
<tr>
<td>AVT 256 Flight Advanced II-Jet Type-Rating* .. 1</td>
</tr>
</tbody>
</table>

*Flight courses are flexible enrollment and may be taken in sequence regardless of semester.

AVIATION TECHNOLOGY — AIR CARGO TRANSPORT OPTION

(Associate Degree)

This option is designed to provide students with an overview of transportation methods and technology associated with the aviation industry. Upon completion of the program, students may be eligible to be employed in positions such as air cargo sales, air freight transportation and cargo loading.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>AVT 110 Introduction to Aviation .. 3</td>
</tr>
<tr>
<td>AVT 121 Ground School Private .. 3</td>
</tr>
<tr>
<td>AVT 122 Aviation Law .. 3</td>
</tr>
<tr>
<td>AVT 210 FAA Regulations .. 3</td>
</tr>
<tr>
<td>BUS 105 Introduction to Business .. 15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER II</td>
</tr>
<tr>
<td>AVT 226 Meteorology .. 3</td>
</tr>
<tr>
<td>AVT 249 Air Transportation, Traffic and Cargo .. 3</td>
</tr>
<tr>
<td>ACC 201 Principles of Accounting I .. 3</td>
</tr>
<tr>
<td>ENG 101 Composition I .. 3</td>
</tr>
<tr>
<td>+ Elective .. 15</td>
</tr>
</tbody>
</table>

Minimum Hours Required .. 60

+ Elective—must be selected from the following:

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH 101 College Algebra .. 3</td>
</tr>
<tr>
<td>MTH 130 Business Mathematics .. 3</td>
</tr>
<tr>
<td>MTH 195 Technical Mathematics I .. 3</td>
</tr>
</tbody>
</table>

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

(Associate Degree)

Mountain View offers a specialized degree program in air traffic control in conjunction with the Southwest Region ARTC. The program provides students with the background and general experience in aviation which may enable them to enter an air traffic control career with the FAA. Career opportunities in air traffic control include positions such as control tower operator, approach control, air route traffic control and flight service station specialist.

Students interested in admission to the air traffic control program must have completed 15 credit hours (Aviation Technology courses recommended) prior to enrollment into the specialized air traffic control courses and must meet FAA eligibility requirements.

CREDIT HOURS

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>AVT 121</td>
<td>3</td>
</tr>
<tr>
<td>AVT 135</td>
<td>2</td>
</tr>
<tr>
<td>AVT 137</td>
<td>1</td>
</tr>
<tr>
<td>AVT 210</td>
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<tr>
<td>AVT 221</td>
<td>3</td>
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<tr>
<td>AVT 226</td>
<td>3</td>
</tr>
<tr>
<td></td>
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</table>

<table>
<thead>
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<tbody>
<tr>
<td>AVT 270</td>
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<tr>
<td>AVT 272</td>
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</tr>
<tr>
<td>AVT 274</td>
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<tr>
<td>AVT 704</td>
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</table>

<table>
<thead>
<tr>
<th>SEMESTER III</th>
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</thead>
<tbody>
<tr>
<td>AVT 224</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>3</td>
</tr>
<tr>
<td>MTH 195</td>
<td>3</td>
</tr>
<tr>
<td>PSY 131</td>
<td>3</td>
</tr>
<tr>
<td>SC 101</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEMESTER IV</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AVT 212</td>
<td>3</td>
</tr>
<tr>
<td>MGT 136</td>
<td>3</td>
</tr>
<tr>
<td>AVT 223</td>
<td>3</td>
</tr>
<tr>
<td>MGT 242</td>
<td>3</td>
</tr>
<tr>
<td>AVT 714</td>
<td>4</td>
</tr>
<tr>
<td>ENG 102</td>
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</tr>
<tr>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

SEMESTER V
AVT 804 Cooperative Work Experience .... 4

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

*Flight courses are flexible enrollment and may be taken in sequence regardless of semester.

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

(Associate Degree)

The job performed by an aircraft dispatcher is an integral part of the overall flight operations for airlines. An individual in this position works in conjunction with an airline pilot and is responsible for regulation compliance, weather and loading procedures prior to take-off. In the Aircraft Dispatcher Program students may earn a certificate after approximately one year or choose to complete the Associate in Applied Arts and Sciences Degree.

Entry into either program will be in accordance with Federal Aviation Administration regulations and with instructor approval. Upon completion of the courses in the desired program, students may be recommended to apply to take the FAA written examination for aircraft dispatcher.

CREDIT HOURS

SEMESTER I
AVT 110 Introduction to Aviation .......... 3
AVT 121 Ground School Private .......... 3
AVT 122 Aviation Law .................... 3
AVT 210 FAA Regulations, Airspace and Air Traffic Control .......... 3
AVT 226 Meteorology ........................ 3

15

SEMESTER II
AVT 123 Ground School Commercial .......... 3
AVT 128 Aero Engine and Systems .......... 3
AVT 221 Advanced Navigation ............... 3
CIS 103 Introduction to Computer Information Systems .......... 3
ENG 101 Composition I ........................ 3

15

SEMESTER III
AVT 224 Ground School Instrument .......... 3
AVT 261 Aircraft Dispatcher .......... 3
MTH 195 Technical Mathematics I .......... 3
PSY 131 Applied Psychology and Human Relations .......... 3
SC 101 Introduction to Speech Communication .......... 3

15

SEMESTER IV
AVT 262 Practical Dispatching .......... 3
AVT 129 Introduction to Aircraft Electrical Systems .......... 3
BUS 105 Introduction to Business .......... 3
MGT 136 Principles of Management .......... 3
MTH 196 Technical Mathematics II .......... 3

15

Minimum Hours Required .......................... 60

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

AVIATION TECHNOLOGY — AIRCRAFT DISPATCHER

(Certificate)

The job performed by an aircraft dispatcher is an integral part of the overall flight operations for airlines. An individual in this position works in conjunction with an airline pilot and is responsible for regulation compliance, weather and loading procedures prior to take-off. In the Aircraft Dispatcher Program students may earn a certificate after approximately one year or choose to complete the Associate in Applied Arts and Sciences Degree.

Entry into either program will be in accordance with Federal Aviation Administration regulations and with instructor approval. Upon completion of the courses in the desired program, students may be recommended to apply to take the FAA written examination for aircraft dispatcher.

CREDIT HOURS

SEMESTER I
AVT 110 Introduction to Aviation .......... 3
AVT 121 Ground School Private .......... 3
AVT 122 Aviation Law .................... 3
AVT 210 FAA Regulations, Airspace and Air Traffic Control .......... 3
AVT 226 Meteorology ........................ 3

15

SEMESTER II
AVT 123 Ground School Commercial .......... 3
AVT 128 Aero Engine and Systems .......... 3
AVT 221 Advanced Navigation ............... 3
AVT 224 Ground School Instrument .......... 3
AVT 262 Practical Dispatching .......... 3

15

Minimum Hours Required .......................... 33

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

(Associate Degree)

The Airline Marketing Option stresses the significance and functions of marketing from the airline viewpoint. Students completing the program may opt to enter a variety of marketing related positions in the areas of customer service, sales and promotion, crew scheduling or entry level management.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>AVT 110 Introduction to Aviation .......... 3</td>
</tr>
<tr>
<td>AVT 121 Ground School Private ............ 3</td>
</tr>
<tr>
<td>AVT 122 Aviation Law ...................... 3</td>
</tr>
<tr>
<td>AVT 210 FAA Regulations ................... 3</td>
</tr>
<tr>
<td>BUS 105 Introduction to Business .......... 3</td>
</tr>
<tr>
<td>SEMESTER II</td>
</tr>
<tr>
<td>AVT 249 Air Transportation, Traffic and Cargo .......... 3</td>
</tr>
<tr>
<td>ACC 201 Principles of Accounting I ........ 3</td>
</tr>
<tr>
<td>CIS 103 Introduction to Computer Information Systems ........ 3</td>
</tr>
<tr>
<td>ENG 101 Composition I ..................... 3</td>
</tr>
<tr>
<td>+ Elective ..................................... 3</td>
</tr>
<tr>
<td>SEMESTER III</td>
</tr>
<tr>
<td>AVT 212 Airport Management ............... 3</td>
</tr>
<tr>
<td>AVT 223 Airline Management ............... 3</td>
</tr>
<tr>
<td>ECO 201 Principles of Economics I .......... 3</td>
</tr>
<tr>
<td>PSY 131 Applied Psychology and Human Relations or PSY 101 Introduction to Psychology ........ 3</td>
</tr>
<tr>
<td>SC 101 Introduction to Speech Communication 3</td>
</tr>
<tr>
<td>SEMESTER IV</td>
</tr>
<tr>
<td>AVT 225 Aviation Marketing ............... 3</td>
</tr>
<tr>
<td>+ Elective ..................................... 3</td>
</tr>
<tr>
<td>ACC 202 Principles of Accounting II ........ 3</td>
</tr>
<tr>
<td>ECO 202 Principles of Economics II .......... 3</td>
</tr>
<tr>
<td>+ + Elective ................................... 3</td>
</tr>
<tr>
<td>Minimum Hours Required .................... 60</td>
</tr>
</tbody>
</table>

+ Elective—must be selected from the following:

MTH 101 College Algebra ........................ 3
MTH 130 Business Mathematics ................. 3
MTH 195 Technical Mathematics I .............. 3

+ + Elective—must be selected from the following:

MKT 205 Principles of Marketing ............... 3
MKT 230 Salesmanship ........................... 3
MKT 233 Advertising and Sales Promotion ........ 3
BUS 224 Business Law ........................... 3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
### AVIATION TECHNOLOGY — FIXED BASE OPERATIONS/ AIRPORT MANAGEMENT OPTION

(Associate Degree)

This option provides students with a general administrative overview combining aviation and business courses stressing terminology, management techniques and functions as they apply to the aviation industry. Students completing this program may qualify for support or training positions in airport management, as staff members to operations superintendents or aviation authority boards. Positions as fixed base operators for aircraft dealers may include equipment sales and service and aircraft sales.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>AVT 110</td>
</tr>
<tr>
<td>AVT 121</td>
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<tr>
<td>AVT 122</td>
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<tr>
<td>AVT 210</td>
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<tr>
<td>BUS 105</td>
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<tr>
<td>SEMESTER II</td>
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<td>AVT 226</td>
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<tr>
<td>AVT 249</td>
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<tr>
<td>CIS 103</td>
</tr>
<tr>
<td>ENG 101</td>
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<tr>
<td>+ Elective</td>
</tr>
<tr>
<td>SEMESTER III</td>
</tr>
<tr>
<td>AVT 223</td>
</tr>
<tr>
<td>ACC 201</td>
</tr>
<tr>
<td>ECO 201</td>
</tr>
<tr>
<td>PSY 131</td>
</tr>
<tr>
<td>SC 101</td>
</tr>
<tr>
<td>SEMESTER IV</td>
</tr>
<tr>
<td>AVT 212</td>
</tr>
<tr>
<td>MGT 153</td>
</tr>
<tr>
<td>ACC 202</td>
</tr>
<tr>
<td>BUS 234</td>
</tr>
<tr>
<td>ECO 202</td>
</tr>
<tr>
<td>Minimum Hours Required</td>
</tr>
</tbody>
</table>

+ Math elective — must be selected from the following:

- MTH 101: College Algebra
- MTH 195: Technical Mathematics I
- MTH 130: Business Mathematics

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

(Associate Degree)

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

CREDIT HOURS

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 103</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105</td>
<td>Introduction to Business or Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MTH 111</td>
<td>Mathematics for Business and Economics I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>+ Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>SEMESTER II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 162</td>
<td>COBOL Programming I</td>
<td>4</td>
</tr>
<tr>
<td>MTH 112</td>
<td>Mathematics for Business and Economics II</td>
<td>3</td>
</tr>
<tr>
<td>SC 101</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>CIS 150</td>
<td>Computer Program Logic and Design</td>
<td>3</td>
</tr>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting I*</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>SEMESTER III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 164</td>
<td>COBOL Programming II</td>
<td>4</td>
</tr>
<tr>
<td>ECO 201</td>
<td>Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>ACC 202</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>+ Elective</td>
<td></td>
<td>3-4</td>
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<tr>
<td></td>
<td></td>
<td><strong>16-17</strong></td>
</tr>
<tr>
<td>SEMESTER IV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 210</td>
<td>Assembly Language I</td>
<td>4</td>
</tr>
<tr>
<td>ECO 202</td>
<td>Principles of Economics II</td>
<td>3</td>
</tr>
<tr>
<td>Any CIS/CS or Accounting course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>+ Elective</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td></td>
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</tbody>
</table>

Minimum Hours Required: **60**

+ Elective—must be selected from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>HST 101</td>
<td>History of the United States</td>
<td>3</td>
</tr>
<tr>
<td>GVT 201</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

+ + Elective—must be selected from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 102</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>HUM 101</td>
<td>Introduction to the Humanities</td>
<td>3</td>
</tr>
</tbody>
</table>

+ + + Recommended Electives

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

Any 200 level accounting course not listed.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 108</td>
<td>PC Software Applications</td>
<td>4</td>
</tr>
<tr>
<td>CIS 114</td>
<td>Problem Solving With the Computer</td>
<td>4</td>
</tr>
<tr>
<td>CIS 118</td>
<td>Text Processing Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIS 157</td>
<td>C Programming</td>
<td>4</td>
</tr>
<tr>
<td>CIS 169</td>
<td>4th Generation Languages</td>
<td>4</td>
</tr>
<tr>
<td>CIS 170</td>
<td>RPG Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 172</td>
<td>BASIC Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 173</td>
<td>PASCAL Programming for Business</td>
<td>3</td>
</tr>
<tr>
<td>CIS 218</td>
<td>Spreadsheet Applications</td>
<td>4</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 172</td>
<td>Assembly Language II</td>
<td>4</td>
</tr>
<tr>
<td>CIS 210</td>
<td>Principles of Economics II</td>
<td>3</td>
</tr>
<tr>
<td>CIS 103</td>
<td>Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>CIS 173</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>CIS 172</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
</tbody>
</table>
| +ACC 131 and ACC 132 may be substituted for ACC 201.

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

(Appropriate Degree)

This option is intended for the preparation of entry-level or trainee computer programmers who will work in an applications setting to support the general, administrative, and organizational information processing function of industry, commerce, business, and government service. It is designed as a two-year career program to prepare students for direct entry into the work environment. It is intended to provide a sufficient foundation so the graduate with experience and continued learning may advance in career paths appropriate to their own particular interests and abilities. Touch typing speed of 20 words per minute is suggested for most CIS courses with a lab component. Students are advised to develop this proficiency.

CREDIT HOURS

SEMESTER I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 103</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105</td>
<td>Introduction to Business or</td>
<td>3</td>
</tr>
<tr>
<td>MGT 136</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MTH 115</td>
<td>College Mathematics*</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>PSY 131</td>
<td>Applied Psychology and Human Relations**</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

SEMESTER II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 150</td>
<td>Computer Program Logic and Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS 160</td>
<td>Data Communications</td>
<td>3</td>
</tr>
<tr>
<td>CIS 162</td>
<td>COBOL Programming I</td>
<td>4</td>
</tr>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting I***</td>
<td>3</td>
</tr>
<tr>
<td>SC 101</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

SEMESTER III

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 164</td>
<td>COBOL Programming II</td>
<td>4</td>
</tr>
<tr>
<td>CIS 205</td>
<td>JCL and Operating Systems</td>
<td>4</td>
</tr>
<tr>
<td>ACC 202</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>+ Elective</td>
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SEMESTER IV

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>HOURS</th>
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<tbody>
<tr>
<td>CIS 210</td>
<td>Assembly Language I</td>
<td>4</td>
</tr>
<tr>
<td>CIS 225</td>
<td>Systems Analysis and Design</td>
<td>4</td>
</tr>
<tr>
<td>CIS 258</td>
<td>On-Line Applications or</td>
<td>4</td>
</tr>
<tr>
<td>CIS 254</td>
<td>Data Base Systems</td>
<td>4</td>
</tr>
<tr>
<td>++ + Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3-4</strong></td>
<td></td>
</tr>
</tbody>
</table>

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

CREDIT

HOURS

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

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

**Electives—must be selected from the following:

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

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

CIS 108 PC Software Applications .......... 4
CIS 114 Problem Solving With the Computer ........ 4
CIS 118 Text Processing Applications .......... 3
CIS 137 C Programming .................. 4
CIS 159 4th Generation Languages .......... 4
CIS 170 RPG Programming .................. 3
CIS 172 BASIC Programming ................. 3
CIS 173 PASCAL Programming for Business .......... 3
CIS 218 Spreadsheet Applications .......... 4
Any 200 level CIS course .................. 3-4

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

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

* MTH 111 or MTH 130 may be substituted

** PSY 101 may be substituted

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

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

(Associate Degree)

This program includes education/training to qualify students to provide support for personal computer users; to troubleshoot software and hardware problems, implementing corrections where possible; to evaluate new software and hardware, matching company standards to product specifics; to install hardware and software, including equipment assembly and diagnostics; and to assist in the development of training courses, providing training for users.

A touch typing speed of 20 words per minute is suggested for most CIS courses with a lab component. Students are advised to develop this proficiency.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>CIS 108 PC Software Applications .............. 4</td>
</tr>
<tr>
<td>BUS 105 Introduction to Business or</td>
</tr>
<tr>
<td>MGT 136 Principles of Management .............. 3</td>
</tr>
<tr>
<td>ENG 101 Composition I ........................ 3</td>
</tr>
<tr>
<td>MTH 115 College Mathematics I* ................ 3</td>
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<tr>
<td>PSY 131 Applied Psychology and Human</td>
</tr>
<tr>
<td>Relations** ...................................... 3</td>
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<tr>
<td>SEMESTER II</td>
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<tr>
<td>CIS 114 Problem Solving With the Computer .... 4</td>
</tr>
<tr>
<td>CIS 118 Text Processing Applications .......... 3</td>
</tr>
<tr>
<td>CIS 160 Data Communications .................... 3</td>
</tr>
<tr>
<td>ACC 201 Principles of Accounting I ............ 3</td>
</tr>
<tr>
<td>SC 101 Introduction to Speech Communication</td>
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<tr>
<td>16</td>
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<td>SEMESTER III</td>
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<tr>
<td>CIS 218 Spreadsheet Applications .............. 4</td>
</tr>
<tr>
<td>CIS 221 PC Operating Systems and Utilities ... 4</td>
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<tr>
<td>CIS 223 PC Hardware ............................ 3</td>
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<tr>
<td>OFC 231 Business Communications ............... 3</td>
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<tr>
<td>+ Elective ........................................ 3</td>
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<tr>
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<tr>
<td>SEMESTER IV</td>
</tr>
<tr>
<td>CIS 228 Database Applications ................ 4</td>
</tr>
<tr>
<td>CIS 239 User Documentation and Training ....... 3</td>
</tr>
<tr>
<td>CIS 280 Applied Studies ........................ 3</td>
</tr>
<tr>
<td>CIS XXX Any PC Programming Language .......... 3-4</td>
</tr>
<tr>
<td>+ + CIS Elective ............................... 3-4</td>
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</table>

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

+ Elective to be selected from the following:

<p>| |</p>
<table>
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<tbody>
<tr>
<td>ENG 102 Composition II ................................... 3</td>
</tr>
<tr>
<td>HUM 101 Introduction to Humanities ................... 3</td>
</tr>
<tr>
<td>PHI 103 Critical Thinking ............................. 3</td>
</tr>
</tbody>
</table>

++CIS elective to be selected from any CIS course offered.

*Mathematics 111 or 130 may be substituted.

**PSY 101 may be substituted.

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

(Associate Degree)

This program prepares the student for employment in a wide range of industries as a drafter or engineering aide. Information in related fields is provided to enable the student to work effectively with engineers and professional staff. Enrollment in drafting cooperative work experience courses (co-op) provides students with on-the-job experience while in the program.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>DFT 135 Reproduction Processes 2</td>
</tr>
<tr>
<td>DFT 183 Basic Drafting 4</td>
</tr>
<tr>
<td>COM 131 Applied Communications or ENG 101 Composition I 3</td>
</tr>
<tr>
<td>MTH 195 Technical Mathematics I or MTH 101 College Algebra 3</td>
</tr>
<tr>
<td>*Elective 3-4</td>
</tr>
<tr>
<td>15-16</td>
</tr>
<tr>
<td>SEMESTER II</td>
</tr>
<tr>
<td>DFT 160 Manufacturing Fundamentals 2</td>
</tr>
<tr>
<td>DFT 245 Computer Aided Design 3</td>
</tr>
<tr>
<td>+ DFT Course or</td>
</tr>
<tr>
<td>++ Cooperative Work Experience 3-4</td>
</tr>
<tr>
<td>MTH 196 Technical Mathematics II or MTH 102 Plane Trigonometry 3</td>
</tr>
<tr>
<td>SC 101 Introduction to Speech Communication 3</td>
</tr>
<tr>
<td>14-15</td>
</tr>
<tr>
<td>SEMESTER III</td>
</tr>
<tr>
<td>+ DFT Course 3</td>
</tr>
<tr>
<td>EGR 106 Descriptive Geometry 3</td>
</tr>
<tr>
<td>HD 105 Basic Processes of Interpersonal Relationships or</td>
</tr>
<tr>
<td>PSY 131 Applied Psychology and Human Relations 3</td>
</tr>
<tr>
<td>*Elective or</td>
</tr>
<tr>
<td>++ Cooperative Work Experience 3-4</td>
</tr>
<tr>
<td>*Elective 3</td>
</tr>
<tr>
<td>15-16</td>
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<tr>
<td>SEMESTER IV</td>
</tr>
<tr>
<td>DFT 246 Advanced CAD-Electronic or</td>
</tr>
<tr>
<td>DFT 248 Advanced CAD-Mechanical or</td>
</tr>
<tr>
<td>DFT 249 Advanced CAD-Architectural 3</td>
</tr>
<tr>
<td>+ DFT Course or</td>
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<tr>
<td>++ Cooperative Work Experience 3-4</td>
</tr>
<tr>
<td>PHY 131 Applied Physics 4</td>
</tr>
<tr>
<td>GVT 202 American Government or</td>
</tr>
<tr>
<td>HST 102 History of the United States 3</td>
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<tr>
<td>**Elective 3-4</td>
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<td>16-18</td>
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</tbody>
</table>

Minimum Hours Required: 60

+ DFT Courses — must be selected from the following:

| DFT 136 Geological and Land Drafting 3 |
| DFT 184 Advanced Mechanical Drafting 3 |
| DFT 185 Architectural Drafting 3 |
| DFT 230 Structural Drafting 3 |
| DFT 231 Electronic Drafting 3 |
| DFT 232 Technical Illustration 3 |
| DFT 234 Advanced Technical Illustration 4 |
| DFT 235 Building Equipment (Mechanical and Electrical) 3 |
| DFT 236 Pipe Drafting 3 |
| DFT 246 Advanced CAD-Electronic 3 |
| DFT 248 Advanced CAD-Mechanical 3 |
| DFT 249 Advanced CAD-Architectural 3 |
| DFT 250 Sheet Metal Design 3 |
| DFT 251 Industrial Design 3 |
| DFT 252 Advanced Computer Aided Design 3 |
| DFT 255 Selected Topics in Drafting 3 |

+ + Drafting Cooperative Work Experience courses — must be selected from the following:

| DFT 704 Cooperative Work Experience 4 |
| DFT 714 Cooperative Work Experience 4 |
| DFT 803 Cooperative Work Experience 3 |
| DFT 813 Cooperative Work Experience 3 |

*Elective — must be selected from the following:

| ACC 131 Bookkeeping I 3 |
| ACC 201 Principles of Accounting I 3 |
| BUS 105 Introduction to Business 3 |
| ECO 201 Principles of Economics I 3 |
| FR 101 Beginning French 4 |
| HUM 101 Introduction to the Humanities 3 |
| MGT 138 Principles of Management 3 |
| MUS 104 Music Appreciation 3 |
| PHI 102 Introduction to Philosophy 3 |
| SPA 101 Beginning Spanish 4 |
| THE 101 Introduction to Theatre 3 |

**Electives — must be selected from the following:

| BPR 177 Blueprint Reading 2 |
| BPR 178 Blueprint Reading 2 |
| OFC 176 Keyboarding 1 |
| CIS 103 Introduction to Computer Information Systems 3 |
| GA 120 Printing Fundamentals 3 |

This elective may also be selected from Drafting courses as approved by the Drafting Department.

