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Eastfield College
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Mesquite, Texas 75150

Call for information: Admissions, 324-7100
Counseling, 324-7106

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

The Dallas County Community College District is an equal opportunity institution.
TExAS aCADemic SKILLS ProGRaM aND
THE DALLAs COrNCTY COMMUNITY COlLGEs

In 1987, the Texas Legislature passed House Bill 2182. This bill, which became 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 develop the necessary skills for college success. If students score poorly in one or more areas of the test, TASP requires them to enroll in Developmental Studies courses or participate in appropriate remediation until all sections of the test are passed.

Q. Who must take the TASP test?
A. Since the Fall 1989 semester, all college students have been expected to take TASP either before or during the semester of completing 15 college-level credit hours. 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 DCCC or other regionally-accredited colleges or universities, and which will count toward graduation; also, various credit-by-exam programs taken prior to Fall 1989 will result in an exemption.

Q. Must a student take TASP prior to entering a DCCC college?
A. No. It is not necessary that a student take TASP prior to enrolling. However, DCCC 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 the completion of their 15th credit hour, does this mean they must pass TASP by that same time?
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 DCCC. Students who 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 DCCC college is a test site. During 1990, the test will be given on June 30, September 22, and November 17. Tentative test dates for 1991 are February 16, April 20 and June 15. TASP registration materials are available in the Counseling Centers and/or Testing Centers of each of the DCCC 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 DCCC 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 DCCC college libraries.

Q. How will TASP affect students planning to attend a DCCC college?
A. Students planning to attend a DCCC 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 DCCC's assessment test. Then, before completing their 15th credit hour, students must take the TASP test.

Q. Are students transferring into the DCCC required to take TASP?
A. Unless the transfer student qualifies for one of the exemptions discussed above, he or she is required to take TASP. Transfer students from another Texas public college/university are expected to take TASP no later than the semester of enrollment in 15 college-level credit hours, and the hours earned at other Texas public colleges ARE USED in computing the 15 credit hours. Hours earned at private or out-of-state colleges/universities ARE NOT used in computing such 15 credit hours.

If you would like more Information on the Texas Academic Skills Program, please contact the college's Counseling Center.
# Academic Calendar for 1990-91

## Summer Sessions, 1990

**First Summer Session:** *(Based on a 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)
- **June 21 (R)**: Last Day to Withdraw with a Grade of "W"
- **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)*

- **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, 1990

- **August 20 (M)**: Faculty Reports
- **August 20-23**: Registration Period *(Varies by Campus)*
- **August 24 (F)**: Faculty Professional Development
- **August 25 (S)**: Saturday Only Classes Begin
- **August 27 (M)**: Classes Begin (M-R Classes)
- **August 31 (F)**: No Friday Only Classes
- **September 1 (S)**: No Saturday Only Classes
- **September 3 (M)**: Labor Day Holiday
- **September 8 (S)**: 12th Class Day
- **September 22 (S)**: TASP Test Administered
- **November 1 (R)**: Last Day to Withdraw with a Grade of "W"
- **November 17 (S)**: TASP Test Administered
- **November 22 (R)**: Thanksgiving Holidays Begin
- **November 26 (M)**: Classes Resume
- **December 7 (F)**: Final Exams for Friday Only Classes
- **December 8 (S)**: Final Exams for Saturday Only Classes
- **December 10-13**: Final Exams for M-R Classes *(M-R)*
- **December 13 (R)**: Semester Ends
- **December 17 (M)**: Grades due in Registrar's Office for the Holidays
- **December 25 (T)**: College Buildings and Offices Closed for the Holidays

## Spring Semester, 1991

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

- **May 27 (M)**: Memorial Day Holiday
- **May 29 (W)**: Registration (Richland Only)
- **May 30 (R)**: Registration (All Campuses)
- **June 3 (M)**: Classes Begin
- **June 6 (R)**: 4th Class Day
- **June 7 (F)**: Class Day (Only Friday Class Day)
- **June 15 (S)**: TASP Test Administered
- **June 20 (R)**: Last Day to Withdraw with a Grade of "W"
- **July 3 (W)**: Final Exams
- **July 3 (W)**: Semester Ends
- **July 4 (R)**: Fourth of July Holiday
- **July 5 (F)**: Grades due in Registrar's Office by 10 a.m.