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

(Associate Degree)

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

<table>
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<tr>
<th>CREDIT HOURS</th>
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**SEMESTER I**

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

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

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

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<th>Course Title</th>
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<tbody>
<tr>
<td>ET 234</td>
<td>Electronic Circuits &amp; Systems</td>
<td>3</td>
</tr>
<tr>
<td>ET 237</td>
<td>Modular Memories &amp; Microprocessors</td>
<td>4</td>
</tr>
<tr>
<td>ET 239</td>
<td>Microwave Theory</td>
<td>3</td>
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Minimum Hours Required: 65

Minimum Hours Required: 65

+ Electives—must be selected from the following:

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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GVT 201</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>GVT 202</td>
<td>American Government</td>
<td></td>
</tr>
<tr>
<td>HST 101</td>
<td>History of the United States</td>
<td>3</td>
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<tr>
<td>HST 102</td>
<td>History of the United States</td>
<td></td>
</tr>
<tr>
<td>HD 104</td>
<td>Educational and Career Planning</td>
<td>3</td>
</tr>
<tr>
<td>HD 105</td>
<td>Basic Processes of Interpersonal Relationships</td>
<td></td>
</tr>
<tr>
<td>PSY 101</td>
<td>Introduction to Psychology</td>
<td>3</td>
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<tr>
<td>PSY 131</td>
<td>Applied Psychology and Human Relations</td>
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+ + Electives—must be selected from the following:

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ET 210</td>
<td>Basic CRT Display</td>
<td>4</td>
</tr>
<tr>
<td>ET 268</td>
<td>Microprocessor Troubleshooting and Interface</td>
<td></td>
</tr>
<tr>
<td>ET 704</td>
<td>Cooperative Work Experience</td>
<td>4</td>
</tr>
<tr>
<td>EGT 243</td>
<td>Robotics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
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</tr>
</tbody>
</table>

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

Mountain View only
(associate degree)

The Associate Degree program in Avionics is an option to the Electronics Technology Program. This option provides the student with an electronics background and specialized skills in avionics. In this program a level of knowledge and practical skills adequate to gain entry level employment in the installation and maintenance of aircraft electronics systems (avionics) is gained by students.

CREDIT HOURS

SEMESTER I
ET 135 DC-AC Theory and Circuit Analysis or (6)
ET 190 DC Circuits and Electrical Measurements 4
AV 129 Introduction to Aircraft Electrical Systems 3
COM 131 Applied Communications or 3
ENG 101 Composition I 3
MTH 195 Technical Mathematics I or 3
MTH 101 College Algebra 3

13-15

SEMESTER II
ET 191 AC Circuits (Unless ET 135 Completed) (4)
ET 193 Active Devices 4
AV 235 Operational Testing of Aircraft Electronic Systems 4
SC 101 Introduction to Speech Communication 3
MTH 196 Technical Mathematics II or 3
MTH 102 Plane Trigonometry 3
PHY 131 Applied Physics or 4
PHY 117 Concepts in Physics 4

18-22

SEMESTER III
ET 231 Special Circuits with Communication Applications 4
ET 232 Analysis of Electronic Logic and Switching Circuits 4
ET 238 Linear Integrated Circuits or 4
ET 704 Cooperative Work Experience 4
ET 240 Electronic Theory and Applications of Digital Computers 4
Elective 3

19

SEMESTER IV
ET 237 Modular Memories and Microprocessors 4
ET 239 Microwave Technology 3
AV 132 Aircraft Electrical and Electronics Systems Installation 4
MGT 153 Small Business Management 3

14

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

+ Elective—must be selected from the following:

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

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

(Associate Degree)

The Industrial Technology Option prepares the student for technician level employment with a broad based curriculum involving electronics and computers, mechanical automation equipment, and fluid power devices and systems. Job opportunities exist in all types of manufacturing, equipment repair and maintenance, and research and development of new systems.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>DFT 182 Technician Drafting or</td>
</tr>
<tr>
<td>DFT 183 Basic Drafting</td>
</tr>
<tr>
<td>ET 135 DC-AC Theory and Circuit Analysis or</td>
</tr>
<tr>
<td>ET 190 DC Circuits and Electrical Measurements</td>
</tr>
<tr>
<td>EGT 243 Robotics I</td>
</tr>
<tr>
<td>MTH 195 Technical Mathematics I</td>
</tr>
<tr>
<td>MTH 101 College Algebra</td>
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<tr>
<td>COM 131 Applied Communications or</td>
</tr>
<tr>
<td>ENG 101 Composition I</td>
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<tr>
<td>EGT 141 Basic Hydraulics and Fluid Mechanics</td>
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<tr>
<td>ET 191 AC Circuits</td>
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<td>ET 193 Active Devices</td>
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<tr>
<td>MTH 196 Technical Mathematics II or</td>
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<tr>
<td>MTH 102 Plane Trigonometry</td>
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<tr>
<td>SC 101 Introduction to Speech Communication</td>
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<tr>
<th>SEMESTER III</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGT 143 Technical Programming or</td>
</tr>
<tr>
<td>ET 240 Electronics Theory and Application of Digital Computers</td>
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<tr>
<td>EGT 230 Digital Machine Control</td>
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<tr>
<td>++Elective</td>
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<td>+++Elective</td>
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<table>
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<th>SEMESTER IV</th>
</tr>
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<tbody>
<tr>
<td>QCT 121 Introduction to Quality Control</td>
</tr>
<tr>
<td>EGR 186 Manufacturing Processes or</td>
</tr>
<tr>
<td>ET 234 Electronic Circuits and Systems</td>
</tr>
<tr>
<td>PHY 131 Applied Physics or</td>
</tr>
<tr>
<td>PHY 201 General Physics</td>
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<tr>
<td>+++Elective</td>
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<tr>
<td></td>
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</table>

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

+ Electives—must be selected from the following:

| ART 104 | Art Appreciation .............................................. 3 |
| HD 104  | Education and Career Planning ............................... 3 |
| HD 105  | Basic Processes of Interpersonal Relationships .......... 3 |
| HUM 101 | Introduction to Humanities ................................... 3 |
| MUS 104 | Music Appreciation ............................................ 3 |
| PHI 102 | Introduction to Philosophy ................................... 3 |
| PSY 101 | Introduction to Psychology ................................... 3 |
| PSY 131 | Applied Psychology and Human Relations .................... 3 |
| THE 101 | Introduction to Theatre ....................................... 3 |

++ Electives—must be selected from the following:

| QCT 122 | Dimensional Measurement ...................................... 3 |
| EGT 144 | Instrumentation and Testing .................................. 3 |
| ET 194  | Instrumentation .................................................. 3 |
| EGR 187 | Manufacturing Processes ........................................ 2 |
| EGT 222 | Fundamentals of Pneumatics ................................... 3 |
| EGT 232 | Applied Mechanics ............................................... 4 |
| EGT 228 | Amplifiers and Control Circuits or                     |       |
| ET 238  | Linear Integrated Circuits .................................... 4 |
| EGT 239 | Principles of Microcomputer Controls or ................. |       |
| ET 237  | Modular Memories and Microprocessors ....................... 4 |
| EGT 242 | Digital Control Circuits or                            |       |
| ET 232  | Analysis of Electronics Logic and Switching Circuits ....| 4   |
| DFT 245 | Computer Aided Design or                               | (3)  |
| MT 248  | Computer Aided Design or                               | 4   |
| EGT 247 | Robotics II ...................................................... 3 |
| EGT 251 | Advanced Robotics and Automated Systems ................. | 3   |
| EGT 268 | Microprocessor Interfacing and Troubleshooting ..........| 4   |
| EGT 270 | Computer Integrated Manufacturing .........................| 4   |
| EGT 704 | Cooperative Work Experience ..................................| 4   |

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

(Associate Degree)

The Robotics Technology Option prepares the student for technician level employment in industrial robotics and automated manufacturing systems. The student also receives training in electronics and computers, manufacturing processes, control systems and computer aided design.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>DFT 182</td>
</tr>
<tr>
<td>DFT 183</td>
</tr>
<tr>
<td>ET 135</td>
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<tr>
<td>ET 190</td>
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<tr>
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<td>MTH 102</td>
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<td>SC 101</td>
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<tr>
<td>SEMESTER III</td>
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<td>EGT 143</td>
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<td>ET 240</td>
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<td>EGT 230</td>
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<td>Elective</td>
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<td>Electives</td>
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<tr>
<td>SEMESTER IV</td>
</tr>
<tr>
<td>QCT 121</td>
</tr>
<tr>
<td>EGR 186</td>
</tr>
<tr>
<td>ET 234</td>
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<tr>
<td>EGT 247</td>
</tr>
<tr>
<td>PHY 131</td>
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<tr>
<td>PHY 201</td>
</tr>
<tr>
<td>Electives</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Minimum Hours Required</td>
</tr>
</tbody>
</table>
ENGINEERING TECHNOLOGY—ROBOTICS AND FLUID POWER CERTIFICATE

This one-year program provides the student with the basic skills needed in the industrial robotics and/or industrial hydraulics and pneumatics industry. All of the courses for the one-year certificate are applicable to the Engineering Technology Associate Degree, Robotics and Fluid Power option.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
<th>SEMESTER I</th>
<th>SEMESTER II</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>ET 190</td>
<td>DFT 182</td>
</tr>
<tr>
<td></td>
<td>DC Circuits and Electrical</td>
<td>Technician Drafting</td>
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<tr>
<td></td>
<td>Measurements</td>
<td>...............</td>
</tr>
<tr>
<td></td>
<td>EGR 186</td>
<td>EGT 222</td>
</tr>
<tr>
<td></td>
<td>Manufacturing Processes</td>
<td>Fundamentals of Pneumatics</td>
</tr>
<tr>
<td></td>
<td>EGT 141</td>
<td>EGT 225</td>
</tr>
<tr>
<td></td>
<td>Basic Hydraulics and Fluid Mechanics</td>
<td>Advanced Fluid Power Systems</td>
</tr>
<tr>
<td></td>
<td>EGT 243</td>
<td>EGT 247</td>
</tr>
<tr>
<td></td>
<td>Robotics I</td>
<td>Robotics II</td>
</tr>
<tr>
<td></td>
<td>MTH 195</td>
<td>MTH 196</td>
</tr>
<tr>
<td></td>
<td>Technical Mathematics I*</td>
<td>Technical Mathematics II*</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>17-19</td>
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</tbody>
</table>

Minimum Hours Required: 33

Technical Electives—must be selected from the following:

- EGR 187 Manufacturing Processes 2
- EGT 144 Instrumentation and Testing 4
- EGT 143 Technical Programming 4
- EGT 251 Advanced Robotics and Automated Systems 3

*MTH 101 and MTH 102 may be substituted for MTH 195 and MTH 196.
MACHINE SHOP

(Associate Degree)

The Machine Shop Program will prepare the student for employment as an entry level machinist in the industry. It will also prepare the student for entry into an apprentice or trainee program for machinist, tool and die-maker, etc. Successful students will find access to supportive type jobs in the metal working field such as planner, programmer, etc.

Enrollment in machine shop courses will be open on the first Monday of October and November in the fall semester and the first Monday of February and March in the spring semester. In each case, such enrollment is subject to completion of specified prerequisite competencies. The program is designed to be self-paced by the student but students can generally plan to spend 18 months of study to complete the entire program.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>MS 133 Basic Lathe .................................. 5</td>
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<tr>
<td>MS 134 Basic Milling Machine ........................ 5</td>
</tr>
<tr>
<td>DFT 183 Basic Drafting* ................................ 4</td>
</tr>
<tr>
<td>MTH 195 Technical Mathematics I ...................... 3</td>
</tr>
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</tr>
<tr>
<td>SEMESTER II</td>
</tr>
<tr>
<td>MS 135 Intermediate Lathe ................................ 5</td>
</tr>
<tr>
<td>MS 136 Intermediate Milling Machine .................. 5</td>
</tr>
<tr>
<td>DFT 184 Advanced Mechanical Drafting* ................ 3</td>
</tr>
<tr>
<td>MTH 196 Technical Mathematics II ..................... 3</td>
</tr>
<tr>
<td>QCT 122 Dimensional Measurement ........................ 3</td>
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<tr>
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<tr>
<td>SEMESTER III</td>
</tr>
<tr>
<td>MS 233 Advanced Lathe .................................. 5</td>
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<tr>
<td>MS 234 Advanced Milling Machine ........................ 5</td>
</tr>
<tr>
<td>COM 131 Applied Communications or ENG 101 Composition I .............................................. 3</td>
</tr>
<tr>
<td>EGR 186 Manufacturing Processes or MS 702 Cooperative Work Experience or ......................... 2</td>
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<tr>
<td>+ Elective  (1)</td>
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<tr>
<td>PHY 131 Applied Physics ................................... 4</td>
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<tr>
<td>SEMESTER IV</td>
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<tr>
<td>MS 235 Applied Lathe .................................... 5</td>
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<td>MS 236 Applied Milling Machine ........................ 5</td>
</tr>
<tr>
<td>PSY 131 Applied Psychology and Human Relations .......... 3</td>
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<tr>
<td>SC 101 Introduction to Speech Communication .......... 3</td>
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</tbody>
</table>

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

+ Elective -must be selected from the following:

| MS 145 Special Topics ..................................... 1 |

*Students may substitute Blueprint Reading 177 for Drafting 183 and Blueprint Reading 178 for Drafting 184.

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

**ADMINISTRATIVE MANAGEMENT OPTION**

(Associate Degree)

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

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>MGT 136: Principles of Management</td>
<td>3</td>
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<tr>
<td>BUS 105: Introduction to Business</td>
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<tr>
<td>ENG 101: Composition I</td>
<td>3</td>
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<tr>
<td>MTH 111: Mathematics for Business and Economics I or MTH 130: Business Mathematics</td>
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<tr>
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<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>MKT 206: Principles of Marketing</td>
<td>3</td>
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<tr>
<td>ACC 201: Principles of Accounting I</td>
<td>3</td>
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<tr>
<td>ENG 102: Composition II</td>
<td>3</td>
</tr>
<tr>
<td>CIS 103: Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
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<td>+ Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>SEMESTER III</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 202: Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 234: Business Law</td>
<td>3</td>
</tr>
<tr>
<td>ECO 201: Principles of Economics I</td>
<td>3</td>
</tr>
<tr>
<td>PSY 131: Applied Psychology and Human Relations</td>
<td>3</td>
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<tr>
<td>SC 101: Introduction to Speech Communication</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>SEMESTER IV</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 242: Personnel Administration</td>
<td>3</td>
</tr>
<tr>
<td>MGT 237: Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>ECO 202: Principles of Economics II</td>
<td>3</td>
</tr>
<tr>
<td>OFC 231: Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>+ Elective</td>
<td>3</td>
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<tr>
<td>+ Elective</td>
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<tr>
<td><strong>Total</strong></td>
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</tbody>
</table>

Minimum Hours Required: 63

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+ Elective—must be selected from the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDIT</th>
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<tbody>
<tr>
<td>ART 104: Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>HUM 101: Introduction to the Humanities</td>
<td>3</td>
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<tr>
<td>ENG 201: British Literature</td>
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<tr>
<td>ENG 202: British Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENG 203: World Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENG 204: World Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENG 205: American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENG 206: American Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUS 104: Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>PHI 102: Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>THE 101: Introduction to the Theatre</td>
<td>3</td>
</tr>
</tbody>
</table>

Foreign Language

+ Electives—may be selected from the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 153: Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 171: Introduction to Supervision</td>
<td>3</td>
</tr>
<tr>
<td>MGT 212: Special Problems in Business</td>
<td>1</td>
</tr>
<tr>
<td>MGT 704: Cooperative Work Experience</td>
<td>4</td>
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<tr>
<td>MKT 137: Principles of Retailing</td>
<td>3</td>
</tr>
<tr>
<td>MKT 230: Salesmanship</td>
<td>3</td>
</tr>
<tr>
<td>MKT 233: Advertising and Sales Promotion</td>
<td>3</td>
</tr>
<tr>
<td>OFC 160: Office Calculating Machines</td>
<td>3</td>
</tr>
<tr>
<td>OFC 172: Beginning Typing</td>
<td>3</td>
</tr>
</tbody>
</table>

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

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

(Associate Degree)

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

CREDIT HOURS

SEMESTER I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 136</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 171</td>
<td>Introduction to Supervision</td>
<td>3</td>
</tr>
<tr>
<td>MGT 704</td>
<td>Cooperative Work Experience</td>
<td>4</td>
</tr>
<tr>
<td>BUS 105</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>SC 101</td>
<td>Introduction to Speech</td>
<td>3</td>
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Total: 19

SEMESTER II

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<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MGT 242</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 714</td>
<td>Cooperative Work Experience</td>
<td>4</td>
</tr>
<tr>
<td>CIS 103</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MTH 111</td>
<td>Mathematics for Business and Economics I or</td>
<td>3</td>
</tr>
<tr>
<td>MTH 130</td>
<td>Business Mathematics</td>
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<td>ENG 102</td>
<td>Composition II</td>
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Total: 16

SEMESTER III

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<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>MGT 237</td>
<td>Organizational Behavior</td>
<td>3</td>
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<tr>
<td>MGT 804</td>
<td>Cooperative Work Experience</td>
<td>4</td>
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<tr>
<td>ACC 201</td>
<td>Principles of Accounting I*</td>
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<tr>
<td>ECO 201</td>
<td>Principles of Economics I</td>
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Total: 13

SEMESTER IV

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<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>MGT 244</td>
<td>Problem Solving and Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>MGT 814</td>
<td>Cooperative Work Experience</td>
<td>4</td>
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<tr>
<td>+ Elective</td>
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<tr>
<td>+ + Elective</td>
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<td>3</td>
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</tbody>
</table>

Minimum Hours Required: 61

+ Elective—must be selected from the following:

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

++ Elective—must be selected from the following:

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

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

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

Mountain View only
(Associate Degree)

The Postal Service Administration curriculum is designed as a two-year program that leads to an Associate Degree in Applied Arts and Sciences. The program aids the student in developing postal skills and provides the student with an insight into multi-level functions employed throughout the postal service system. Emphasis is directed to the areas of methodology, technology, management, and leadership concepts reflected in modern day technology as applied to public service related agencies.

CREDIT HOURS

SEMESTER I
PSA 110 Introduction to Postal Service .......... 3
ENG 101 Composition I .......................... 3
SC 101 Introduction to Speech Communication 3
MTH 111 Mathematics for Business and Economics or
MTH 130 Business Mathematics .................. 3
MGT 136 Principles of Management ............ 3

15

SEMESTER II
PSA 122 Customer Service ....................... 3
ENG 102 Composition II .......................... 3
PSY 101 Introduction to Psychology ............ 3
MGT 171 Introduction to Supervision ............ 3
+ Elective ...................................... 3

15

SEMESTER III
PSA 120 Mail Processing ......................... 3
CIS 103 Introduction to Computer Information Systems 3
MGT 237 Organizational Behavior ................. 3
SOC 101 Introduction to Sociology .............. 3
MKT 206 Principles of Marketing or
MKT 233 Advertising and Sales Promotion .......... 3

15

SEMESTER IV
PSA 216 Postal Management ..................... 3
MGT 242 Personnel Administration ............... 3
GVT 201 American Government .................. 3
++ Elective ..................................... 6

15

Minimum Hours Required ...................... 60

+ Elective--must be selected from the following:

HUM 101 Introduction to the Humanities .......... 3
MUS 104 Music Appreciation ...................... 3
PHI 102 Introduction to Philosophy ............. 3
THE 101 Introduction to the Theatre .......... 3

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

ACC 201 Principles of Accounting I .......... 3
BUS 234 Business Law .......................... 3
CIS 218 Spreadsheet Applications ............... 3
ECO 201 Principles of Economics I ............. 3
GVT 202 American Government ................ 3
HD 105 Basic Processes of Interpersonal Relationships 3
HST 101 History of the United States .......... 3
HST 102 History of the United States .......... 3

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

(The Associate Degree)

The Small Business Management Option is designed for students who plan to become owners or managers of a small business. The practical aspects of planning, locating resources, financing, starting, and operating a business are emphasized. Owners and managers of small businesses may also benefit from the program.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>MGT 136 Principles of Management .................................................. 3</td>
</tr>
<tr>
<td>MGT 153 Small Business Management .................................................. 3</td>
</tr>
<tr>
<td>BUS 105 Introduction to Business ..................................................... 3</td>
</tr>
<tr>
<td>BUS 143 Personal Finance ................................................................. 3</td>
</tr>
<tr>
<td>ENG 101 Composition I .................................................................... 3</td>
</tr>
<tr>
<td>MTH 111 Mathematics for Business and Economics I or MTH 130 Business Mathematics .................. 3</td>
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<tr>
<td>15</td>
</tr>
<tr>
<td>SEMESTER II</td>
</tr>
<tr>
<td>MKT 206 Principles of Marketing ....................................................... 3</td>
</tr>
<tr>
<td>ACC 201 Principles of Accounting I .................................................... 3</td>
</tr>
<tr>
<td>CIS 103 Introduction to Computer Information Systems ............................ 3</td>
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<td>SC 101 Introduction to Speech Communication ....................................... 3</td>
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<tr>
<td>+ ELECTIVE                                             3-4</td>
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<tr>
<td>+++ ELECTIVE                                           3-4</td>
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<tr>
<td>18-19</td>
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<tr>
<td>SEMESTER III</td>
</tr>
<tr>
<td>MGT 211 Small Business Operations .................................................. 3</td>
</tr>
<tr>
<td>MGT 237 Organizational Behavior ...................................................... 3</td>
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<td>ECO 201 Principles of Economics I ..................................................... 3</td>
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<tr>
<td>ACC 202 Principles of Accounting II .................................................. 3</td>
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<td>+ ELECTIVE                                             3</td>
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<td>SEMESTER IV</td>
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<td>MGT 210 Small Business Capitalization, Acquisition and Finance or ACC 205 Business Finance .................................................. 3</td>
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<td>BUS 234 Business Law ................................................................. 3</td>
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<td>ECO 202 Principles of Economics II .................................................. 3</td>
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<tr>
<td>+ ELECTIVES ........................................................................ 6</td>
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Minimum Hours Required .................................................. 66

+ Three electives must be selected from the following Management-related electives:

- ACC 204 Managerial Accounting .................................................. 3
- ACC 238 Cost Accounting .................................................. 3
- ACC 239 Income Tax Accounting .................................................. 3
- FM 117 Letters of Credit .................................................. 2

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

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

CORE CURRICULUM

(For all first year students in Office Careers)

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MTH 130 Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>OFC 150 Automated Filing Procedures</td>
<td>3</td>
</tr>
<tr>
<td>OFC 160 Office Calculating Machines</td>
<td>3</td>
</tr>
<tr>
<td>OFC 172 Beginning Typing*</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

SEMESTER II

| ENG 102 Composition II | 3 |
| OFC 162 Office Procedures | 3 |
| OFC 173 Intermediate Typing* | 3 |
| ACC 131 Bookkeeping I or ACC 201 Principles of Accounting | 3 |
| CIS 103 Introduction to Computer Information Systems | 3 |
| **OFC 179 Office Information Systems Concepts** | 2 |
| **OFC 182 Introduction to Word Processing Equipment** | 1 |
| **TOTAL** | **18** |

Minimum Hours Required: 36

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

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

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

OFFICE CAREERS--ADMINISTRATIVE ASSISTANT OPTION

(Associate Degree)

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

<table>
<thead>
<tr>
<th>SEMESTERS I and II</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Curriculum</td>
<td>36</td>
</tr>
</tbody>
</table>

SEMESTER III

| OFC 231 Business Communications | 3 |
| SC 101 Introduction to Speech Communication | 3 |
| PSY 131 Applied Psychology and Human Relations | 3 |
| HD 105 Basic Processes of Interpersonal Relationships | 3 |
| **OFC 185 Basic Machine Transcription** | 1 |
| **OFC 282 Word Processing Applications** | 1 |
| **OFC 273 Advanced Typing Applications** | 2 |
| OFC 159 Beginning Shorthand or OFC 103 Speedwriting | 4 |
| **TOTAL** | **17** |

SEMESTER IV

| HUM 101 Introduction to the Humanities | 3 |
| OFC 283 Specialized Software | 1 |
| MGT 136 Principles of Management or MGT 237 Organizational Behavior | 3 |
| OFC 166 Intermediate Shorthand or OFC 106 Speedwriting Dictation and Transcription | 4 |
| OFC 703 Cooperative Work Experience or OFC 704 Cooperative Work Experience | 3-4 |
| **TOTAL** | **14-15** |

Minimum Hours Required: 67

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

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

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

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

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

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

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

OFFICE CAREERS--LEGAL SECRETARY OPTION

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

<table>
<thead>
<tr>
<th>CREDIT</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTERS I and II</td>
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</tr>
<tr>
<td>Core Curriculum</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>SEMESTER III</td>
<td></td>
</tr>
<tr>
<td>OFC 231 Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>SC 101 Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>PSY 131 Applied Psychology and Human Relations or</td>
<td></td>
</tr>
<tr>
<td>HD 105 Basic Processes of Interpersonal Relationships</td>
<td>3</td>
</tr>
<tr>
<td>** OFC 185 Basic Machine Transcription</td>
<td>1</td>
</tr>
<tr>
<td>OFC 282 Word Processing Applications</td>
<td>1</td>
</tr>
<tr>
<td>** OFC 273 Advanced Typing Applications</td>
<td>2</td>
</tr>
<tr>
<td>HUM 101 Introduction to the Humanities</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Minimum Hours Required:</td>
<td>65</td>
</tr>
</tbody>
</table>

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

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

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

(Associate Degree)

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

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

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MTH 130</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>**OFC 160</td>
<td>Office Calculating Machines</td>
<td>3</td>
</tr>
<tr>
<td>*OFC 173</td>
<td>Intermediate Typing</td>
<td>3</td>
</tr>
<tr>
<td>**OFC 179</td>
<td>Office Information Systems Concepts</td>
<td>2</td>
</tr>
<tr>
<td>**OFC 182</td>
<td>Introduction to Word Processing Equipment</td>
<td>1</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 102</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>OFC 162</td>
<td>Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>**OFC 185</td>
<td>Basic Machine Transcription</td>
<td>1</td>
</tr>
<tr>
<td>*OFC 273</td>
<td>Advanced Typing Applications</td>
<td>2</td>
</tr>
<tr>
<td>**OFC 282</td>
<td>Word Processing Applications</td>
<td>1</td>
</tr>
<tr>
<td>CIS 103</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ACC 131</td>
<td>Bookkeeping I or</td>
<td></td>
</tr>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>SEMESTER III</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SC 101</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>PSY 131</td>
<td>Applied Psychology and Human Relations</td>
<td></td>
</tr>
<tr>
<td>HD 105</td>
<td>Basic Processes of Interpersonal Relationships</td>
<td>3</td>
</tr>
<tr>
<td>OFC 150</td>
<td>Automated Filing Procedures</td>
<td>3</td>
</tr>
<tr>
<td>OFC 231</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>**OFC 283</td>
<td>Specialized Software</td>
<td>1</td>
</tr>
<tr>
<td>OFC 285</td>
<td>Applied Machine Transcription</td>
<td>1</td>
</tr>
<tr>
<td>+ Elective</td>
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</tbody>
</table>

CREDIT HOURS

<table>
<thead>
<tr>
<th>SEMESTER</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>15</td>
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<tr>
<td>II</td>
<td>15</td>
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<tr>
<td>III</td>
<td>17</td>
</tr>
<tr>
<td>IV</td>
<td>15-16</td>
</tr>
</tbody>
</table>

Minimum Hours Required: 63

+ Electives—must be selected from the following:

OFC 143 Contemporary Topics in Office Careers 1
OFC 182 Introduction to Word Processing Equipment*** 1
OFC 282 Word Processing Applications*** 1
OFC 283 Specialized Software*** 1

+ + Electives—must be selected from the following:

BUS 105 Introduction to Business 3
BUS 234 Business Law 3
MGT 136 Principles of Management 3

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

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

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

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
The Welding Technology Program is designed to prepare the student in the basic processes of oxyacetylene and arc welding plus many specialized welding applications as options to fit the specific needs of the student. In addition, instruction is offered in related support areas such as metallurgy, tooling, drafting, pattern layout and characteristics of materials. Thus, the program offers preparation for both entry level jobs as well as welding inspectors.

The student will be required to purchase a basic set of tools which will be used in class and later on the job. Tool lists will be given out by the instructor during the first week of classes.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WE 111 Oxyfuel I</td>
<td>2</td>
</tr>
<tr>
<td>WE 112 Oxyfuel II</td>
<td>2</td>
</tr>
<tr>
<td>WE 113 Shielded Metal Arc Welding I</td>
<td>2</td>
</tr>
<tr>
<td>WE 114 Shielded Metal Arc Welding II</td>
<td>2</td>
</tr>
<tr>
<td>DFT 182 Technician Drafting</td>
<td>2</td>
</tr>
<tr>
<td>MTH 195 Technical Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>COM 131 Applied Communications or ENG 101 Composition I</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>WE 115 Shielded Metal Arc Welding II</td>
<td>4</td>
</tr>
<tr>
<td>WE 117 General Metal Layout</td>
<td>3</td>
</tr>
<tr>
<td>WE 118 Welding Inspection and Quality Control</td>
<td>4</td>
</tr>
<tr>
<td>PSY 131 Applied Psychology and Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>WE 704 Cooperative Work Experience or</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17-18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEMESTER III</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>WE 211 Gas Tungsten Arc Welding I</td>
<td>2</td>
</tr>
<tr>
<td>WE 212 Gas Tungsten Arc Welding II</td>
<td>2</td>
</tr>
<tr>
<td>WE 214 Gas Metal Arc Welding I</td>
<td>2</td>
</tr>
<tr>
<td>WE 215 Gas Metal Arc Welding II</td>
<td>2</td>
</tr>
<tr>
<td>WE 217 Basic Welding Metallurgy</td>
<td>3</td>
</tr>
<tr>
<td>PHY 131 Applied Physics</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEMESTER IV</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>WE 116 Shielded Metal Arc Welding IV</td>
<td>4</td>
</tr>
<tr>
<td>WE 213 Gas Tungsten Arc Welding III</td>
<td>4</td>
</tr>
<tr>
<td>WE 216 Gas Metal Arc Welding III</td>
<td>4</td>
</tr>
<tr>
<td>WE 219 Welding Design</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

Electives—must be selected from the following:

WE 218 Applied Welding Metallurgy | 3 |
WE 221 Special Welding Applications | 1 |
WE 222 Special Welding Applications | 2 |
WE 223 Special Welding Applications | 3 |
MTH 111 Mathematics for Business and Economics I | 3 |

Minimum Hours Required: 65
WELDING TECHNOLOGY

(Certificate)

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WE 111 Oxyfuel I</td>
<td>2</td>
</tr>
<tr>
<td>WE 112 Oxyfuel II</td>
<td>2</td>
</tr>
<tr>
<td>WE 113 Shielded Metal Arc Welding I</td>
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<tr>
<td>WE 114 Shielded Metal Arc Welding II</td>
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<tr>
<td>WE 211 Gas Tungsten Arc Welding I</td>
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<tr>
<td>WE 212 Gas Tungsten Arc Welding II</td>
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<tr>
<td>WE 214 Gas Metal Arc Welding I</td>
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<tr>
<td>WE 215 Gas Metal Arc Welding II</td>
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<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WE 115 Shielded Metal Arc Welding III</td>
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<tr>
<td>WE 116 Shielded Metal Arc Welding IV</td>
<td>4</td>
</tr>
<tr>
<td>WE 117 General Metal Layout</td>
<td>3</td>
</tr>
<tr>
<td>WE 213 Gas Tungsten Arc Welding III*</td>
<td>4</td>
</tr>
<tr>
<td>WE 216 Gas Metal Arc Welding III*</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>19</td>
</tr>
</tbody>
</table>

Minimum Hours Required: 35

* WE 704 Cooperative Work Experience may be substituted for WE 213 or WE 216.
**Course Descriptions**

**Including General Education and Career Program Courses**

- All courses listed in the District catalog are not available at every college. The District catalog contains descriptions of both General Education courses and Technical/Occupational courses offered collectively by the seven colleges of the Dallas County Community College District. The listing is alphabetical by course subject title.

- Each campus within the District publishes a catalog which reflects courses and programs that are offered on that campus.

- All courses listed in this catalog may not be offered during the current year. It is suggested that students plan their schedules with the help of a college counselor well in advance of registration.

### Understanding The Course Descriptions

<table>
<thead>
<tr>
<th>Abbreviation on the general program area name (in this case, “Biology”).</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Number</strong></td>
</tr>
<tr>
<td><strong>Prerequisite</strong> - A course that must be successfully completed or a requirement such as related life experiences that must be met before enrolling in this course.</td>
</tr>
<tr>
<td><strong>Credit Hours</strong> - When you complete a course, you are awarded a certain number of credit hours. If you are in a degree program, a specified number of credit hours is required for graduation. Counselors are available to help you determine your course and credit hour requirements.</td>
</tr>
<tr>
<td><strong>Laboratory Fee</strong> - A charge for equipment or services in addition to tuition.</td>
</tr>
</tbody>
</table>

**Example Course Description:**

**(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.)

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

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

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

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

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

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

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

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

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

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

(ACC) 238 Cost Accounting (3)
Prerequisite: Accounting 202. The theory and practice of accounting for a manufacturing concern are presented. The measurement and control of material, labor, and factory overhead are studied. Budgets, variance analysis, standard costs, and joint and by-product costing are also included. (3 Lec.)

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

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

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

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

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

ANTHROPOLOGY

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

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

(ANT) 110 The Heritage Of Mexico (3)
This course (cross-listed as History 110) is taught in two parts each semester. The first part of the course deals with the archeology of Mexico beginning with the first humans to enter the North American continent and culminating with the arrival of the Spanish in 1519 A.D. Emphasis is on archaic cultures, the Maya, the Toltec, and Aztec empires. The second part of the course deals with Mexican history and modern relations between the United States and Mexico. The student may register for either History 110 or Anthropology 110 but may receive credit for only one of the two. (3 Lec.)

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

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

(ART) 106 Survey Of Art History (3)
This course covers the history of art from the Baroque period through the present. It explores the cultural, geophysical, and personal influences on art styles. (3 Lec.)

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

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

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

(ART) 115 Drawing II (3)
Prerequisite: Art 114. This course is an expansion of Art 114. It stresses the expressive and conceptual aspects of drawing, including advanced compositional arrangements, a range of wet and dry media, and the development of an individual approach to theme and content. (2 Lec., 4 Lab.)

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

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

(ART) 118 Creative Photography For The Artist I (3)
Prerequisites: Art 110, Art 114, or demonstrated competence approved by the instructor. Creative use of the camera is studied. Photosensitive materials are examined as a means of making expressive graphic images. Emphasis is on black and white processing and printing techniques. Laboratory fee. (2 Lec., 4 Lab.)
(ART) 119 Creative Photography For The Artist II (3)
Prerequisite: Art 118 or demonstrated competence approved by the instructor. This course is a continuation of Art 118. Emphasis is on individual expression. Laboratory fee. (2 Lec., 4 Lab.)

(ART) 199 Problems In Contemporary Art (1)
Area artists, critics, and art educators speak with students about the work exhibited in the gallery and discuss current art styles and movements. They also discuss specific aspects of being artists in contemporary society. This course may be repeated for credit. (1 Lec.)

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

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

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

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

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

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

(ART) 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.)

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

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

(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 laboratory 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.)

AVIATION TECHNOLOGY

(AVT) 110 Introduction To Aviation (3)
This course introduces various aspects of the aviation industry. It covers the history, development, and advances in aircraft from balloon flight to the supersonic transport. The industry's economic and sociological effects on people and communities are also included. Special emphasis is on the origin and growth of airlines and the aviation industry. (3 Lec.)
(AVT) 121 Ground School Private (3)
This course includes the study of Federal Aviation Regulations, flight dynamics, meteorology, navigation, use of the radio, and general service of aircraft. The course is designed to fulfill the Ground School Requirements for the FAA Private Pilot Certificate. (3 Lec.)

(AVT) 122 Aviation Law (3)
Prerequisite: Aviation Technology 110 or concurrent enrollment in Air Transportation. Procedural laws and regulations are studied. Local, national, and international procedures are included as well as those relating both to public and private sectors of air commerce. Topics include the development of aviation law, regulatory agencies, and quasi-official study and advisory groups. Special emphasis is on flight procedures (flight plans), ports of entry, customs, clearances, contraband, quarantines, aviation hazards, and liabilities. The present legal structure and possible future changes are covered, including reciprocity agreements. (3 Lec.)

(AVT) 123 Ground School Commercial (3)
Prerequisite: Private Pilot Certificate. This course is an in-depth analysis of all topics covered in the Commercial Pilot written examination. Emphasis is on problem development and solutions. Advanced exercises are included in the areas of aircraft operation, meteorology, navigation, communications, theory and hazards of attitude Instrument flight, flight physiology, and emergency procedures. This course is designed to fulfill the Ground School Requirements of the FAA for the Commercial Pilot Certificate. (3 Lec.)

(AVT) 128 Aero Engines And Systems (3)
Prerequisite: Credit or concurrent enrollment in Aviation Technology 110. Electronics Technology 235, or the equivalent. Basic power plant types and principles of operation are presented. Reciprocating, rotary, jet, and rocket engines are included. Also covered are configurations, such as in-line, radial, vee and horizontally opposed, turbo-prop, turbo-jet, fan- jet, and ram-jet. Also included are numerous systems, such as the fuel ignition, electrical, environmental, lubrication, hydraulics, pneumatics, fire detection and extinguishing, cooling, tachometer, monitoring, manual control, and power boosted systems. (3 Lec.)

(AVT) 135 Flight Basic (2)
This course provides 25 hours of flight instruction (15 hours dual, 10 hours solo flight). Two hours in the synthetic flight trainer are required. A current Second-Class Medical Certificate is required. Flight and laboratory fee. (9 Lab., 25 Flight)

(AVT) 137 Flight Private Pilot (1)
This course provides 20 hours of flight instruction (10 hours dual and 10 hours solo flight). Pre-flight instruction and briefing are included. Students receive credit for the course upon completion of the flight prerequisite for the Private Pilot Flight Examination. One hour in the synthetic flight trainer is required. Flight and simulator fee. (24 Contact Hours)

(AVT) 210 Federal Aviation Regulations, Airspace And Air Traffic Control (3)
It is recommended that this course be taken concurrently with one of the ground school courses. This course is an in-depth study of Federal Aviation Regulations, Air Traffic Control Procedures, the National Airspace System, and NTSB Regulations. Rated pilots may take this course to prepare for the 24-month flight review. (3 Lec.)

(AVT) 212 Airport Management (3)
Prerequisites: Required core courses and Management 136. The major functions of airport management are presented. Topics include the adequacy of facilities and services, organization, personnel, maintenance, planning and zoning, operations, revenues and expenses, public relations, ecology, and safety. A study of the socioeconomic effect of airports on the communities they serve is also covered. (3 Lec.)

(AVT) 220 Aero Dynamics (3)
Prerequisite: Credit or concurrent enrollment in Mathematics 196. The aeronautical applications of physical laws are studied. Areas considered include gravitational laws, forces and stresses, Bernoulli's principle, gyroscopic principles, and velocity-sonic relationships. The dynamics of airfoils, high efficiency lift devices, energy conversion to reactive forces related to aerobatics, and precision flight are also covered. (3 Lec.)

(AVT) 221 Advanced Navigation (3)
Prerequisite: Credit or concurrent enrollment in Aviation Technology 226 or demonstrated competence approved by the instructor. This course covers flight planning. Consideration is given to adverse atmospheric conditions, navigational capabilities, and safety. The course also includes the analysis of atmospheric maps, charts, and weather radar. The interpretation and use of all operational data are also presented. (3 Lec.)

(AVT) 223 Airline Management (3)
Prerequisites: Required core courses and Management 136. This course covers the organization, operation, and management of an airline. Topics include planning, facility requirements, financing, aircraft selection criteria, route feasibility studies, market and passenger trends, and population trends affecting load factors. Problems unique to airline operations are explored. (3 Lec.)

(AVT) 224 Ground School Instrument (3)
Prerequisite: Private or Commercial Pilot Certificate. This course presents aircraft attitude control, flight procedures, and maneuvering by reference solely to cockpit instruments. Completion of this course will qualify the student to take the FAA Instrument Rating Written Examination. (3 Lec.)

(AVT) 225 Aviation Marketing (3)
Prerequisites: Required core courses. The significance and functions of marketing are stressed from the airline viewpoint. Topics include market research, sales, advertising and promotion concepts, traffic, demand analysis, and price determination theory. (3 Lec.)
(AVT) 228 Meteorology (3)
Basic concepts of meteorology are studied. Weather data and measuring devices are covered. Topics include weather maps and symbols, U.S. Weather Bureau documents, structure and general circulation of the atmosphere, theories of air mass, fronts, pressure areas, temperature gradients and inversions, violent atmospheric activities, and ecological considerations. (3 Lec.)

(AVT) 249 Air Transportation, Traffic And Cargo (3)
Prerequisites: Required core courses and credit or concurrent enrollment in Management 136. Transportation methods of passengers and cargo are examined. The need, nature and structure of the air transportation segment of the aviation industry are studied. Emphasis is on the diagnosis and solution of problems at terminals. Topics include air cargo, air mail, air express, air freight, air taxi, air carrier, commuter, business and pleasure. (3 Lec.)

(AVT) 250 Flight Instructor Ground School (2)
Prerequisite: Commercial Pilot Certificate or Private Pilot Certificate with 200 hours logged flight time. Principles of flight and ground school instruction are presented. Instructional techniques, analysis of maneuvers, and Federal Aviation Regulations are included. Completion of this course should qualify the student to pass the Flight Instructor Written Examination. (2 Lec.)