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

- **July 9 (T)**: Registration (All Campuses)
- **July 10 (W)**: Classes Begin
- **July 16 (T)**: 4th Class Day
- **August 1 (R)**: Last Day to Withdraw with a Grade of "W"
- **August 13 (T)**: Final Exams
- **August 13 (T)**: Semester Ends
- **August 15 (R)**: Grades due in Registrar's Office by 10 a.m.
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EASTFIELD COLLEGE

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

Eastfield provides a full range of academic transfer programs balanced with technical/occupational programs that are designed to equip students for rewarding careers in Metroplex businesses and industries. In addition, thousands of people each semester find rewarding growth opportunities through the extensive continuing education course offerings.

The Campus

The Eastfield campus rises impressively from the plains of eastern Dallas County and is the scene of many seasonal athletic events held on its beautiful grass-covered playing fields.

Function building clusters give students easy access to classrooms and labs and the overall aesthetic effect has earned Eastfield several architectural awards of excellence. The careful landscape planning includes many trees, shrubs and terraced areas as well as a beautiful outdoor swimming pool. In addition, the campus boasts an outstanding Performance Hall which serves the community for a variety of fine arts events.

Accreditation

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

Institutional Memberships

The American Association of Community and Junior Colleges
Southern Association of Junior Colleges
Association of Texas Colleges and Universities
The League of Innovation in the Community College

Eastfield is recognized and sanctioned by the Coordination Board of the Texas College and University System and the Texas Education Agency, and is an affirmative Action Equal Opportunity Institution.

EASTFIELD COLLEGE ADMINISTRATION

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Brown, Karryette Stover English
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Brumbach, Virginia English
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Carandang, Amado I. Philosophy
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Carlisle, Charles Richard Spanish

Carpen ter, Robert W. Accounting
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Carr, Laura V. Interpreter Training Program

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Wisdom, Hardy ................................. Auto Body Technology
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Zamora, Felix A. ................................. Vice President of Student Development
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History of the Dallas County Community College District

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

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

The voters of Dallas County approved the sale of an additional $85 million in bonds in September, 1972. This step provided for expansion of the four existing colleges and the construction of three more colleges. A key part of the expansion program was the remodeling and enlarging of El Centro College, a project completed in 1979. Construction of new facilities resulted in the opening of Cedar Valley College and North Lake College in 1977. Brookhaven College, the final campus in the seven-college master plan, opened in 1978. In February, 1989, the Bill J. Priest Institute for Economic Development opened near downtown Dallas. Named for the DCCCD's founding chancellor, the BJPIED serves the community through the Business and Professional Institute, Edmund J. Kahn Job Training Center, Small Business Development Center, Center for Government Contracting, Business Incubation Center, and International Trade Resource Center.

District Philosophy And Goals

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

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

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

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

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

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

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

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

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

**District Responsibilities**

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

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

**League for Innovation**

The Dallas County Community College District is a member of the League for Innovation in the Community College. The League is composed of 19 outstanding community college districts throughout the nation. Its purpose is to encourage innovative experimentation and the continuing development of the community college movement in America. Membership commits the District to research, evaluation, and cooperation with other community college districts. The goal is to serve the community with the best educational program and the fullest use of resources.

**Equal Educational And Employment Opportunity Policy**

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

**Family Educational Rights And Privacy Act Of 1974**

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

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

**Student Consumer Information Services**

Pursuant to the Education Amendment of 1980, Public Law 96-374, the College provides all students with information about its academic programs and financial aid available to students.

**Standard Of Conduct**

The college student is considered a responsible adult. The student's enrollment indicates acceptance of the standards of conduct published in this catalog.

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

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

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

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

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

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

Class Schedule: A booklet which 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 which provide knowledge and skills necessary for living well and functioning competently in rapidly changing local, state, national, and world communities.

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

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

Credit: The numerical value assigned to a course (see CREDIT HOURS/SEMESTER HOURS").