(AVT) 251 Flight Instructor Airplane/Single Or Multi-Engine (2)
Prerequisite: Commercial Pilot Certificate or Private Pilot Certificate with 200 hours logged flight time. This course focuses on the science of flight instruction. Evaluation of student performance and maneuver analysis are included. The required instructional flight disciplines are covered in order to qualify students for the FAA Flight Instructor Rating. Simulator fee. (40 Contact Hours)

(AVT) 252 Instrument Flight Instructor Ground School (3)
Prerequisites: Instrument Rating and Commercial Pilot Certificate; pass written examination on airspace and regulations or concurrent enrollment in Aviation Technology 210. Instructional techniques of the synthetic flight trainer are presented. Included are instrument flight rules, instrument charts, instrument procedures, and the use of aircraft instruments for instrument flight. Emphasis is on developing instructional techniques and materials. The course is designed to prepare students for the FAA Instrument Flight Instructor Flight Test and Written Test. Students will be required to conduct instruction in Synthetic Ground Trainers. (48 Contact Hours)

(AVT) 253 Flight Instructor-Airplane Instrument (1)
Prerequisite: Certified Flight Instructor Rating. This course including evaluation of student performance and maneuver analysis. The required flight disciplines that qualify the student for the FAA Flight Instructor-Airplane Instrument Rating are covered. Flight fee. (20 Contact Hours)

(AVT) 254 Flight Advanced I (1)
Prerequisite: A Private Pilot Certificate or a Commercial Pilot Certificate. This course includes 10 hours of flight instruction. All flying is in modern twin-engine aircraft and is designed to give the advanced pilot a greater depth of aircraft experience. The course includes pre-flight instruction and briefing. It leads to the FAA Multi-Engine Pilot Rating. Flight fee. (16 Contact Hours)

(AVT) 255 Type Rating Turbo Jet Ground School (3)
Prerequisites: Commercial Pilot Certificate and Instrument Rating. This course will provide an analysis of normal, abnormal and emergency operation of the flight control, engine, fuel, electrical, pneumatic, navigation and auxiliary systems and use of the manufacturer’s performance data for a specific make and model (type) of small, multi-engine, turbo-jet powered airplane. A review of procedures related to pre-flight, takeoffs, enroute flight, landings, engine-out procedures, no-flap landings, collision avoidance and wake turbulence avoidance will also be included. (48 Contact Hours)

(AVT) 256 Flight Advanced II-Jet Type Rating (1)
Prerequisites: Commercial Pilot Certificate and Instrument Rating. This course includes ten hours of flight instruction, and ten hours of pre- and post-flight instruction. All flying is in a small multi-engine, turbo-jet powered airplane. It leads to the FAA Multi-Engine Jet airplane type rating. Flight fee. (13 Contact Hours)

(AVT) 261 Aircraft Dispatcher I (3)
This course includes a survey of FAA regulations and duties of an aircraft dispatcher plus basic flight planning for transport category aircraft. (48 Contact Hours)

(AVT) 262 Practical Dispatching (3)
Prerequisite: Aviation Technology 261. The content of this course is described in the current FAA Aircraft Dispatcher Circular. The content is designed to prepare the student for the FAA written exam for aircraft dispatcher. Ten hours are required in the simulated flight trainer. (Simulated flight hours can be accumulated both on and off campus but must be verified by the instructor). Simulator fee. (58 Contact Hours)

(AVT) 263 Flight Engineer Ground School (3)
Prerequisites: Aviation Technology 261 and Aviation Technology 262 or the equivalent experience and/or credentials. This course includes FAA regulations, flight theory and aerodynamics, basic meteorology with respect to engine operations, center of gravity computations, airplane systems and equipment, and normal and emergency operating procedures. This information prepares the student for the flight engineer's written tests. Specific emphasis is placed on the Boeing 727 and Boeing 707 as aircraft which are used for flight engineer training by civil United States air carriers. (48 Contact Hours)

(AVT) 264 Air Transport Pilot Ground School (3)
Prerequisites: Aviation Technology 261 and Aviation Technology 262 or the equivalent experience and/or credentials.
This course is designed to prepare the student for the Air Transport Pilot Written Test and includes operations of air carrier aircraft, navigation by instruments, the general system and material relative to weather information collection and dissemination, meteorology, weather conditions, air navigation facilities, airplane weather observations and influence of terrain on meteorological conditions, radio communications, and basic principles of loading and weight distribution. (48 Contact Hours)

(AVT) 265 Flight Commercial I (2)
Prerequisite: Private Pilot Certificate. This course provides 30 hours of flight instruction (10 hours dual and 20 hours solo flight) to apply toward the Commercial Pilot Certificate. Pre-flight instruction and briefing are included. A current Second-Class Medical Certificate is required. Flight and laboratory fee. (8 Lab., 30 Flight)

(AVT) 266 Flight Commercial II (3)
Prerequisites: Aviation Technology 265 and concurrent enrollment in Aviation Technology 123. This course provides 46 hours of flight instruction (10 hours dual instrument instruction and 36 hours of solo flight) to apply toward the Commercial Pilot Certificate. Pre-flight instruction and briefing are included, as are 5 hours of night flight. Flight and laboratory fee. (8 Lab., 46 Flight)

(AVT) 267 Flight Commercial III - Instrument (3)
Prerequisites: Private Pilot Certificate, Aviation Technology 265 and completion of or concurrent enrollment in Aviation Technology 224. This course provides 45 hours of instrument flight instruction. Pre-flight instruction and briefing are included. Flight fee. (46 Flight)

(AVT) 268 Flight Commercial IV (3)
Prerequisites: Aviation Technology 123 and 267. This course provides 46 hours flight instruction (6 hours dual flight, 30 hours solo flight, and 10 hours dual and practice flight in a more sophisticated aircraft) to fulfill flight law requirements for the Commercial Pilot Certificate. Pre-flight instruction and briefing are included. Students receive course credit upon completion of the flight prerequisites to the Commercial Pilot Flight Examination. Flight fee and laboratory fee. (4 Lab., 46 Flight)

(AVT) 270 Orientation To Air Traffic Control (5)
This course is designed to acquaint new employees with the FAA organization, the options within the air traffic service, and the emergency readiness requirements. It provides a basic orientation to the history, structure, and functions of the FAA with emphasis on air traffic service. National, local, and individual policies and obligations are also presented. (80 Contact Hours)

(AVT) 272 Aircraft Types And Characteristics/Air Traffic Control Communications (2)
This course is designed to introduce developmental controllers to the information necessary to identify the types of aircraft by name or model by their physical characteristics and to state the normal range of operating speeds, altitudes, the weight class and category, as well as developing the ability to identify the procedures, phrasology, and discipline pertaining to radio communications in accordance with FCC regulations. Emergency communications and visual communications used by air traffic control facilities are also presented. (32 Contact Hours)

(AVT) 274 Air Traffic Computer Operations (3)
This course is designed to train the student to operate the components of the central computer complex in an enroute air traffic control center and includes computer operations, input and output devices and their operating characteristics and message format, content, and computer responses. (48 Contact Hours)

(AVT) 704 Cooperative Work Experience (4)
Prerequisite: 15 Credit Hours. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include job interview and job application techniques, job site interpersonal relations, and employer expectations of employees. (1 Lec., 20 Lab.)

(AVT) 714 Cooperative Work Experience (4)
Prerequisite: 15 Credit Hours. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include dressing for success, how to advance in the job through off-duty education, and utilizing role models to achieve goals. (1 Lec., 20 Lab.)

(AVT) 804 Cooperative Work Experience (4)
Prerequisite: 15 Credit Hours. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 20 Lab.)

AVIONICS TECHNOLOGY

(AV) 129 Introduction To Aircraft Electronic Systems (3)
This course relates aircraft electronic systems to aircraft flight and navigation. Emphasis is on the operation and function of the electronic systems. The laboratory requirements include demonstrations of the operation of the systems and the use of some ramp test equipment. Laboratory fee. (2 Lec., 2 Lab.)

(AV) 132 Aircraft Electrical And Electronic Systems Installation (4)
Prerequisite: Avionics Technology 129. Suggested pre- or corequisites: Electronics Technology 191 or Electronics
Technology 135. This is a course of study and practical experience in the installation of avionic systems in aircraft, mounting of electronic equipment, construction and installation of electrical wiring and cables, proper use of tools, selection of materials, and accepted methods and procedures to insure aircraft safety, mechanical integrity, electrical reliability, and compliance with applicable FAA regulations. Laboratory fee. (3 Lec., 3 Lab.)

(AV) 235 Operational Testing Of Aircraft Electronic Systems (4)
Prerequisite: Avionics Technology 129. Suggested pre- or co- requisites: Electronics Technology 191 or Electronics Technology 135. This course integrates technical drawing Interpretation, wiring interface checkout and the application of ramp test equipment in common usage. In the laboratory, the student will perform functional checks of aircraft electrical and electronic systems using appropriate procedures for determining the operating condition of the equipment and techniques for correcting equipment malfunctions. The students should gain practical experience in avionics equipment in the aircraft and on the bench. Laboratory fee. (3 Lec., 3 Lab.)

BIOLOGY

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

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

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

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

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

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

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

BLUEPRINT READING

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

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

BUSINESS

(BUS) 105 Introduction To Business (3)
This course provides an introduction to business operations. Topics include: the business system, legal forms of business, organization and management, business functions (production, marketing, finance, risk management, information systems, accounting) and the environments affecting business (the economy, labor, government regulation, social responsibility, law, international business, and technology). (This course is offered on campus and may be offered via television.) (3 Lec.)
(BUS) 143 Personal Finance (3)
Personal financial issues are explored. Topics include financial planning, insurance, budgeting, credit use, home ownership, savings, investment, and tax problems. (3 Lec.)

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

CHEMISTRY

(CHM) 101 General Chemistry (4)
Prerequisites: Developmental Mathematics 093 or equivalent and any one of the following: high school chemistry, Chemistry 115, or the equivalent. This course is for science and science-related majors. Fundamental concepts of chemistry are presented including states and properties of matter, the periodic table, chemical reaction types and energy relationships, chemical bonding, atomic and molecular structure, stoichiometry, gas laws and solutions. Laboratory fee. (3 Lec., 3 Lab.)

(CHM) 102 General Chemistry (4)
Prerequisite: Chemistry 101. This course is for science and science-related majors. It is a continuation of Chemistry 101. Previously learned and new concepts are applied. Topics include reaction kinetics and chemical equilibrium, acids, bases, salts and buffers, thermodynamics, colligative properties of solutions, electrochemistry, transition-metal chemistry, nuclear chemistry, qualitative inorganic analysis and an introduction to organic chemistry. Laboratory fee. (3 Lec., 3 Lab.)

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

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

(CHM) 201 Organic Chemistry I (4)
Prerequisite: Chemistry 102. This course is for science and science-related majors. It introduces the fundamental classes of organic (carbon) compounds and studies aliphatic and aromatic hydrocarbons in detail. It includes occurrence, structure, stereochemistry, nomenclature, and reactions and mechanisms of synthesis. Lab includes: synthesis, purification by distillation, recrystallization, extraction and chromatography, and identification by spectroscopic, physical and chemical methods. Laboratory fee. (3 Lec., 2 Lab.)

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

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

CHILD DEVELOPMENT

(CD) 127 Early Childhood Development, 5-12 Years (3)
This course covers the principles of normal child growth and development from five through twelve years of age. Emphasis is on physical, intellectual, emotional, and social growth. Special attention is given to before- and after-school care. (3 Lec.)

(CD) 135 Introduction To Early Childhood Programs And Services (4)
This course is a study of historical and current early childhood development programs and services, as well as individuals influencing these programs. Laws and standards regulating these child-care facilities are covered. The laboratory experience includes observation of and participation with pre-schools and child-care centers in the community. Laboratory fee. (3 Lec., 2 Lab.)

(CD) 137 Early Childhood Learning Environments, Activities And Materials (4)
This course is a study of appropriate learning experiences for young children in child-care facilities. Emphasis is on quality environments, learning activities, materials and effective teaching techniques. The laboratory experience includes observation and participation in the Parent/Child Study Center and community child-care facilities. Laboratory fee. (3 Lec., 2 Lab.)

(CD) 140 Early Childhood Development, 0-3 Years (3)
This course covers the principles of normal child growth and development from conception through three years. Emphasis is on physical, intellectual, emotional, and social growth. (3 Lec.)
(CD) 141 Early Childhood Development, 3-5 Years (3)
This course covers the principles of normal child growth and development from three through five years of age. Emphasis is on physical, intellectual, emotional, and social growth. (3 Lec.)

(CD) 150 Nutrition, Health And Safety Of The Young Child (3)
Practical experience and information on the nutritional, health, and safety needs of the young child are provided. A survey of community services for parents and teachers is included. Students earn a first aid certificate during this course. Laboratory fee. (2 Lec., 2 Lab.)

(CD) 236 The Special Child: Growth And Development (3)
Children with special needs are studied with emphasis on physical, mental, and emotional/behavioral problems. This course provides a broad overview of these problem areas and serves as an introduction to the study of exceptional children. (3 Lec.)

(CD) 238 Studies In Child Guidance (3)
This course is a study of appropriate ways of guiding and teaching young children. Emphasis is on guidance principles that develop a positive self-concept in early childhood while recognizing individual differences and varied family situations. The course includes observation of and participation with young children in child-care facilities and interpretation of anecdotal records and case studies of young children. Laboratory fee. (2 Lec., 2 Lab.)

(CD) 253 Abuse Within The Family (3)
The symptoms and causes of abusive behaviors within the family are the focus of this course. Emphasis is on developing skills and competencies in working with these families to help them lessen and alleviate abusive behaviors and experiences. Laboratory fee. (2 Lec., 2 Lab.)

COLLEGE LEARNING SKILLS

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

COMMUNICATIONS

(COM) 131 Applied Communications (3)
This course focuses on student writing. It emphasizes reading and analytical thinking skills and introduces research skills. Students practice writing for a variety of audiences and purposes, primarily job-related. (3 Lec.)

COMPUTER INFORMATION SYSTEMS

(CIS) 103 Introduction To Computer Information Systems (3)
This course presents an overview of computer information systems with an emphasis on business applications. Topics include terminology, systems and procedures, and the role of computers and their evolution in an information-oriented society. The fundamentals of computer problem solving are applied through the use of the BASIC programming language and application software packages. Laboratory fee. (This course is offered on campus and may be offered via television.) (3 Lec., 1 Lab.)

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

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

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

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

(CIS) 160 Data Communications (3)
Prerequisite: Computer Information Systems 103 or 108. This course provides an introduction to data communications vocabulary, concepts, and uses. Topics include data communications hardware, software, networks, and protocols. (3 Lec.)
(CIS) 162 COBOL Programming I (4)
Prerequisites: Computer Information Systems 103, credit or concurrent enrollment in Computer Information Systems 150, or demonstrated competence approved by the instructor. This course develops structured programming skills using the COBOL language. Topics include advanced table concepts, sort techniques, and report formats. Skills in problem analysis, using design tools, coding, testing, and documentation are also developed. Laboratory fee. (3 Lec., 4 Lab.)

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

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

(CIS) 169 4th Generation Languages (4)
Prerequisite: Three credit hours in a programming language course or demonstrated competence approved by the instructor. This course presents an introduction to 4th generation languages and their relationship to software productivity. Topics include survey and definition of available products and their uses, current functions, evaluation standards, selection and implementation. Laboratory fee. (3 Lec., 4 Lab.)

(CIS) 170 RPG Programming (3)
Prerequisite: Three credit hours in a programming language course or demonstrated competence approved by the instructor. This course introduces programming skills using the RPG II language. Topics include basic listings with levels of totals, multi-record input, exception reporting, look-ahead feature, and multi-file processing. Laboratory fee. (2 Lec., 2 Lab.)

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

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

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

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

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

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

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

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

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

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

(CIS) 228 Database Applications (4)
Prerequisites: Computer Information Systems 108 and 114 or demonstrated competence approved by the instructor. This course covers microcomputer database management concepts using commercially available software. Topics include terminology, organizing data and designing files, report and menu generation, indexing, selection/queries, browsing, file operations, and program development. Laboratory fee. (3 Lec., 4 Lab.)

(CIS) 239 User Documentation And Training (3)
Prerequisites: Speech Communication 101, Office Careers 231, and Computer Information Systems 118 or comparable word processing course or demonstrated competence approved by the instructor. This course covers the practical application of adult learning theory, product documentation, creating user guides and reference manuals, using tutorials, evaluating and using training materials, effective training experiences, concepts of desktop publishing, and presentation graphics. (3 Lec.)

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

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

(CIS) 260 Contemporary Topics In Computer Information Systems (1)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Recent developments and topics of current interest are studied. May be repeated when topics vary. (1 Lec.)

(CIS) 262 Contemporary Topics In Computer Information Systems (3)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Recent developments and topics of current interest are studied. May be repeated when topics vary. (3 Lec.)

(CIS) 263 Special Topics In Computer Information Systems (3)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Current developments in the rapidly changing field of computer information systems are studied. May be repeated when topics vary. Laboratory fee. (2 Lec., 2 Lab.)

(CIS) 265 Special Topics In Computer Information Systems (4)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Current developments in the rapidly changing field of computer information systems are studied. May be repeated as topics vary. Laboratory fee. (3 Lec., 4 Lab.)

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

(CIS) 280 Applied Studies (3)
Prerequisites: Computer Information Systems 223 and twelve additional credit hours from this option or demonstrated competence approved by instructor. This course applies PC analyst skills to real world situations. Topics include planning and implementing solutions to business-related problems, incorporating student knowledge of hardware, software, applications packages, training, documentation, communication skills, and problem solving skills. (3 Lec.)

(CIS) 701 Cooperative Work Experience (1)
Prerequisite: Completion of two courses in the Computer Information Systems program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will
develop a written competency-based learning plan with varied learning objectives and work experiences. Student must develop new learning objectives each semester. The seminar consists of topics which include job interview and application techniques, job site interpersonal relations, preparation of resumes, building self-esteem, setting and writing job objectives, time and stress management techniques, career Interest/aptitude test, evaluation and planning, vendor presentation and professional development. (1 Lec., 5 Lab.)

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

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

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

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

COMPUTER SCIENCE

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

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

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

(CS) 122 Introduction To BASIC Programming (3)
Prerequisite: Developmental Math 093 or demonstrated competence approved by the instructor. This course is an introduction to the BASIC programming language. Topics include input/output, looping, decision structures, functions, arrays, disk files, and formatting. Emphasis is placed on structured programming techniques and algorithm development. Laboratory fee. (2 Lec., 2 Lab.)

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

(CS) 211 Assembly Language (3)
Prerequisite: Computer Science 112 or demonstrated competence approved by the instructor. This course is designed to meet the requirements for a degree in computer science or a related field. Topics covered include a study of assembly language programming, machine representation of data and instructions, and addressing techniques. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 221 Introduction To Computer Organization (3)
Prerequisite: Computer Science 112 or demonstrated competence approved by the instructor. This course introduces the organization and structuring of the major hardware components of computers, the mechanics of information transfer and control within a digital computer system, and the fundamentals of logic design. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 222 Introduction To File Processing (3)
Prerequisite: Computer Science 112 or demonstrated competence approved by the instructor. This course introduces the concepts and techniques of structuring data. Experience is provided in the use of secondary storage devices and applications of data structures and file processing techniques. Laboratory fee. (2 Lec., 2 Lab.)

DANCE

(DAN) 116 Rehearsal and Performance (1)
This course supplements beginning dance technique classes. Basic concepts of approaching work on the concert stage--stage directions, stage areas, and the craft involved in rehearsing and performing are emphasized. This course may be repeated for credit. (4 Lab.)

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

(DAN) 156 Jazz II (1)
Prerequisite: Dance 155 or demonstrated competence approved by the instructor. Work on skills and style in jazz dance is continued. Technical skills, combinations of steps and skills into dance patterns, and exploration of composition in jazz form are emphasized. Laboratory fee. (3 Lab.)

(DAN) 161 Beginning Ballet I (2)
This course explores basic ballet techniques. Included are posture, balance, coordination, rhythm, and flow of physical energy through the art form. Theory, terminology, ballet history, and current attitudes and events in ballet are also studied. Barre exercises and centre floor combinations are given. Laboratory fee. (1 Lec., 3 Lab.)

(DAN) 163 Beginning Ballet II (2)
Prerequisite: Dance 161. This course is a continuation of Dance 161. Emphasis is on expansion of combinations at the barre. Connecting steps learned at centre are added. Jumps and pirouettes are introduced. Laboratory fee. (1 Lec., 3 Lab.)

(DAN) 165 Beginning Contemporary Dance I (2)
This course explores basic contemporary techniques. Emphasis is on technique development, and familiarity with contemporary meters and rhythms. An awareness of major influences on concert dance is developed. Laboratory fee. (1 Lec., 3 Lab.)

(DAN) 166 Beginning Contemporary Dance II (2)
Prerequisite: Dance 165. This course continues and further develops an exploration of Dance 165. Laboratory fee. (1 Lec., 3 Lab.)

(DAN) 200 Rehearsal and Performance (1)
Prerequisite: Dance 116 or demonstrated competence approved by the instructor. This course supplements intermediate dance technique classes. It is a continuation of Dance 116 with emphasis on more advanced concepts as they apply to actual rehearsals and performances. This course may be repeated for credit. (4 Lab.)

(DAN) 252 Coaching and Repertoire (1)
Prerequisite: Demonstrated competence approved by the instructor. Variations (male and female) and pas de deux from standard ballet repertoire are studied and notated. The dancer is given individual coaching, with special attention given to the correction of problems. This course may be repeated for credit. Laboratory fee. (2 Lab.)

(DAN) 253 Improvisation (1)
Prerequisite: Dance 156 or 163. This course consists of creative problem-solving utilizing basic elements of design. This course may be repeated for credit. Laboratory fee. (2 Lab.)

(DAN) 255 Jazz III (1)
Prerequisite: Dance 156. This course consists of the development of proper performance framing. Complex jazz rhythms, turns, jumps, and intricate elements of choreography are introduced. Laboratory fee. (3 Lab.)

(DAN) 256 Jazz IV (1)
Prerequisite: Dance 255. This course is a further exploration of Dance 255. This course may be repeated for credit. Laboratory fee. (3 Lab.)

(DAN) 258 Intermediate Ballet I (2)
Prerequisite: Dance 163. The development of ballet techniques is continued. More complicated exercises at the barre and centre floor are included. Emphasis is on long series of movements, adagio and jumps. Precision of movement is stressed. Laboratory fee. (1 Lec., 3 Lab.)
(DAN) 260 Intermediate Ballet II (2)
Prerequisite: Dance 258. This course begins pointe work for women. Specialized beats and tour are begun for men. Individual proficiency and technical virtuosity are developed. This course may be repeated for credit. Laboratory fee. (1 Lec., 3 Lab.)

DEVELOPMENTAL COMMUNICATIONS

(DC) 095 Communication Skills (3)
This course focuses on strengthening language communications. Topics include grammar, paragraph structure, reading skills, and oral communication. Emphasis is on individual testing and needs. (3 Lec.)

(DC) 120 Communication Skills (3)
This course is for students with significant communication problems. It is organized around skill development, and students may enroll at any time (not just at the beginning of a semester) upon the referral of an instructor. Emphasis is on individual needs and personalized programs. Special attention is given to oral language. Contacts are made with other departments to provide other ways of learning for the students. (2 Lec., 2 Lab.)

DEVELOPMENTAL LEARNING

(DL) 094 Learning Skills Improvement (1)
Learning skills are strengthened. Emphasis is on individual needs and personalized programs. This course may be repeated for a maximum of three credits. (2 Lab.)

DEVELOPMENTAL MATHEMATICS

(OM) 090 Pre Algebra Mathematics (3)
This course is designed to develop an understanding of fundamental operations using whole numbers, fractions, decimals, and percentages and to strengthen basic skills in mathematics. The course is planned primarily for students who need to review basic mathematical processes. This is the first three-hour course in the developmental mathematics sequence. (3 Lec.)

(OM) 091 Elementary Algebra (3)
Prerequisite: Developmental Mathematics 090 or an appropriate assessment test score. This is a course in introductory algebra which includes operations on real numbers, polynomials, special products and factoring, rational expressions, and linear equations and inequalities. Also covered are graphs, systems of linear equations, exponents, roots, radicals, and quadratic equations. (3 Lec.)

(OM) 093 Intermediate Algebra (3)
Prerequisite: One year of high school algebra and an appropriate assessment test score or Developmental Mathematics 091. This course includes further development of the terminology of sets, operations on sets, properties of real numbers, polynomials, rational expressions, linear equations and inequalities, the straight line, systems of linear equations, exponents, roots, and radicals. Also covered are products and factoring, quadratic equations and inequalities, absolute value equations and inequalities, relations, functions, and graphs. (3 Lec.)

DEVELOPMENTAL READING

Students can improve their performance in English courses by enrolling in Developmental Reading courses. Developmental Reading 090 and 091 are valuable skill development courses for English 101. Reading 101 is especially helpful in courses that require a considerable amount of college-level reading. See the catalog descriptions in reading for full course content.

(DR) 090 Basic Reading Skills (3)
Development of comprehension and vocabulary skills, based on individual needs, is the focus of this course. Basic study skills are introduced. A score of 12 to 19 on the Descriptive Test of Language Skills Reading Comprehension Test would indicate that a student has the reading skills needed for this course. (3 Lec.)

(DR) 091 Preparation For College Reading (3)
This course emphasizes development of comprehension and vocabulary skills, according to individual needs. Also included are critical reading, rate flexibility, and basic study skills. A score of 20 to 27 on the Descriptive Test of Language Skills Reading Comprehension Test would indicate that a student has the reading skills needed for this course. (3 Lec.)

DEVELOPMENTAL WRITING

Students can improve their writing skills by taking Developmental Writing. These courses are offered for one to three hours of credit.

(DW) 090 Developmental Writing (3)
This course introduces the writing process. Course topics include practice in getting ideas, writing and rewriting, making improvements, and correcting mistakes. A learning lab is available to provide additional assistance. (3 Lec.)

(DW) 091 Developmental Writing (3)
This course focuses on the writing process. Course topics include inventing, drafting, revising, and editing multi-paragraph papers. Building reading skills, using resources, developing thinking skills, and improving attitudes toward writing comprise other course topics. A learning lab is available to provide additional assistance. (3 Lec.)

(DW) 092 Developmental Writing (1)
This course is a writing workshop designed to support students enrolled in English 101 and other courses requiring writing. (3 Lab.)
DRAFTING & COMPUTER AIDED DESIGN

(DFT) 135 Reproduction Processes (2)
Equipment and processes used to reproduce technical art are studied. Included are the graphic arts process camera, lithographic offset printing, diazo reproduction, blueprinting, photodrafting, microfilming, photocopying, silk screen printing, printed circuit board etching, thermography, typographics, xerography, engravings, and others. The rapidly expanding field of computer graphics is also covered. Lab work includes the preparation of flats for offset printing of brochures. Laboratory fee. (1 Lec., 3 Lab.)

(DFT) 138 Geological And Land Drafting (3)
Prerequisites: Drafting 183 or the equivalent and Mathematics 196. Equivalence is based on high school drafting courses or on student's work experience. Sample of drawings and/or high school transcript must be presented. This is a specialty course to prepare one to work in civil drafting. Topics include lettering, rectangular geometry, fasteners, sectioning, tolerancing, and auxiliaries. Experience is provided in using handbooks and other resource materials and in developing design skills. U.S.A.S.I., government, and industrial standards are used. Emphasis is on both mechanical skills and graphic theory. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 183 Basic Drafting (4)
This course is for students who have had little or no previous experience in drafting. Skill in orthographic, axonometric, and oblique sketching and drawing is developed. Topics include lettering, applied geometry, fasteners, sectioning, tolerancing, and auxiliaries. Experience is provided in using handbooks and other resource materials and in developing design skills. U.S.S.I., government, and industrial standards are used. Emphasis is on both mechanical skills and graphic theory. Laboratory fee. (2 Lec., 6 Lab.)

(DFT) 184 Advanced Mechanical Drafting (3)
Prerequisites: Drafting 183 or the equivalent. Equivalence is based on high school drafting courses or on student's work experience. Samples of drawings and/or a high school transcript must be presented. Drafting problems, design function, and specialized drafting areas are examined. Included are the detailing and assembling of machine parts, gears, cams, jigs, fixtures, metals, and metal forming processes. Drawing room standards and reproduction of drawings are studied. Detail and assembly drawings are made. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 185 Architectural Drafting (4)
This course begins with architectural lettering and drafting of construction details. Emphasis is on technique and use of appropriate material symbols and conventions. Working drawings are prepared, including plans, elevations, sections, and details. Drawings for buildings using steel, concrete, and timber structural components are covered. Reference materials are used to provide skills in locating data and in using handbooks. Laboratory fee. (2 Lec., 6 Lab.)

(DFT) 230 Structural Drafting (3)
Prerequisites: Drafting 184 and Mathematics 196. Stresses and thermal and elastic qualities of various materials are studied. Beams, columns, and other materials are included. Structural plans, details, and shop drawings of components are developed for buildings using steel, reinforced concrete, and timber structures. Emphasis is on drafting appropriate drawings for fabrication and erection of structural components. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 231 Electronic Drafting (3)
Prerequisite: Drafting 183. This course focuses on drawings used in the electronics industry. Topics include block and logic diagrams, schematic diagrams, interconnecting wiring diagrams, printed circuit boards, integrated circuits, component packaging, chassis design and current practices. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 232 Technical Illustration (3)
Prerequisite: Drafting 183. The rendering of three-dimensional drawings is covered. Orthographic views and engineers' sketches are developed into isometric, dimetric, perspective, and diagramatic drawings of equipment and their environments. Technical sketching, hand mechanical lettering, air brush retouching of photographs, handling of commercially prepared pressure sensitive materials, and layout of schematics, charts, and graphs are practiced. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 233 Computer Aided Design (3)
Prerequisites: Drafting 183 or the equivalent. Capabilities and limitations of the electronic computer as an aid to the designer are studied. Drafting procedures using an interactive system with computer graphics are practiced. Forms and uses of computer aided products are viewed in perspective with the overall design process. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 234 Advanced CAD-Mechanical (3)
Prerequisites: Drafting 184 and Drafting 245 or the equivalent. Advanced uses of the electronic computer as an aid to the designer are studied. Special emphasis is given to three-dimensional design, specifically mechanical. Menu and library construction will be practiced while using the Interactive graphic systems. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 235 Advanced CAD-Architectural (3)
Prerequisites: Drafting 185 and 245 or the equivalent. Advanced uses of the electronic computer as an aid to the designer are studied. Special emphasis is given to architectural drafting as it relates to the single-family residence. Menu and library construction will be practiced while using the Interactive graphic system. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 252 Advanced Computer Aided Design (3)
Advanced CAD software for personal computers is studied. Increasing productivity of computer drafting and design systems through task analysis and the creation of menus, macros, and programmed routines is the emphasis in this course. Extracting data from drawings containing blocks...
with attributes is also covered. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 704 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Drafting and Computer Aided Design program or Instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of an introduction to cooperative education, orientation to learning on the job, writing the learning plan, college resources available, and college degree plans. (1 Lec., 20 Lab.)

(DFT) 714 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Drafting and Computer Aided Design program or Instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of transitions in life, communication skills, performance appraisals, and effective use of power. (1 Lec., 15 Lab.)

(DFT) 803 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Drafting and Computer Aided Design program or Instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of human potential, motivation, what to look for in a career, and trends in drafting occupations. (1 Lec., 15 Lab.)

(DFT) 813 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Drafting and Computer Aided Design program or Instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of transitions in life, communication skills, performance appraisals, and effective use of power. (1 Lec., 15 Lab.)

ECONOMICS

(ECO) 105 Economics Of Contemporary Social Issues (3)
This course is a study of the economics of current social issues and public policy, including such matters as antitrust policy, business deregulation, social security, wage and price controls, budget deficits, economic growth, medical care, nuclear power, farm policy, labor unions, foreign trade, and economic stabilization. This course is not intended for economics or business administration majors. (3 Lec.)

(ECO) 201 Principles Of Economics I (3)
Sophomore standing is recommended. The principles of macroeconomics are presented. Topics include economic organization, national income determination, money and banking, monetary and fiscal policy, macroeconomic applications of international trade and finance, economic fluctuations, and growth. (This course is offered on campus and may be offered via television.) (3 Lec.)

(ECO) 202 Principles Of Economics II (3)
Prerequisite: Economics 201 or demonstrated competence approved by the instructor. The principles of microeconomics are presented. Topics include the theory of demand, supply, and price of factors. Income distribution and theory of the firm are also included. Emphasis is given to microeconomic applications of international trade and finance as well as other contemporary microeconomic problems. (This course is offered on campus and may be offered via television.) (3 Lec.)

ELECTRONICS TECHNOLOGY

(ET) 135 DC-AC Theory And Circuit Analysis (6)
Prerequisite: Credit or concurrent enrollment in Mathematics 195 or the equivalent. This is an accelerated course combining DC circuits (ET 190) and AC circuits (ET 191) in one semester for students with previous electronics experience or a good mathematics background. Topics include the analysis of resistive, capacitive, inductive, and combination circuits. Magnetism, resonance, schematic symbols, and sine wave analysis are also included. Series, parallel, and series-parallel circuits are covered. Laboratory fee. (5 Lec., 3 Lab.)

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

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

(ET) 174 Oscilloscope Utilization (1)
This course will cover all front panel controls on basic laboratory calibrated oscilloscopes. Emphasis will be placed on utilization of oscilloscope in troubleshooting a circuit. Laboratory fee. (1 Lec., 1 Lab.)
(ET) 190 DC Circuits And Electrical Measurements (4)
The mathematical theory of direct current circuits is presented in combination with laboratory fundamentals. Emphasis is on elementary principles of magnetism, electric concepts and units, diagrams, and resistance. Electromagnetism, series and parallel circuits, simple meter circuits, conductors, and insulators are also stressed. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 191 A.C. Circuits (4)
Prerequisites: Electronics Technology 190 and credit or concurrent enrollment in Mathematics 195 or the equivalent. This course covers the fundamental theories of alternating current. The theories are applied in various circuits. Included are laboratory experiments on power factor, sine wave analysis, resonant circuits, capacitance, inductance, Q of coils, magnetism, and resistance. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 193 Active Devices (4)
Prerequisites: Electronics Technology 190 and credit or concurrent enrollment in Electronics Technology 191. Semiconductors (active devices) are the focus of this course. Topics include composition, parameters, linear and non-linear characteristics, in-circuit action, amplifiers, rectifiers, and switching. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 194 Instrumentation (3)
Prerequisites: Electronics Technology 190 and credit or concurrent enrollment in Electronics Technology 191 and 193. Electrical devices for measurement and instrumentation are studied and applied to work situations. Included are basic AC and DC measurement meters, impedance bridges, oscilloscopes, signal generators, signal-tracers, and tube and transistor testers. The course concludes with a study of audio frequency test methods and equipment. Laboratory fee. (2 Lec., 3 Lab.)

(ET) 200 Special Applications Of Electronics (4)
This course is intended for use by any given group of students that desire specific topics to be covered. This course may substitute for any 200 level electronics course with the demonstrated competence approved by the instructor. This course is repeatable for credit as topics vary. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 210 Basic CRT Display And Television Theory and Service (4)
Prerequisite: Electronics Technology 190, 191, 193 and 194. This course is designed to introduce CRT display and television theory and to give the student hands on experience in basic servicing of all major sections of modern television receivers and CRT displays for computers. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 231 Special Circuits With Communications Applications (4)
Prerequisites: Electronics Technology 193 and 194. Active devices are applied to circuitry common to most communications equipment. Both the theory of operation and practical applications of the circuits in laboratory experiments are included. Circuits including power supplies, voltage regulators, tuned and untuned amplifiers, filters, oscillators, modulators, and detectors, with application to various types of intelligence transmission and reception are emphasized in the course. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 232 Analysis Of Electronics Logic And Switching Circuits (4)
Prerequisites: Electronics Technology 193 and 194. The course presents circuitry common to electronic control systems and automatic measuring systems. Typical circuit systems functions covered include clamping, gating, switching, and counting. Circuits include voltage discriminators, multi-vibrators, dividers, counters, and gaging circuits. Boolean algebra and binary numbers are reviewed. Emphasis is on semiconductor devices. Fluidic switching devices are introduced. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 234 Electronic Circuits And Systems (3)
Prerequisites: Completion of all electronics technology courses up to and including Electronics Technology 231; and may take Electronics Technology 232 and Electronics Technology 231 concurrently with Electronics Technology 234. The design, layout construction, and calibration of an electronics project are covered. Students develop independent project and prepare term papers on functions of components, operating specifications and schematics. Laboratory fee. (6 Lab.)

(ET) 237 Modular Memories And Microprocessors (4)
Prerequisite: Electronics Technology 232. Read only memories (ROM's), random access memories (RAM's) and microprocessors are presented. Emphasis is on specifications, applications, and operation. Control busses data basics, addressing, coding, and programming of typical microprocessor units are included. Micro processor system is constructed, tested, coded, and programmed. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 238 Linear Integrated Circuits (4)
Prerequisites: Electronics Technology 190, 191, and 193. Differential amplifiers, operational amplifiers, and integrated circuit timers are investigated. Topics include comparators, detectors, inverting and non-inverting amplifiers, OP AMP adders, differentiating and integrating amplifiers, and instrumentation amplifiers. Digital to analog converters, analog to digital converters, special OP AMP applications, and integrated circuits timers are also included. Limitations and specifications of integrated circuits are covered. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 239 Microwave Technology (3)
Prerequisites: Electronics Technology 194 and Electronics Technology 231. Microwave concepts such as propagation, transmission lines including waveguides, standing waves, impedance matching, basic antennas and various basic microwave measurements are covered. Microwave measurement techniques such as power and frequency meter measurements and calibration, VSWR determina-
tions, klystron characteristics, and waveguide tuning will be demonstrated. A basic radar system is discussed as time permits. (3 Lec.)

(ET) 240 Electronics Theory And Application Of Digital Computers (4)
Prerequisites: Mathematics 196 and Electronics Technology 193. The course presents the electronic switching circuits for digital computer systems. Logic symbology, gates, and related Boolean algebra are covered. Computer terminology and number systems are included. An introduction to digital computers to solve engineering problems. Basic computer programming techniques are introduced in the microcomputer laboratory using high-level languages such as BASIC. Laboratory fee. (3 Lec., 3 Lab.)

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

(ET) 704 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Electronics Technology, Digital Electronics Technology, or Electronic Telecommunications Technology programs, or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences related to the electronics field. The seminar consists of group or individual meetings with the instructor, individualized plans for job-related or self-improvement (i.e. Job interview, job application procedures, job site interpersonal relations, employer expectations of employees) or combinations of both. (1 Lec., 20 Lab.)

(ET) 714 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Electronics Technology, Digital Electronics Technology, or Electronic Telecommunications Technology programs, or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences related to the electronics field. The seminar consists of group or individual meetings with the instructor, individualized plans for job-related or self-improvement (i.e. preparation of resumes, changing jobs, supervising subordinates, building self-esteem), or combinations of both. (1 Lec., 20 Lab.)

ENGINEERING

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

(EGR) 107 Engineering Mechanics I (3)
Prerequisite: Credit or concurrent enrollment in Mathematics 124. This course is a study of the statics of particles and rigid bodies with vector mathematics in three-dimensional space. Topics include the equilibrium of forces and force systems, resultants, free body diagrams, friction, centroids and moments of inertia, virtual works, and potential energy. Distributed forces, centers of gravity, and analysis of structures, beams, and cables are also presented. (3 Lec.)

(EGR) 186 Manufacturing Processes (2)
Prerequisite: Engineering 186. This course is a continuing study of the metal-working processes with emphasis on automation, programming and operation of CNC machines. Laboratory fee. (1 Lec., 2 Lab.)

(EGR) 187 Manufacturing Processes (2)
Prerequisite: Engineering 186. This course is a continuing study of the metal-working processes with emphasis on automation, programming and operation of CNC machines. Laboratory fee. (1 Lec., 2 Lab.)

ENGINEERING TECHNOLOGY

(EGT) 141 Basic Hydraulics And Fluid Mechanics (4)
Principles of hydraulics and fluid mechanics are examined. Hydraulic pumps, motors, cylinders, and values are studied. Emphasis is on the application of formulas related to the properties of fluids and the laws which govern fluid flow. Various hydraulic components are tested, and basic hydraulic circuits are set up and evaluated. (3 Lec., 3 Lab.)

(EGT) 143 Technical Programming (4)
Prerequisite: Mathematics 195 or demonstrated competence approved by the Instructor. This course introduces the engineering technician to the world of technology. Skills are developed in using hand calculators and computers to solve engineering problems. Basic computer design of hydraulic and pneumatic systems. Circuit calculations are made for force, torque, power, speed, fluid
pressure, flow rate, and velocity. Emphasis is on the selection of pumps, cylinders, valves, motors, compressors, filters, and other fluid power components. The set-up, operation, and testing of various fluid power circuits are covered. Laboratory fee. (3 Lec., 3 Lab.)

(EGT) 228 Amplifier And Analog Control Circuits (4)
Prerequisite: Electronics Technology 193. This course treats analog circuits including conventional amplifiers and operational amplifiers. The use of these circuits in controls, sensing, and testing is stressed. The laboratory emphasis is on application and characteristics of these circuits as applied to electro mechanical controls. Reliance on preassembled or commercially available circuits is emphasized, especially semiconductor and integrated circuits. Laboratory fee. (3 Lec., 3 Lab.)

(EGT) 230 Digital Machine Control (4)
Prerequisite: Electronics Technology 191. This course emphasizes electromechanical controls, solid state industrial controls, and programmable controllers. Control components, control and power circuit diagrams, manual and automatic AC and DC machine control, solid state logic elements and programmable controllers are studied. Laboratory fee. (3 Lec., 3 Lab.)

(EGT) 232 Applied Mechanics (4)
Prerequisite: Mathematics 196 or the equivalent. The theory and applications of mechanics are presented. Basic static and dynamic concepts are included. Topics include forces, vectors, equilibrium, moments, friction, moment of inertia, rectilinear and angular motion, work, energy and power. The construction, testing and analysis of linkage and drive elements in laboratory supports lecture material on related topics. (3 Lec., 3 Lab.)

(EGT) 233 Electrical Machinery (3)
Prerequisite: Electronics Technology 191 or concurrent enrollment in Electronics Technology 191. The theory and function of power electricity, including AC and DC machines. Electrical and mechanical aspects are stressed. The laboratory provides hands-on experience in operation of machinery, quantitative analysis of performance characteristics, electrical measurements on power circuits and demonstration of principles discussed in class. Safety practices are stressed. Laboratory fee. (2 Lec., 3 Lab.)

(EGT) 239 Principles Of Microcomputer Control (4)
Prerequisite: Electro-Mechanical Technology 242. The control of automated industrial systems with digital elements as subsystems is studied. Included are the functions of the various control elements and their interface with other components. The conversion of control information between analog and binary forms is examined. The use and implementation of logical decision elements are covered. Emphasis is on the operation and function of micro-computers in modern control systems. Laboratory fee. (3 Lec., 3 Lab.)

(EGT) 242 Digital Control Circuits (4)
Prerequisite: Electronics Technology 193 or the equivalent. This course covers number systems used in computer systems. Alphanumeric and interchange codes are included. Binary arithmetic, including octal, hexadecimal and BCD, is covered with logic functions and Boolean algebra presented at a conceptual level. Logic gates, flip-flops, registers, encoders, decoders, counters, timing circuits, ALU's and memory units are included. Lecture material is supported by laboratory work. Laboratory fee. (3 Lec., 3 Lab.)

(EGT) 243 Robotics I (3)
This course provides an introduction to robot technology. The basic components and systems used in industrial robots are studied. The set-up and operation of robots and associated automatic control systems are emphasized. Laboratory fee. (2 Lec., 3 Lab.)

(EGT) 247 Robotics II (3)
Prerequisite: Engineering Technology 243 or demonstrated competence approved by the instructor. This course includes a study of robot end effectors, sensors, programmable controllers, power systems and software. The development of workcells and complete robotic systems is emphasized. Laboratory fee. (2 Lec., 3 Lab.)

(EGT) 251 Advanced Robotics And Automated Systems (3)
Prerequisite: Engineering Technology 247 or demonstrated competence approved by the instructor. In this course, the student will interface industrial robots with programmable controllers and other types of equipment used in automated manufacturing. An Introduction to Computer Integrated Manufacturing and Artificial Intelligence related to robotics is included. Hands-on laboratory work is emphasized. Laboratory fee. (2 Lec., 3 Lab.)

(EGT) 268 Microprocessor Interfacing And Troubleshooting (4)
Prerequisite: Engineering Technology 239. This course is a study of microcomputer hardware interface concepts and necessary input/output software. An overall system approach is used to learn practical troubleshooting techniques that are applicable to any microprocessor system. Actual troubleshooting tools are used. Laboratory fee. (3 Lec., 3 Lab.)

(EGT) 701 Cooperative Work Experience (1)
Prerequisites: Completion of two courses in the Engineering Technology program or Instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of discussions on the writing of effective competency-based learning objectives and other work related skills such as time management, resume writing, and human relations. (1 Lec., 5 Lab.)
(EGT) 702 Cooperative Work Experience (2)
Prerequisites: Completion of two courses in the Engineering Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer, and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of discussions on the writing of effective competency-based learning objectives and other work-related skills such as time management, resume writing, and human relations. (1 Lec., 10 Lab.)

(EGT) 703 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Engineering Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer, and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of discussions on the writing of effective competency-based learning objectives and other work-related skills such as time management, resume writing, and human relations. (1 Lec., 15 Lab.)

(EGT) 704 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Engineering Technology program or instructor approval. This course combines productive work experience with academic study. The student, employer, and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of discussions on the writing of effective competency-based learning objectives and other work-related skills such as time management, resume writing, and human relations. (1 Lec., 20 Lab.)

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

(ENG) 101 Composition I (3)
Prerequisite: An appropriate assessment test score (ACT, DCCCD test, or SAT). This course focuses on student writing. It emphasizes reading and analytical thinking and introduces research skills. Students practice writing for a variety of audiences and purposes. (This course is offered on campus and may be offered via television.) (3 Lec.)

(ENG) 102 Composition II (3)
Prerequisite: English 101. In this course students refine the writing, research, and reading skills introduced in English 101. A related goal is the development of critical thinking skills. Writing assignments emphasize argumentation and persuasion. Students will also write a formal research paper. (This course is offered on campus and may be offered via television.) (3 Lec.)

English In The Sophomore Year
English 201, 202, 203, 204, 205, 206, 215, and 216 are independent units of three credit hours each, from which any combination of two will be selected to satisfy degree requirements in sophomore English.

(ENG) 201 British Literature (3)
Prerequisite: English 102. This course includes significant works of British writers from the Old English Period through the 18th century. (3 Lec.)

(ENG) 202 British Literature (3)
Prerequisite: English 102. This course includes significant works of British writers from the Romantic Period to the present. (3 Lec.)

(ENG) 203 World Literature (3)
Prerequisite: English 102. This course includes significant works of Continental Europe and may include works from other cultures. It covers the Ancient World through the Renaissance. (3 Lec.)

(ENG) 204 World Literature (3)
Prerequisite: English 102. This course includes significant works of Continental Europe and may include selected works of other cultures from the Renaissance to the present. (3 Lec.)

(ENG) 205 American Literature (3)
Prerequisite: English 102. This course includes significant works of American writers from the Colonial through the Romantic Period. (3 Lec.)

(ENG) 206 American Literature (3)
Prerequisite: English 102. This course includes significant works of American writers from the Realistic Period to the present. (3 Lec.)

(ENG) 209 Creative Writing (3)
Prerequisite: English 102. The writing of fiction is the focus of this course. Included are the short story, poetry, and short drama. (3 Lec.)

(ENG) 210 Technical Writing (3)
Prerequisites: English 101 and English 102. The technical style of writing is introduced. Emphasis is on the writing of technical papers, reports, proposals, progress reports, and descriptions. (3 Lec.)

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

The English-as-a-Second Language (ESL) credit curriculum is designed to develop students' language proficiency in the areas of listening, speaking, reading, and writing. The plan of study consists of thirteen courses divided into three skill areas and four levels (Listening-Conversation, Reading, and Writing). The student enters the program by taking the Michigan Test of Language Proficiency (MTAC). (The Michigan Test of Aural Comprehension, the MTAC, is used optionally on each campus.) The credit ESL curriculum is designed to interface both with Continuing Education ESL programs and with developmental studies or college level programs on each campus.

(ESL) 031-034 (Listening-Conversation)
These courses prepare students to communicate orally in English. They can (but do not necessarily) precede the Reading (ESL 041-044) and Writing (ESL 051-054, ESL 063) courses.

(ESL) 041-044 (Reading)
These courses prepare a student for reading English in daily life and for reading college textbooks. ESL students needing additional academic preparation should enroll for regular Developmental Reading courses upon completion of the ESL-Reading program.

(ESL) 051-054/ (ESL) 063 (Writing-Grammar)
These courses are designed to prepare a student for English 101. There are three courses in syntax (grammar) development (ESL 051, ESL 052, ESL 063) and two courses in principles of composition (ESL 053 and ESL 054). Following these courses, each ESL student will be assessed to determine readiness for other composition courses.

INGLES-COM-SEGUNDO-IDIOMA

El programa de crédito de Inglés-Como-Segundo-Idioma (ESL) está diseñado para proporcionar al estudiante la habilidad de ser diestro en el desarrollo del idioma inglés en las áreas de escuchar, conversar, leer y escribir. El plan de estudio consiste de tres cursos divididos en tres secciones y cuatro niveles: escuchar-conversar, leer y escribir. El estudiante inicia el programa tomando un examen llamado Michigan Test of English Language Proficiency (MTELP). (Examen Michigan para la evaluación de la destreza en el idioma Inglés). (El examen Michigan para la evaluación de la comprensión auditiva (MTAC) es utilizado opcionalmente por cada uno de los colegios). El programa de ESL se entrelaza con los programas de Educación Continua (Continuing Education) y con los programas de Desarrollo o de nivel de educación superior en cada uno de los colegios.

(ESL) 031-034 (Escuchar y Conversar)
Estos cursos preparan al estudiante a comunicarse oralmente en inglés. Estas pueden (pero no necesariamente) preceder a los cursos de Lectura (ESL 041-044) y Escritura (ESL 051-054, ESL 063).

(ESL) 041-044 (Lectura)
Estos cursos preparan al estudiante en la lectura del inglés en la vida diaria y a leer libros de texto en nivel de educación superior. Por lo tanto los estudiantes que necesitan preparación académica adicional se les recomienda inscribirse en cursos regulares de Desarrollo de la Lectura (Developmental Reading) una vez concluidos los cursos de Lectura de ESL (ESL-Reading).

(ESL) 051-054/ (ESL) 063 (Escritura-Gramática)
Estos cursos están diseñados para preparar al estudiante para pasar a la clase de Inglés 101 (English 101). Estas clases tienen tres cursos de desarrollo en la sintaxis (ESL 051, ESL 052, ESL 063) y dos cursos en principios de la composición (ESL 053 y ESL 054). Terminando estos cursos, el estudiante será asesorado para así determinar su nivel de preparación para subsiguientes cursos de composición.

ENGLISH-AS-A-SECOND LANGUAGE

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

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

(ESL) 033 ESL Conversation—Listening (3)
This course is designed to improve formal and informal conversation skills including listening comprehension, note-taking, oral reporting, and class discussion techniques. (3 Lec.)

(ESL) 034 ESL Conversation—Listening (3)
This course develops academic, professional, and social aural/oral skills. Emphasis is placed on analysis and critical thinking in English. (3 Lec.)

(ESL) 041 ESL Reading (3)
This course focuses on language development through reading activities. It includes reading comprehension, vocabulary, and word recognition. (3 Lec.)

(ESL) 042 ESL Reading (3)
This course is designed for students needing more practice in the skills and information introduced in ESL 041. Topics include reading comprehension, vocabulary development, word recognition, language and culture. (3 Lec.)
(ESL) 043 ESL Reading (3)
This course covers pre-reading strategy, specific reading comprehension skills, critical reading skills, vocabulary development, idioms, and use of the dictionary and library. (3 Lec.)

(ESL) 044 ESL Reading (3)
This course is designed for students needing more practice in the skills and information introduced in ESL 043. Topics include pre-reading strategies, specific reading comprehension skills, critical reading skills, vocabulary development, idioms, and use of the dictionary and library. (3 Lee.)

(ESL) 051 ESL Writing—Grammar (3)
This course emphasizes correct formation of basic sentences with particular attention to specific grammatical points. These basic sentence structures will also be reinforced in writing exercises. (3 Lec.)

(ESL) 052 ESL Writing—Grammar (3)
This course strengthens English grammar skills introduced in ESL 051. Students will learn to produce compound and complex sentence structures. (3 Lec.)

(ESL) 053 ESL Writing—Grammar (3)
This course introduces principles of composition and emphasizes the processes of paragraph formation. Concurrent enrollment in ESL 053 is recommended. (3 Lec.)

(ESL) 054 ESL Writing—Grammar (3)
This course emphasizes improving skills in expository writing. Particular attention is given to improving unity, coherence, transition, and style as students progress to multi-paragraph compositions. (3 Lec.)

(ESL) 055 ESL Writing—Grammar (3)
This course includes an intensive grammar review of major points covered in ESL 051 and ESL 052 as well as an exploration of the more complex points of English grammar. Concurrent enrollment in ESL 053 is recommended. (3 Lec.)

(FR) 101 Beginning French (4)
The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee. (3 Lec., 2 Lab.)

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

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

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

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.)

GEOLOGY

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

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

(GEO) 103 Introduction To Oceanography (3)
The physical and chemical characteristics of ocean water, its circulation, relationship with the atmosphere, and the effect on the adjacent land are investigated. The geological development of the ocean basins and the sediment in them is also considered. Laboratory fee. (2 Lec., 2 Lab.)

(GEO) 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
GOVERNMENT

(GVT) 201 American Government (3)
Prerequisite: Sophomore standing recommended. This course is an introduction to the study of political science. Topics include the origin and development of constitutional democracy (United States and Texas), federalism and intergovernmental relations, local governmental relations, local government, parties, politics, and political behavior. (This course is offered on campus and may be offered via television.) (3 Lec.)

(GVT) 202 American Government (3)
Prerequisite: Sophomore standing recommended. The three branches of the United States and Texas government are studied. Topics include the legislative process, the executive and bureaucratic structure, the judicial process, civil rights and liberties, and domestic policies. Other topics include foreign relations and national defense. (This course is offered on campus and may be offered via television.) (3 Lec.)

HISTORY

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

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

(HST) 103 World Civilizations (3)
This course presents a survey of ancient and medieval history with emphasis on Asian, African, and European cultures. (3 Lec.)

(HST) 104 World Civilizations (3)
This course is a continuation of History 103. The modern history and cultures of Asia, Africa, Europe, and the Americas, including recent developments, are presented. (3 Lec.)

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

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

(HST) 110 The Heritage Of Mexico (3)
This course (cross-listed as Anthropology 110) is taught in two parts each semester. The first part of the course deals with the archaeology of Mexico beginning with the first humans to enter the North American continent and culminating with the arrival of the Spanish in 1519 A.D. Emphasis is on archaic cultures, the Maya, the Toltec, and the Aztec empires. The second part of the course deals with Mexican history and modern relations between the United States and Mexico. The student may register for either History 110 or Anthropology 110, but may receive credit for only one of the two. (3 Lec.)

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

(HST) 205 Advanced Historical Studies (3)
Prerequisite: Six hours of history. An in-depth study of minority, local, regional, national, or international topics is presented. (3 Lec.)

HUMAN DEVELOPMENT

(HD) 100 Educational Alternatives (1)
The learning environment is introduced. Career, personal study skills, educational planning, and skills for living are all included. Emphasis is on exploring career and educational alternatives and learning a systematic approach to decision-making. A wide range of learning alternatives is covered, and opportunity is provided to participate in personal seminars. This course may be repeated for credit. (1 Lec.)

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

(HD) 105 Basic Processes Of Interpersonal Relationships (3)
This course is designed to help the student develop a self-awareness that will enable him/her to relate more effectively to others. Students are made aware of their feelings, values, attitudes, verbal and non-verbal behaviors. The course content, which utilizes an experiential model, also focuses on developing communication and problem-solving skills. (3 Lec.)

(HD) 106 Personal And Social Growth (3)
This course focuses on the interactions between the individual and the social structures in which he lives. Roles, social influences and personal adjustments to the world around us are explored in readings and classroom discussion. Human behavior, the diversity of lifestyles and the components of a healthy personality are studied in an effort to develop a pattern for growth that demonstrates a responsibility to self and society. (3 Lec.)

(HD) 107 Developing Leadership Behavior (3)
The basic purpose of this course is to help the student develop leadership and human relations skills. Topics include individual and group productivity, value systems, appropriate communication skills, and positive attitudes in a group environment. The concepts of leadership are explored through both theory and practice. These leadership activities can be applied to the student's personal, business, and professional interactions. (3 Lec.)

(HD) 110 Assessment Of Prior Learning (1)
Prerequisite: Limited to students in Technical-Occupational Programs. Demonstrated competence approved by the instructor is required. This course is designed to assist students in documenting prior learning for the purpose of applying for college credit. Students develop a portfolio which includes a statement of educational/career goals, related non-collegiate experiences which have contributed to college-level learning, and documentation of such experiences. This course may be repeated for credit. (1 Lec.)

HUMANITIES

(HUM) 101 Introduction To The Humanities (3)
Introduction to the Humanities focuses on the study and appreciation of the fine and performing arts and the ways in which they reflect the values of civilizations. (This course is offered on campus and may be offered via television. Laboratory fee required for television course.) (3 Lec.)

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

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.)

MACHINE SHOP

(MS) 133 Basic Lathe (5)
Prerequisite: Limited to students in Technical-Occupational Programs. Demonstrated competence approved by the instructor is required. This course is designed to assist students in documenting prior learning for the purpose of applying for college credit. Students develop a portfolio which includes a statement of educational/career goals, related non-collegiate experiences which have contributed to college-level learning, and documentation of such experiences. This course may be repeated for credit. (1 Lec.)

(MS) 134 Basic Milling Machine (5)
Prerequisite: Machine Shop 133. This course is the intermediate study of the milling machine. Workpieces are more complicated and tolerances more exacting. Various machines and work holding methods are used. Precision layout and measuring tools are used. Precision layout and measuring tools are introduced. Additional work in determining cutting speeds and feeds is also included. Laboratory fee. (1 Lec., 8 Lab.)

(MS) 135 Intermediate Lathe (5)
Prerequisite: Machine Shop 133. This course is the intermediate study of the engine lathe. Workpieces are more complicated and tolerances more exacting. Various machines and work holding methods are used. Precision layout and measuring tools are used. Precision layout and measuring tools are introduced. Additional work in determining cutting speeds and feeds is also included. Laboratory fee. (1 Lec., 8 Lab.)

(MS) 136 Intermediate Milling Machine (5)
Prerequisite: Machine Shop 134. This course is the intermediate study of the milling machine. Workpieces are more complicated and tolerances more exacting. Various machines and work holding methods are used. Precision layout and measuring tools are introduced. Additional work in determining cutting speeds and feeds is also included. Laboratory fee. (1 Lec., 8 Lab.)

(MS) 135 Special Topics (1)
Prerequisite: Machine Shop 134. This course is for those people who are working as machinists, toolmakers, diemakers, etc., who wish to review old or little used skills or to acquire skills needed in today's rapidly changing metal working field. This course may be repeated for credit when the topics vary. Laboratory fee. (1 Lec.)
**Management**

(MGT) 136 Principles Of Management (3)
This course emphasizes the managerial functions of planning, organizing, staffing, directing, and controlling. Communication, motivation, leadership, and decision making are included. (This course is offered on campus and may be offered via television.) (3 Lec.)

(MGT) 153 Small Business Management (3)
Small Business Management presents an introductory view of the basic entrepreneurial strategies for planning, financing, establishing, and operating a small business. Resources for both initial start-up and day-to-day operations are emphasized including market research, site selection, and such services as financial, legal, and accounting. (3 Lec.)

(MGT) 160 Principles Of Purchasing (3)
An introduction to the purchasing function is provided. The course covers purchasing tasks and responsibilities, analytical techniques in buying, organizational interrelationships and coordination, measurement and control, and legal implications. Special emphasis is placed on the five tenets of buying: quality, quantity, time, price and source. (3 Lec.)

(MGT) 171 Introduction To Supervision (3)
This course is a study of today's supervisors and their problems. The practical concepts of modern-day, first-line supervision are described. Emphasis is on the supervisor's major functions, such as facilitating relations with others, leading, motivating, communicating, and counseling. (3 Lec.)
(MGT) 210 Small Business Capitalization, Acquisition And Finance (3)
Prerequisite: Accounting 201 or demonstrated competence approved by Instructor. The student studies alternative strategies of financial planning, capitalization, profits, acquisition, ratio analysis, and other related financial operations required of small business owners. The preparation and presentation of a loan proposal are included. (3 Lec.)

(MGT) 211 Small Business Operations (3)
Skills in decision making necessary for the operation of a small business are covered. Topics include strategic planning, forecasting, organizational structure, and the expansion of such business functions as human resources, marketing, finance and accounting, purchasing, and control processes. (3 Lec.)

(MGT) 212 Special Problems In Business (1)
Each student will participate in the definition and analysis of current business problems. Special emphasis will be placed on relevant problems and pragmatic solutions that integrate total knowledge of the business process in American society. This course may be repeated for credit up to a maximum of three credit hours. (1 Lec.)

(MGT) 237 Organizational Behavior (3)
The persisting human problems of administration in modern organizations are covered. The theory and methods of behavioral science as they relate to organizations are included. (3 Lec.)

(MGT) 242 Human Resources Management (3)
This course presents the fundamentals, theories, principles, and practices of people management. Emphasis is on people and their employment. Topics include recruitment, selection, training, job development, interactions with others, labor/management relations, and government regulations. The managerial functions of planning, organizing, staffing, directing, and controlling are also covered. (3 Lec.)

(MGT) 244 Problem Solving And Decision-Making (3)
The decision-making process and problem-solving as key components are the focus of this course. Topics include: individual, group, and organizational decision-making; logical and creative problem-solving techniques; and the use of decision aids by managers. Application of theory is provided by experiential activities such as small group discussions, case studies, and simulations. (3 Lec.)

(MGT) 275 International Business And Trade (3)
The techniques for entering the International marketplace are covered. Topics include the impact of socio-cultural, demographic, economic, legal, technological, and political factors upon the development of international marketing strategies, Market behavior and trends, forecasting, pricing, and distribution are also included. (3 Lec.)

(MGT) 276 International Marketing Management (3)
Opportunities for international trade are explored. Topics include patterns of world trade, the foreign trade environment, Internationalization of the firm, and the development of International export/import marketing and financial plan. (3 Lec.)

(MGT) 277 Comparative Management (3)
Cross-cultural comparisons of management practices are made. Emphasis is placed upon geographic distinctions and cultural antecedents that affect behavior and the effects of socio-cultural, economic, and political environments upon communication and decision making. (3 Lec.)

(MGT) 704 Cooperative Work Experience (4)
Prerequisite: Previous credit in or concurrent enrollment in Management Careers 171 or demonstrated competence approved by the Instructor. This course is designed to develop the student's managerial skills through the completion of a written competency-based learning plan describing varied student learning objectives and planned work experience. Emphasis is on improving leadership skills and goal-setting. (1 Lec., 20 Lab.)

(MGT) 714 Cooperative Work Experience (4)
Prerequisite: Previous credit in or concurrent enrollment in Management Careers 242 or demonstrated competence approved by the Instructor. This course is designed to develop the student's managerial skills through the completion of a written competency-based learning plan describing varied student learning objectives and planned work experience. Emphasis is on the role of managers in job analysis/job descriptions and interviewing techniques. (1 Lec., 20 Lab.)

(MGT) 804 Cooperative Work Experience (4)
Prerequisite: Previous credit in or concurrent enrollment in Management Careers 237 or demonstrated competence approved by the Instructor. This course is designed to develop the student's managerial skills through the completion of a written competency-based learning plan describing varied student learning objectives and planned work experience. Emphasis is on improving motivational techniques and communicating. (1 Lec., 20 Lab.)

(MGT) 814 Cooperative Work Experience (4)
Prerequisite: Previous credit in or concurrent enrollment in Management Careers 244 or demonstrated competence approved by the Instructor. This course is designed to develop the competency-based learning plan describing varied student learning objectives and planned work experience. Emphasis is on individual and group decision-making and rational and creative problem solving. (1 Lec., 20 Lab.)
MARKETING

(MKT) 137 Principles Of Retailing (3)
The operation of the retail system of distribution is examined. Topics include consumer demand, requirements, computer use, store location and layout, and credit policies. Interrelationships are emphasized. (3 Lee.)

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

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

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

MATHEMATICS

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

(MTH) 101 College Algebra (3)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 093. This course is a study of relations and functions including polynomial, rational, exponential, logarithmic, and special functions. Other topics include variation, complex numbers, systems of equations and inequalities, theory of equations, progressions, the binomial theorem, proofs, and applications. (3 Lee.)

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

(MTH) 111 Mathematics For Business And Economics I (3)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 093. This course includes equations, inequalities, matrices, linear programming; linear, quadratic, polynomial, rational, exponential, and logarithmic functions; and probability. Applications to business and economics problems are emphasized. (3 Lec.)

(MTH) 112 Mathematics For Business And Economics II (3)
Prerequisite: Mathematics 111. This course includes limits, differential calculus, integral calculus, and appropriate applications. (3 Lec.)

(MTH) 115 College Mathematics I (3)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 093. Designed for liberal arts students, this course includes the study of sets, logic, sets of numbers, and mathematical systems. Additional topics will be selected from mathematics of finance, introduction to computers, introduction to statistics, and introduction to matrices. Recreational and historical aspects of selected topics are also included. (3 Lec.)

(MTH) 116 College Mathematics II (3)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 093. Designed for liberal arts students, this course includes limits, differential calculus, integral calculus, and appropriate applications. (3 Lec.)

(MTH) 121 Analytic Geometry (3)
Prerequisite: Mathematics 102 or equivalent. This course is a study of the real numbers, distance, the straight line, conics, transformation of coordinates, polar coordinates, parametric equations, and three-dimensional space. (3 Lec.)

(MTH) 124 Calculus I (5)
Prerequisite: Mathematics 109 or 121 or equivalent. This course is a study of limits, continuity, derivatives, and integrals of algebraic and transcendental functions, with applications. (5 Lec.)

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

(MTH) 139 Applied Mathematics (3)
The course is a study of commercial, technical, and other applied uses of mathematics. Topics vary to fit the needs of the students enrolled in a particular technical/occupational program. The prerequisite will vary accordingly and be determined by the needed skills. (3 Lec.)
(MTH) 195 Technical Mathematics I (3)
Prerequisites: One year of high school algebra and an appropriate assessment test score or Developmental Mathematics 091 or the equivalent. This course is designed for technical students. It covers the basic concepts and fundamental facts of plane and solid geometry, computational techniques and devices, units and dimensions, the terminology and concepts of elementary algebra, functions, coordinate systems, simultaneous equations, and stated problems. (3 Lec.)

(MTH) 196 Technical Mathematics II (3)
Prerequisite: Mathematics 195. This course is designed for technical students. It includes a study of topics in algebra, an introduction to logarithms, and an introduction to trigonometry, trigonometric functions, and the solution of triangles. (3 Lec.)

(MTH) 202 Introductory Statistics (3)
Prerequisite: Two years of high school algebra or demonstrated competence approved by the instructor. This course is a study of collection and tabulation of data, bar charts, graphs, sampling, measures of central tendency and variability, correlation, index numbers, statistical distributions, probability, and application to various fields. (3 Lec.)

(MTH) 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.)

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

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

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

(MUS) 113 Foundations Of Music I (3)
This course focuses on participation and skills for satisfactory performance in singing; playing an instrument, listening, and creating rhythmic responses. The ability to manage notation (music reading) is developed. (3 Lec.)

(MUS) 114 Foundations In Music II (3)
Prerequisite: Music 113. This course prepares students with limited music training for Music 145 and increases their general music understanding. Emphasis is on rhythmic and melodic training, chord functions, melody, textures, and basic analysis of music. (3 Lec.)

(MUS) 117 Plano 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 Plano Class II (1)
The study of piano is continued. Included are techniques, skills, harmonization, transposition, Improvisation, accompanying, sight-reading, and performing various styles of repertoire. This course may be repeated for credit. (2 Lab.)

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

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

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

(MUS) 145 Music Theory I (3)
This course presents the basic elements of music. Emphasis is on notation, cadences, classification of diatonic triads, scales, and modes. (3 Lec.)
(MUS) 146 Music Theory II (3)
Prerequisite: Music 145. This course focuses on part-writing and harmonization with triads and their inversions. Also included is a chord vocabulary expanded to include materials from the common practice period as well as later periods. (3 Lec.)

(MUS) 149 Digital Music Production (3)
Prerequisite: One year of music theory or demonstrated competence approved by the instructor. This course meets the specific needs of experienced songwriters, performers, composers/arrangers, and those people working in or actively interested in music production. (2 Lec., 1 Lab.)

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

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

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

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

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

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

(MUS) 161 Musicianship I (1)
This course relates to topics in Music 145. Aural skills including sight-singing, ear training, and keyboard are developed. (3 Lab.)

(MUS) 162 Musicianship II (1)
Prerequisite: Music 161. This course relates to topics in Music 146. Aural music skills including sight-singing, ear training, and keyboard are further developed. (3 Lab.)

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

(MUS) 217 Piano Class III (1)
Prerequisite: Music 118 or the equivalent. This course is a continuation of functional keyboard skills, including harmonization, sightreading, accompanying styles, improvisation, and technical exercises. It is designed for the music major preparing for the piano proficiency exam, but is also open to any interested student. It is recommended that music majors also study privately. (2 Lab.)

(MUS) 218 Piano Class IV (1)
Prerequisite: Music 217 or the equivalent. This course is a continuation of functional keyboard skills in Music 217 with greater emphasis on advanced harmonization and appropriate technical skills. It is designed as a preparation for the piano proficiency exam for the music major, but is also open to any interested student. It is recommended that music majors also study privately. (2 Lab.)

(MUS) 221-243 Applied Music-Concentration (2)
This course is open to students enrolled in music theory, ensembles, and other music major and minor courses. It provides private instruction in the area of the student’s concentration and consists of two half-hour lessons a week. Laboratory fee required. Private music may be repeated for credit. (1 Lec.)

(MUS) 245 Music Theory III (3)
Prerequisite: Music 146. This course is a continuation of the study of music theory. It includes the materials of modulation, larger forms, and thematic development. (3 Lec.)

(MUS) 246 Music Theory IV (3)
Prerequisite: Music 245. This course is a continuation of the topics developed in Music 245. The preceding materials are expanded to include melody, harmony, tonality, and the formal processes of 20th century music. (3 Lec.)
This course is primarily for music performance majors and is open to students enrolled in music theory, ensembles, and other music major and minor courses. It provides private instruction in the area of the student's major instrument, and consists of two half-hour lessons a week.

Laboratory fee. (1 Lec.)

(MUS) 271 Musicianship III (1)
Prerequisite: Music 162. This course relates to topics in Music 245. Aural music skills, including sight-singing, ear training, and keyboard are developed. (3 Lab.)

(MUS) 272 Musicianship IV (1)
Prerequisite: Music 271. This course relates to topics in Music 246. Aural music skills, including sight-singing, ear training, and keyboard are developed. (3 Lab.)

OFFICE CAREERS

(OFC) 143 Contemporary Topics In Office Careers (1)
Prerequisites: Demonstrated competence approved by the Instructor. This course emphasizes current topics of interest in office career fields. Realistic solutions to problems relevant to the needs of industry are presented. This course may be repeated for credit with different emphasis up to six hours. (1 Lec.)

(OFC) 144 Contemporary Topics In Office Careers (2)
Prerequisites: Will vary based on topics covered and will be annotated in each semester's class schedule. Current developments in the rapidly changing field of office careers are studied. (2 Lec.)

(OFC) 145 Contemporary Topics In Office Careers (3)
Prerequisites: Will vary based on topics covered and will be annotated in each semester's class schedule. Current developments in the rapidly changing field of office careers are studied. (3 Lec.)

(OFC) 150 Automated Filing Procedures (3)
This course introduces the basic principles and procedures of records storage and control. Topics include records storage methods; procedures for the operation and control of manual and automated storage systems; rules for indexing; and principles for the selection of records equipment and supplies. (2 Lec., 2 Lab.)

(OFC) 159 Beginning Shorthand (4)
Prerequisite: Credit or concurrent enrollment in Office Careers 172 or demonstrated competence approved by the instructor. 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 electronic calculators. Emphasis is on developing the touch system for both speed and accuracy. Business math and business applications are included. Office Careers 160 is equivalent to Office Careers 192, 193, and 194. Laboratory fee. (3 Lec.)

(OFC) 162 Office Procedures (3)
Prerequisites: Office Careers 173 or concurrent enrollment or demonstrated competence approved by the instructor. This course bridges the gap between the basic skills courses and current office practices. Topics include records management, electronic filing, reprographics, mail, telephone usage, financial transactions, and interpersonal relations. (3 Lec.)

(OFC) 166 Intermediate Shorthand (4)
Prerequisites: Office Careers 159 and Office Careers 172 or demonstrated competence approved by the instructor. The principles of Gregg Shorthand are studied. Emphasis is on increased speed dictation, accuracy in typing from shorthand notes, and beginning techniques of transcription skills. Also included are oral reading, speed building, and grammar. Office Careers 166 is equivalent to Office Careers 187, 188, and 189. Laboratory fee. (3 Lec., 2 Lab.)

(OFC) 167 Legal Terminology And Transcription (3)
Prerequisites: Office Careers 173 and Office Careers 185 or concurrent enrollment or demonstrated competence approved by the Instructor. Legal terms are the focus of this course. Included are the spelling and use of legal terms and Latin words and phrases. Intensive practice is provided in building speed and accuracy in the transcription of legal terms. Laboratory fee. (3 Lec.)

(OFC) 172 Beginning Typing (3)
This course is for students with no previous training in typing. Fundamental techniques in typing are developed. The skills of typing manuscripts, business letters, and tabulations are introduced. Office Careers 172 is equivalent to Office Careers 176, 177, and 178. Laboratory fee. (2 Lec., 3 Lab.)

(OFC) 173 Intermediate Typing (3)
Prerequisites: Office Careers 172 or demonstrated competence approved by the instructor. Typing techniques are developed further. Emphasis is on problem-solving. Increasing speed and accuracy in typing business forms, correspondence, and manuscripts are also covered. Laboratory fee. (2 Lec., 3 Lab.)

(OFC) 178 Keyboarding (1)
This course is for students with no previous training in typing. The course introduces the typewriter parts. Alphabetic keys, numeric keys, and symbol keys are covered. Fundamental techniques are refined, and speed is developed. Laboratory fee. (1 Lec., 1 Lab.)
(OFC) 179 Office Information Systems Concepts (2)
This course introduces information/word processing and describes its effect on traditional office operations. An understanding of basic information word processing principles, concepts, terminology and advantages of word processing environment system is introduced. This course does not include the operation of a dedicated wordprocessor or microcomputer. (2 Lec.)

(OFC) 182 Introduction To Word Processing Equipment (1)
Prerequisites: Office Careers 173 and Office Careers 179 or concurrent enrollment. This course introduces the fundamental techniques required in the operation of word processing equipment/software. Basic concepts of electronic storage and retrieval involved in creating, printing, centering, and revising documents are introduced. May be repeated for credit using different emphasis/equipment. Laboratory fee. (2 Lab.)

(OFC) 183 Keyboarding For Speed And Accuracy (1)
This course provides intensive practice drills for developing speed and accuracy on one-, three-, and five-minute writings. May be taken concurrently with Intermediate Typing or Advanced Typing Applications. May be repeated for credit. Laboratory fee. (2 Lab.)

(OFC) 185 Basic Machine Transcription (1)
Prerequisites: Office Careers 173 or concurrent enrollment. This course introduces the basic equipment, techniques, and skills required to transcribe recorded business information into mailable documents. Emphasis is placed on grammar, punctuation, and spelling skills required in word processing operations. Automated equipment and audio transcription machines are used. Laboratory fee. (1 Lec., 1 Lab.)

(OFC) 192 Office Machines I (1)
Business mathematical skills needed to operate office calculators are reviewed. Speed and accuracy skills using ten-key touch are developed. Laboratory fee. (1 Lec.)

(OFC) 231 Business Communications (3)
Prerequisites: Office Careers 172 or demonstrated competence approved by the instructor. This practical course includes a study of letter forms, the mechanics of writing and the composition of various types of communications. A critical analysis of the appearance and content of representative business correspondence, proposals, and reports is made. (3 Lec.)

(OFC) 268 Advanced Shorthand (4)
Prerequisites: Office Careers 166 and Office Careers 173 or demonstrated competence approved by the instructor. Emphasis is on building dictation speed. Producing mailable, typed transcriptions under timed conditions is also stressed. Vocabulary and extensive production work capabilities are developed. Laboratory fee. (3 Lec., 2 Lab.)

(OFC) 273 Advanced Typing Applications (2)
Decision-making and production of all types of business materials under timed conditions are emphasized. A continuation of skill development and a review of typing techniques are also stressed. Accuracy at advanced speeds is demanded. Laboratory fee. (1 Lec., 2 Lab.)

(OFC) 274 Legal Secretarial Procedures (3)
Prerequisite: Office Careers 167. This course focuses on procedures of the legal secretary. Topics include reminder and filing systems, telephone usage, dictation and correspondence, the preparation of legal documents, and the court system. Client contacts, use of law library, research techniques, timekeeping, billing, bookkeeping, and ethics are also covered. Ways to obtain a position as a legal secretary are described. (3 Lec.)

(OFC) 282 Word Processing Applications (1)
Prerequisites: Office Careers 190 or 182 and completion of or concurrent enrollment in Office Careers 185. This course is designed for students who have a basic knowledge of word processing equipment. Advanced word processing concepts and machine functions are developed on a specific keyboard. Special emphasis is placed on producing mailable documents. May be repeated for credit using different emphasis/equipment. Laboratory fee. (2 Lab.)

(OFC) 283 Specialized Software (1)
Prerequisites: Office Careers 282 or demonstrated competence approved by the instructor. Current information/word processing technology is presented. Specialized applications are performed using automated equipment which the student has previously mastered. Applications will include graphics, math functions, spreadsheets, and the use of other software packages. Dedicated word processing equipment or microcomputers will be used in this course. May be repeated for credit using different emphasis/equipment. Laboratory fee. (2 Lab.)

(OFC) 285 Applied Machine Transcription (1)
Prerequisites: Office Careers 173 or 190 and Office Careers 185 or demonstrated competence approved by the instructor. This course is designed for students with basic skills in machine transcription. Emphasis is placed on increasing accuracy and speed in the timed transcription of recorded information. Composing and dictating business communications are introduced. Laboratory fee. (1 Lec., 1 Lab.)

(OFC) 703 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Office Careers program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. Students must complete three objectives and work a minimum of 15 hours per week for a total of three credit hours. This seminar consists of orientation, setting/writing job objectives, inter-
personal skills, career interest/aptitude test and evaluation, time management, career planning, and exit seminar. (1 Lec., 15 Lab.)

(OFC) 704 Cooperative Work Experience (4)  
Prerequisites: Completion of two courses in the Office Careers program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must complete four objectives and work a minimum of 20 hours per week for a total of four credit hours. This seminar consists of orientation, setting/writing job objectives, interpersonal skills, career interest/aptitude test and evaluation, time management, career planning, and exit seminar. (1 Lec., 15 Lab.)

(OFC) 713 Cooperative Work Experience (3)  
Prerequisites: Completion of two courses in the Office Careers program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. Students must complete three objectives and work a minimum of 15 hours per week for a total of three credit hours. This seminar consists of orientation, setting/writing job objectives, stress management, Certified Professional Secretary, communication skills, job search, professional image, and exit seminar. (1 Lec., 20 Lab.)

(OFC) 714 Cooperative Work Experience (4)  
Prerequisites: Completion of two courses in the Office Careers program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives each semester. Students must complete four objectives and work a minimum of 20 hours per week for a total of four credit hours. This seminar consists of orientation, setting/writing job objectives, stress management, Certified Professional Secretary, communication skills, job search, professional image, and exit seminar. (1 Lec., 20 Lab.)

(OFC) 804 Cooperative Work Experience (4)  
Prerequisites: Completion of previous Office Careers 703 or 704 and 713 or 714. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. Students must complete four objectives and work a minimum of 20 hours per week for a total of four credit hours. This seminar consists of orientation, setting/writing job objectives, and independent study of business topics. (1 Lec., 20 Lab.)

PHILOSOPHY

(PHI) 102 Introduction To Philosophy (3)  
The fundamental problems in philosophy are surveyed. Methods to deal with the problems are discussed. Ancient and modern views are examined as possible solutions. (3 Lec.)

(PIHI) 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.)

(PIHI) 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.)

(PIHI) 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.)

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.)
PHOTOGRAPHY

(PHO) 122 Commercial Photography I (3)
Commercial or contract photography is studied. Field, studio, and darkroom experience for various kinds of photography is discussed. Included are social photography, portrait and studio photography, fashion and theatrical portfolio, publicity photography, and convention photography. The use of natural, stationary, flash, and strobe artificial lights is covered. Laboratory fee. (2 Lec., 4 Lab.)

PHYSICAL EDUCATION

(PEH) 100 Lifetime Sports Activities (1)
Beginning level skills in various lifetime sports are presented as well as rules, etiquette, safety, strategy, offensive and defensive elements, and conditioning activities where appropriate. Physical Education 100 may be repeated for credit when students select different activities in subsequent semesters. Laboratory fee. (3 Lab.)

(PEH) 101 Health For Today (3)
Emphasis is placed on relating course content to lifestyle to foster a better understanding of the major health issues of today. Current issues include, but are not limited to: emotional health, chemical use and abuse, human sexuality, major diseases, physical fitness, nutrition, aging, death and dying. (This course is offered on campus and may be offered via television.) (3 Lec.)

(PEH) 104 Beginning Soccer (1)
Course content emphasizes the basic playing skills of both indoor and outdoor soccer at the beginner level, as well as rules, strategy, safety, offensive and defensive patterns of play, and competitive activities. Laboratory fee. (3 Lab.)

(PEH) 112 Beginning Softball (1)
Course content includes the basic playing skills of softball at the beginner level, as well as rules, strategy, safety, offensive and defensive elements, and competitive activities. These common elements will be applied to fast pitch, slow pitch, and coed softball. Laboratory fee. (3 Lab.)

(PEH) 113 Beginning Handball And Racquetball (1)
Basic handball and racquetball skills, rules, and strategies are taught and class tournaments are conducted. 24 class hours are devoted to each activity. Laboratory fee. (3 Lab.)

(PEH) 114 Beginning Badminton (1)
Course content emphasizes the basic playing skills of badminton at the beginner level, as well as rules, strategy, safety, offensive and defensive elements, and competitive activities. Each of the above elements will be applied to the singles, doubles, and mixed-double games. Laboratory fee. (3 Lab.)

(PEH) 115 Physical Fitness (1)
Students are introduced to fitness related activities to gain the knowledge and skills necessary to evaluate personal fitness level and to develop a personal lifelong fitness program. Activities include, but are not limited to: aerobics, circuit training, flexibility and agility exercises, and weight training. Physical Education 115 may be repeated for credit. Laboratory fee. (3 Lab.)

(PEH) 117 Beginning Archery (1)
The beginning level skills of target shooting, bow hunting, clout shooting, and wand and trap shooting are emphasized, as well as history, rules of competition, preparation and care of all archery equipment, and safety. Laboratory fee. (3 Lab.)

(PEH) 118 Beginning Golf (1)
Course content emphasizes the basic skills involved in club selection, golf course analysis, shot selection and execution of the golf swing. Rules, scoring, handicapping, and etiquette are included. Equipment is furnished. Laboratory fee. (3 Lab.)

(PEH) 119 Beginning Tennis (1)
This course emphasizes the acquisition of beginning level skills in the execution of forehand strokes, backhand strokes, the serve, and the volley. Rules, strategies of the singles and doubles games, etiquette, safety, and competitive activities are included. Laboratory fee. (3 Lab.)

(PEH) 120 Beginning Bowling (1)
Basic bowling skills at the beginner level are emphasized as well as rules, strategies, safety, scoring, and competitive activities. All classes are conducted at an off-campus bowling lane. Laboratory fee. Lane fee. (3 Lab.)

(PEH) 122 Beginning Gymnastics (1)
Beginning level skills in both men's and women's all-around gymnastic events are emphasized. Men's events include horizontal bar, pommel horse, rings, vaulting, floor exercise, and parallel bars. Women's events include floor exercise, vaulting, balance beam, and uneven parallel bars. Basic tumbling skills are also included. All appropriate events will be incorporated into a beginner's level routine. Laboratory fee. (3 Lab.)

(PEH) 123 Beginning Swimming (1)
This course is designed to teach a non-swimmer or a shallow water swimmer only to become a safe and efficient deep water swimmer. After the development of sufficient skill to perform a modified crawl stroke, the elementary back stroke, survival floating and jumping into deep water, leveling off and changing directions, swimmers will be able to swim in deep water. Laboratory fee. (3 Lab.)

(PEH) 124 Social Dance (1)
This course is for students who have limited experience in dance. Ballroom and social dancing are offered. Included are fundamental steps and rhythms of the fox-trot, waltz,
tango, and recent dances. "Country" dancing includes the two-step, cotton-eyed Joe, square dance, and other dances. Laboratory fee. (3 Lab.)

(PEH) 125 Conditioning Exercise (1)
This course focuses on understanding exercise and its effect on the body. Physical fitness is improved through a variety of conditioning activities. A uniform is required. Laboratory fee. (3 Lab.)

(PEH) 126 Aerobics (1)
This course emphasizes the development of cardiovascular endurance by utilizing choreographed routines which may combine basic dance patterns with walking, jogging, and jumping, etc. Depending on the physical fitness level of the student, each routine can be performed at different intensities. This course may be repeated for credit. Laboratory fee. (3 Lab.)

(PEH) 127 Beginning Basketball And Volleyball (1)
Basic basketball and volleyball rules, skills, and strategies are taught, and class tournaments are conducted. Sections using men’s rules and women’s rules may be offered separately. 24 class hours will be devoted to each sport. Laboratory fee. (3 Lab.)

(PEH) 129 Modern Dance (1)
This beginning course is designed to emphasize basic dance technique, including body alignment and placement, floor work, locomotor patterns, and creative movements. A uniform is required. Laboratory fee. (3 Lab.)

(PEH) 130 Beginning Tumbling And Trampoline (1)
Basic skills and techniques involved in tumbling and trampoline are taught. 24 class hours will be devoted to each activity. Laboratory fee. (3 Lab.)

(PEH) 131 Weight Training And Conditioning (1)
Instruction and training in weight training and conditioning techniques are offered. A uniform is required. This course may be repeated for credit. Laboratory fee. (3 Lab.)

(PEH) 132 Self-Defense (1)
Various forms of self-defense are introduced. The history and philosophy of the martial arts are explored. The student should progress from no previous experience in self-defense to an adequate skill level covering basic self-defense situations. Both mental and physical aspects of the arts are stressed. (3 Lab.)

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

(PEH) 144 Introduction To Physical Education (3)
This course is for students majoring in physical education and is designed for professional orientation in physical education, health, and recreation. The history, philosophy, and modern trends of physical education are surveyed. Topics include teacher qualifications, vocational opportunities, expected competencies, and skill testing. (3 Lec.)

(PEH) 200 Lifetime Sports Activities II (1)
This course is a continuation of Physical Education 100. Students participate in selected activities. Instruction is at the Intermediate and Intermediate/advanced levels. This course may be repeated for credit. Laboratory fee. (3 Lab.)

(PEH) 217 Intermediate Archery (1)
Prerequisite: Successful completion of Physical Education 117 or approval of instructor. Archery activities and skills presented in Physical Education 117 are reviewed with emphasis placed on competitive target shooting and field archery. Laboratory fee. (3 Lab.)

(PEH) 218 Intermediate Golf (1)
Prerequisite: Successful completion of Physical Education 118 or approval of instructor. Skills and techniques presented in Physical Education 118 are refined beyond the beginner level. Analysis and practice of the golf swing, swing theory and methods, strategy, and actual course playing are emphasized. Laboratory fee. Green fees. (3 Lab.)

(PEH) 219 Intermediate Tennis (1)
Prerequisite: Successful completion of Physical Education 119 or approval by the instructor. Emphasis is placed on proper execution of the strokes presented in Physical Education 119 as well as on specialty shots such as the lob, overhead, and spins. Competitive activities in singles, doubles and mixed doubles will be available. Laboratory fee. (3 Lab.)

(PEH) 222 Intermediate Gymnastics (1)
Prerequisite: Physical Education 122 or previous gymnastic training. Tumbling and the all-around events for men and women as presented in Physical Education 122 will be emphasized at the Intermediate performance level. Course emphasis is placed on the development, preparation, and presentation of gymnastic routines. Laboratory fee. (3 Lab.)

(PEH) 223 Intermediate Swimming (1)
Prerequisite: Successful completion of Physical Education 123, Red Cross Beginning Swimmer Certificate or approval of Instructor. The correct performance of the crawl, elementary back stroke, side stroke and breast stroke will be emphasized. Some speed and endurance swimming will be required. Laboratory fee. (3 Lab.)

(PEH) 225 Skin And Scuba Diving (2)
Prerequisite: Physical Education 223 or demonstrated competence approved by the instructor. This course includes the use of equipment, safety, physiology, and open water diving. All equipment is supplied except mask, fins, and snorkel. The student may rent needed equipment at the time of registration. Students completing course requirements receive certification as basic scuba divers from the Professional Association of Diving Instructors (PADI)
or the National Association of Underwater Instructors (NAUI) or the Young Men’s Christian Association (YMCA). Laboratory fee. (1 Lec., 2 Lab.)

(PEH) 228 Advanced Life Saving (1)
Prerequisite: Physical Education 223 or deep water swimming ability. Successful completion of this course qualifies students for the Red Cross Advanced Life Saving Certificate. Laboratory fee. (3 Lab.)

(PEH) 228 Advanced Open Water Scuba (2)
Prerequisite: Physical Education 225 or appropriate certifying agency entry level certificate and 10 log book hours. Instruction will include the introductory knowledge and skill development in the open water environment for the student to participate in underwater investigation, deep diving, search and light salvage, and limited visibility/night diving. Safety, special equipment, dive planning and dive buddy procedures will be covered. Upon successful completion of the course, the student will receive advanced open water certification through PADI. (1 Lec., 2 Lab.)

(PEH) 231 Intermediate Weight Training (1)
Prerequisite: Physical Education 131. Skills and instruction in weight training techniques are developed beyond the beginner stage. This course may be repeated for credit. Laboratory fee. (3 Lab.)

(PEH) 232 Intermediate Self Defense (1)
Prerequisite: Physical Education 132 or demonstrated competence approved by the instructor. Students will be introduced to intermediate forms of defense and combinations of self defense methods. Emphasis is on practical application of self defense movements. Laboratory fee. (3 Lab.)

(PEH) 233 Jogging For Fitness (1)
Development and improvement of physical fitness through jogging is emphasized. Fitness concepts and jogging skills will be introduced. Laboratory fee. (3 Lab.)

(PEH) 234 Water Safety Instructor (2)
Prerequisite: Current Advanced Life Saving Card. The principles and techniques for instructors in water safety and life saving classes are covered. Completion of the course qualifies the student to test for certification by the Red Cross as a water safety instructor. A uniform is required. Laboratory fee. (1 Lec., 2 Lab.)

(PEH) 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.)

PHYSICS

(PHY) 111 Introductory General Physics (4)
Prerequisite: Two years of high school algebra, including trigonometry, or the equivalent. This course is for pre-dental, biology, pre-medical, pre-pharmacy, and pre-architecture majors and other students who need a two-semester technical course in physics. Mechanics and heat are studied. Laboratory fee. (3 Lec., 3 Lab.)

(PHY) 112 Introductory General Physics (4)
Prerequisite: Physics 111. This course is a continuation of Physics 111. Electricity, magnetism, light, and sound are studied. Laboratory fee. (3 Lec., 3 Lab.)

(PHY) 117 Concepts In Physics (4)
This course is for non-science majors. It introduces principles of physics and does not require a mathematical background. Emphasis is on classical mechanics and thermodynamics. Historical developments and their impact on daily life are included. The principle of energy conservation is stressed, and current problems of worldwide energy production are examined. Laboratory fee. (3 Lec., 3 Lab.)

(PHY) 118 Concepts In Physics (4)
This is for non-science majors. It introduces principles of physics and does not require a mathematical background. Emphasis is on modern developments in physics. Topics include acoustics, electricity and magnetism, light and the electromagnetic spectrum, atomic physics, and relativity. Laboratory fee. (3 Lec., 3 Lab.)

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

(PHY) 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.)
POSTAL SERVICE ADMINISTRATION

(PSA) 110 Introduction To Postal Service (3)
This course depicts and compares the private, corporate, and government agencies which have been responsible for mail services throughout the world. The current U.S. Postal Organization, mandated by public law, is studied as well as postal philosophy, policies, procedures, rules, regulations, planning, and organization cost control. (3 Lec.)

(PSA) 120 Mail Processing (3)
Through discussions of mail processing and transportation procedures of the U.S. Postal Service, this course will provide the student with an in-depth view of flow characteristics involved in movement of mail from sender to recipient. The course will also include a study of the systems devised to attain maximum efficiency in mail handling with a minimum of errors. (3 Lec.)

(PSA) 122 Customer Services (3)
This course provides functional information about mail delivery and collection systems and in-depth information about services provided for postal customers. Included in the course are rural and city delivery/systems, marketing of postal products and service, and techniques of effective public relations. (3 Lec.)

(PSA) 216 Postal Management (3)
This course will provide an overview of the laws and practices leading to the current labor situation in the postal service. Discussion will focus on the Equal Employment Opportunity Act, the development of labor unions, national and local agreements, grievance procedures and disciplinary action procedures. The student is given an opportunity to apply practical Postal Service and management theories in system analysis, problem solving grids and other tools of management decision making to arrive at solutions of Postal Service problems. (3 Lec.)

QUALITY CONTROL

(QCT) 121 Introduction To Quality Control (2)
Prerequisite: Credit or concurrent enrollment in Math 195. This course introduces some of the concepts and techniques currently being used by industry to prevent defective products from reaching the consumer. Included are reliability analysis, control charts, Inspection and sampling plans. The language, terminology and organization of typical industry quality control functions are studied. Elementary probability and statistics concepts are presented as background. (2 Lec.)

(QCT) 122 Dimensional Measurement (3)
Prerequisite: Credit or concurrent enrollment in Quality Control Technology 121 or demonstrated competence approved by the Instructor. This course provides an opportunity to obtain a practical and theoretical understanding of many types of mechanical and optical measuring devices which are used in dimensional inspection. Laboratory fee. (2 Lec., 2 Lab.)

PSYCHOLOGY

(PSY) 101 Introduction To Psychology (3)
Introduction to Psychology surveys major topics in the study of behavior. Factors which determine and affect behavior are examined. Psychological principles are applied to the human experience. (This course is offered on campus and may be offered via television.) (3 Lec.)

(PSY) 131 Applied Psychology And Human Relations (3)
Psychological principles are applied to human relations problems in business and industry. Topics include group dynamics and adjustment factors for employment and advancement. (3 Lec.)

(PSY) 201 Developmental Psychology (3)
Prerequisite: Psychology 101. This course is a study of human growth, development, and behavior. Emphasis is on psychological changes during life. Processes of life from prenatal beginnings through adulthood and aging are included. (This course is offered on campus and may be offered via television). (3 Lec.)

(PSY) 202 Applied Psychology (3)
Prerequisite: Psychology 101. Psychological facts and principles are applied to problems and activities of life. Emphasis is on observing, recording, and modifying human behavior. Some off-campus work may be required. (3 Lec.)

(PSY) 205 Psychology Of Personality (3)
Prerequisite: Psychology 101. This course is an introduction to the study of personality. Topics of personality and adjustment will be studied in the context of various personality theories. Emphasis will be on the application of those topics. (3 Lec.)

READING

(RD) 101 College Reading And Study Skills (3)
Comprehension techniques for reading college texts are emphasized. Also included are vocabulary development, critical reading, and rate flexibility. Study skills addressed include listening, notetaking, underlining, concentrating, and memory. (3 Lec.)

(RD) 102 Speed Reading And Learning (3)
Reading and learning skills are addressed. Speed reading techniques and comprehension are emphasized. Learning and memory skills are also covered. (3 Lec.)
REAL ESTATE

(RE) 130 Real Estate Principles (3)
This course provides an overview of licensing for the real estate broker and salesman, ethics of practice, titles to and conveyancing of real estate, legal descriptions, law of agency, deeds, encumbrances and liens. Distinctions between personal and real property, contracts, appraisal, finance and regulations, closing procedures, and real estate mathematics are also included. Three classroom hours will be devoted to federal, state and local laws governing housing discrimination, housing credit discrimination, and community reinvestment. (3 Lec.)

(RE) 131 Real Estate Finance (3)
Prerequisite: Real Estate 130 or concurrent enrollment in Real Estate 130 or equivalent. This course covers monetary systems, primary and secondary money markets, sources of mortgage loans, federal government programs and loan applications, processes, and procedures. Closing costs, alternative financial instruments, equal credit opportunity act, community reinvestment act, and state housing agency are also included. (3 Lec.)

(RE) 133 Real Estate Marketing (3)
Prerequisite: Real Estate 130 or concurrent enrollment in Real Estate 130 or the equivalent. The emphasis of this course is on real estate professionalism and ethics and the satisfaction of all parties. Topics covered include characteristics of successful salesmen, time management, psychology of marketing, listing procedures, advertising, negotiating and closing, financing, and the Deceptive Trade Practices-Consumer Protection Act, as amended, Section 17.01 et seq, Business and Commerce Code. (3 Lec.)

(RE) 135 Real Estate Appraisal (3)
Prerequisites: Real Estate 130 and 131 or the equivalent. This course focuses on principles and methods of appraising. Topics include central purposes and functions of an appraisal, social and economic determinants of value, appraisal case studies, cost, market data and income approaches to value estimates, final correlations, and reporting. (3 Lec.)

(RE) 136 Real Estate Law (3)
Prerequisite: Real Estate 130 or concurrent enrollment in Real Estate 130 or the equivalent. This course examines the legal concepts of real estate land description, real property rights and estates in land, contracts, conveyances, encumbrances, foreclosures, recording procedures, and evidence of titles. (3 Lec.)

(RE) 138 Real Estate Law: Contracts (3)
Prerequisite: Real Estate 130 or concurrent enrollment in Real Estate 130 or equivalent. Concepts of general contract law are reviewed as required by the Real Estate License Act. Emphasis is on detailed instructions and hands-on exercises in preparation of all promulgated contract forms. The Real Estate License Act and the working process of the Broker-Lawyer Committee are included. (3 Lec.)

RELIGION

(REL) 101 Religion In American Culture (3)
This course examines the nature of religion in America. It covers important influences from the past and characteristics of current religious groups and movements. Emphasis is on understanding the role of religion in American life. (3 Lec.)

(REL) 102 Contemporary Religious Problems (3)
Both classic and recent Issues are explored. Such topics as the nature of religion, the existence of God, world religions, mysticism, sexuality and religion, and the interpretation of death are included. This course may be offered with emphasis on a specific topic, such as death and dying. (3 Lec.)

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

SOCIOLOGY

(SOC) 101 Introduction To Sociology (3)
This course is a study of the nature of society and the sources of group life and social conflict. Topics include institutions, social change, processes, and problems. (This course is offered on campus and may be offered via television.) (3 Lec.)

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

SPANISH

(SPA) 101 Beginning Spanish (4)
The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee. (3 Lec., 2 Lab.)

(SPA) 102 Beginning Spanish (4)
Prerequisite: Spanish 101 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Spanish 101. Emphasis is on idiomatic language and complicated syntax. Laboratory fee. (3 Lec., 2 Lab.)
(SPA) 201 Intermediate Spanish (3)
Prerequisite: Spanish 102 or the equivalent or demonstrated competence approved by the instructor. Reading, composition, and intense oral practice are covered. Grammar is reviewed. (3 Lec.)

(SPA) 202 Intermediate Spanish (3)
Prerequisite: Spanish 201 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Spanish 201. Contemporary literature and composition are studied. (3 Lec.)

SPEECH COMMUNICATION

(SC) 101 Introduction to Speech Communication (3)
Theory and practice of speech communication behavior in one-to-one, small group, and public communication situations are introduced. Students learn more about themselves, improve skills in communicating with others, and make formal oral presentations. This course requires college-level skills in reading and writing. (3 Lec.)

(SC) 105 Fundamentals of Public Speaking (3)
Public speaking is introduced. Topics include the principles of reasoning, audience analysis, collection of materials, and outlining. Emphasis is on giving well prepared speeches. (3 Lec.)

(SC) 109 Voice and Articulation (3)
Students may register for either Speech 109 or Theatre 109 but may receive credit for only one of the two. Emphasis is on improving voice and pronunciation. (3 Lec.)

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

THEATRE

(THE) 102 Contemporary Theatre (3)
This course is a study of the modern theatre. The historical background and traditions of each style are included. Emphasis is on understanding the social, culture, and aesthetic significance of each style. A number of modern plays are read and selected video tapes are viewed. (3 Lec.)

(THE) 106 Acting I (3)
The theory of acting and various exercises are presented. Body control, voice, interpretation, characterization, and stage movement are included. Both individual and group activities are used. Specific roles are analyzed and studied. (2 Lec., 3 Lab.)

(THE) 107 Acting II (3)
Prerequisite: Theatre 106 or demonstrated competence approved by the instructor. This course is a continuation of Theatre 106. Emphasis is on characterization and ensemble acting. (2 Lec., 3 Lab.)

(THE) 109 Voice and Articulation (3)
Students may register for either Speech 109 or Theatre 109 but may receive credit for only one of the two. Emphasis is on improving voice and pronunciation. (3 Lec.)

(THE) 110 History of Theatre I (3)
Theatre is surveyed from its beginning through the 16th century. The theatre is studied in each period as a part of the total culture of the period. (3 Lec.)

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

(THE) 112 Beginning Dance Technique in Theatre (3)
Basic movements of the dance are explored. Emphasis is on swing movements, circular motion, fall and recovery, contraction and release, and contrast of literal and abstract movements. Body balance, manipulation of trunk and limbs, and the rhythmic flow of physical energy are developed. (2 Lec., 3 Lab.)

(THE) 113 Intermediate Dance (3)
Prerequisite: Theatre 112 or demonstrated competence approved by the instructor. Various aspects of dance are surveyed. Topics include the role of dance in total theatre, the evolution of dance styles, and the jazz style. Emphasis is on the flow of movement, body placement, dynamic intensity, level, focus, and direction. (2 Lec., 3 Lab.)

(THE) 114 Rehearsal and Performance I (1)
Participation in the class may include any phase of rehearsal and performance of the current theatrical presentation. This course may be repeated for credit. (3 Lab.)

(THE) 199 Demonstration Lab (1)
Scenes studied in various theatre classes are demonstrated to show contrast and different styles. This course may be repeated for credit. (1 Lab.)

(THE) 201 Television Production I (3)
Station organization, studio operation, and the use of studio equipment are introduced. Topics include continuity, camera, sound, lights, and videotape recording. (2 Lec., 3 Lab.)

(THE) 202 Television Production II (3)
Prerequisite: Theatre 201. This course is a continuation of Theatre 201. Emphasis is on the concept and technique of production in practical situations. (2 Lec., 3 Lab.)

(THE) 205 Scene Study I (3)
Prerequisites: Theatre 106 and 107. Emphasis is on the study, rehearsal and performance of selected scenes of various periods and styles. (2 Lec., 3 Lab.)
(WE) 207 Scene Study II (3)
Prerequisite: Theatre 205. This course is a continuation of Theatre 205. Emphasis is on individual needs of the performer and the various styles of production. (2 Lec., 3 Lab.)

(WE) 210 Rehearsal And Performance II (2)
Participation in the class may include any phase of rehearsals and performance of the current theatrical presentation. This course may be repeated for credit. (6 Lab.)

(WE) 236 Theatre Workshop (3)
A course in theatre with emphasis on performance techniques in musical and repertory theatre with practical performance experience. This course may be repeated for credit. (2 Lec., 3 Lab.)

WELDING

(WE) 101 Basic Welding And Cutting Practices (3)
This course is for students who need welding on the job, such as in auto body, auto mechanics, or air conditioning. Emphasis is on setting up and using oxyfuel equipment. Cutting up to and including 3/8" mild steel, welding up to and including 1/8" mild steel, and brazing up to and including 16 ga. mild steel are all included. Setting up and using arc welding equipment are also included. Welding 1/4" through 3/8" mild steel in the flat and vertical position using E60's series electrodes is covered. Laboratory fee. (1 Lec., 5 Lab.)

(WE) 111 Oxyfuel I (2)
This course gives both theory and practice in basic tools, equipment and processes used in welding and brazing gauge materials. Lab work includes preparation and performance of welded and brazed joints. Laboratory fee. (60 Contact Hours)

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

(WE) 113 Shielded Metal Arc Welding I (2)
This course gives both theory and practice in the identification and usage of shielded metal arc welding electrodes. Laboratory work includes the use of E60 and E70 series including low hydrogen electrodes primarily in the flat and horizontal position. Laboratory fee. (60 Contact Hours)

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

(WE) 115 Shielded Metal Arc Welding III (4)
Prerequisite: Welding 114. This course gives both theory and practice in code quality welding. Laboratory work includes passing standard tests according to the American Welding Society and American Society of Mechanical Engineers for certifying procedures for 3/16" - 3/4" thickness range material in all positions. Laboratory fee. (120 Contact Hours)

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

(WE) 117 General Metal Layout (3)
Prerequisite: Drafting 182 or equivalent. This course gives both theory and practice in blueprint reading, welding symbols, layout work and fabrication techniques of metal weldments. Lab work consists of developing shop drawing and fabrication of designed structures. Laboratory fee. (90 Contact Hours)

(WE) 118 Welding Inspection And Quality Control (4)
Prerequisite: Welding 117 and six credit hours of welding lab courses or equivalent. This course is both theory and practical application of welding codes, processes, testing procedures, testing equipment and weld discontinuities. Lab work emphasis is on inspection and qualification of welds and welding procedures. (120 Contact Hours)

(WE) 211 Gas Tungsten Arc Welding I (2)
This course gives both theory and practice in the set-up and use of gas-tungsten arc welding of plate. Laboratory work will include setting up and using 18 gauge through 3/8" thick mild steel, stainless and aluminum. Welds will be made primarily in the flat and horizontal positions. Laboratory fee. (60 Contact Hours)

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

(WE) 213 Gas Tungsten Arc Welding III (4)
Prerequisite: Welding 212 or equivalent. This is an advanced theory and skills course in the use of gas tungsten arc welding of plate and pipe. Lab work will include passing the standard qualification test in a variety of metals in all positions. Laboratory fee. (120 Contact Hours)

(WE) 214 Gas Metal Arc Welding I (2)
This course gives both theory and practice in the set-up and use of gas metal arc welding processes of plate. Lab work will be on setting up and using gas metal arc welding equipment in welding 18 gauge 3/8" thick mild steel, stainless and aluminum, primarily in the flat and horizontal position. Laboratory fee. (60 Contact Hours)
(WE) 215 Gas Metal Arc Welding II (2)
Prerequisite: Welding 214. This course gives both theory
and practice in the set-up and use of gas metal arc welding
processes of pipe. Lab work includes the welding of
schedule 40 mild steel pipe in the vertical, horizontal rolled
and fixed positions. Laboratory fee. (60 Contact Hours)

(WE) 216 Gas Metal Arc Welding III (4)
Prerequisite: Welding 215. This is an advanced theory and
skills course in the use of gas metal arc welding of plate
and pipe. Lab work will be on passing the standard
qualification test in plate and pipe on plate and pipe in a
variety of metals and thickness ranges in all positions.
Laboratory fee. (120 Contact Hours)

(WE) 217 Basic Welding Metallurgy (3)
This is a theory type course designed to assist those
students in welding and related industries to refresh and
extend their knowledge of the behavior of the various
fabricating metals during welding. The effects of the joining
processes and procedures on the fabrication and service
performance of weldments are also considered.
Laboratory fee. (90 Contact Hours)

(WE) 218 Applied Welding Metallurgy (3)
Prerequisites: Welding 217 and six credit hours of welding
lab courses. This course is designed to assist the student
in improving communication skills with welding engineers
and metallurgists. The course includes a study of welding
processes and their relationship to and effect upon metals
and why they can or cannot be used for certain applica-
tions; the theory of heat treating and its many uses; the
value of preheat, interpass temperature, and post-heat in
welding procedures. This course should increase the
student's knowledge of what metals are made of and why
they are used for specific industrial applications; to
strengthen the knowledge and understanding of the grain
structure of metals and the effect that welding processes
have on them. Laboratory fee. (90 Contact Hours)

(WE) 219 Welding Design (3)
Prerequisites: Welding 117 and six credit hours of welding
lab courses or equivalent. Concepts in designing products
for welding, joint design and selection, weld size determina-
tion, welding costs, codes and applications in welding. A
design project is chosen and carried to completion using
the design team concept. Laboratory fee. (90 Contact Hours)

(WE) 221 Special Welding Applications (1)
This is a skill development course designed to allow stu-
dents to program their own specialized objectives under
instructional supervision. This will permit the student to
upgrade present skills or develop a new skill. This course
may be repeated for credit as topics vary. Laboratory fee.
(60 Contact Hours)

(WE) 223 Special Welding Applications (3)
This is a skill development course designed to allow stu-
dents to program their own specialized objectives under
instructional supervision. This will permit the student to
upgrade present skills or develop a new skill. This course
may be repeated for credit as topics vary. Laboratory fee.
(90 Contact Hours)

(WE) 704 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in Welding Tech-
nology or Instructor approval. This course combines
productive work experience with academic study. The
student, employer and instructor will develop a written
competency-based learning plan with varied learning ob-
jectives and work experiences related to the welding field.
The seminar consists of group or individual meetings with
the instructor, individualized plans for job-related or self
improvement (i.e. preparation of job applications, job inter-
view, job site interpersonal relations, employer
expectations of employees), or combinations of both.
(1 Lec., 20 Lab.)

(WE) 714 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in Welding Tech-
nology or Instructor approval. This course combines
productive work experience with academic study. The
student, employer and instructor will develop a written
competency-based learning plan with varied learning ob-
jectives and work experiences related to the welding field.
The seminar consists of group or individual meetings with
the instructor, individualized plans for job-related or self
improvement (i.e. preparation of resumes, changing jobs,
managing subordinates, building self-esteem), or combi-
nations of both. (1 Lec., 20 Lab.)
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