Credit Hours/Semester Hours: The unit of credit earned for course work. Each college course is worth a certain number of credit or semester hours. This number is determined by the type of class 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 comprised of Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View, North Lake and Richland Colleges, plus the Bill J. Priest Institute for Economic Development.

Developmental Studies Courses: Courses which 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.

Dual Credit: Credit earned for both high school and college via concurrently enrolled high school students.

Electives: Courses which 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 which the college requires for services in addition to tuition charges.

Flexible-entry course: A course beginning and ending on dates which are different from the regular semester. This is also referred to as "flex-entry" or "short semester registration". Consult the 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 entitled "Scholastic Standards."

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

Grades: See catalog section entitled "Scholastic Standards."

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

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

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

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

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

Prerequisite: A requirement which must be met BEFORE enrolling for a specific course. For example, the prerequisite for English 102 is the successful completion of English 101. A prerequisite may be another course (high school or college), an appropriate assessment score, or permission of the instructor.
Probation: A warning for a student whose academic work or behavior is unsatisfactory. Students on academic probation may be suspended if their academic performance does not improve.

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

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

Semester: A term denoting the length of time a student is enrolled in a specific course. For example, there are two long semesters (Fall and Spring) which last approximately 16 weeks. There are two summer sessions or "semesters" (Summer I and Summer II) which last approximately 5 1/2 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 which lead to a certificate or Associate of Applied Arts and Sciences Degree in a technical or occupational program. These courses are designed to aid the student in developing entry-level skills to be utilized in the job market. Consult an advisor regarding transferability if you plan to attend a four-year institution.

Telecourses: Courses providing flexibility and convenience for students seeking college credit with minimum campus visits. Students watch the course television programs at home on regular broadcasts or cablecasts, complete the study guide and reading assignments, take tests on campus, and attend optional discussion meetings. Instructors are available during regular office hours or via telephone when assistance is needed.

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

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

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

III. ADMISSIONS AND REGISTRATION

General Admissions Policy

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

Admission Requirements

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

Beginning Freshmen

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

a. Graduates from an accredited high school.

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

c. Those who have earned a General Education Diploma (G.E.D.).

d. Those who are at least 18 years of age and who do not have a diploma of G.E.D. may be admitted by individual approval.

e. Those who are under the age of 18 and who do not have a diploma or G.E.D. may be admitted upon the written recommendation of the principal or superintendent of the last high school attended.

f. High school seniors recommended by their high school principal. The College admits a limited number of students in this category. The student may enroll for no more that TWO college courses per semester.
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.

Students transferring from a Texas public college or university are subject to the same TASP requirements as are "native" DCCCD students. (See special TASP section.) Therefore, transfer students from Texas public colleges and universities who began their college careers in the 1989 Fall Semester and who have accumulated at least 15 hours of college-level credit must have TASP scores on file with the DCCCD college. Otherwise, enrollment will be limited to remedial and/or other courses which will not count toward graduation.

Students transferring from a non-Texas public college or university who began their college career with the 1989 Fall Semester will have to take the TASP test either before or during their semester of enrollment in their 15th credit hour of college-level coursework.

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 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 Services 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 GPA of 2.00 in all college work attempted.

International students are subject to the requirements of the Texas Academic Skills Program (TASP).

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. IT IS ABSOLUTELY ESSENTIAL THAT TRANSFER STUDENTS SUBMIT TRANSCRIPTS FROM PREVIOUS COLLEGES ATTENDED.

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.
Reciprocal Tuition Agreement

The following Associate of Applied Arts and Sciences Degrees offered by the Dallas County Community College District may be taken by Tarrant County residents at in-county tuition rates:

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>CAMPUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising Art</td>
<td>BHC</td>
</tr>
<tr>
<td>Apparel Design</td>
<td>ECC</td>
</tr>
<tr>
<td>Aviation Technology</td>
<td>MVC</td>
</tr>
<tr>
<td>Air Cargo</td>
<td>MVC</td>
</tr>
<tr>
<td>Air Traffic Control</td>
<td>MVC</td>
</tr>
<tr>
<td>Aircraft Dispatcher</td>
<td>ECC</td>
</tr>
<tr>
<td>Airline Marketing</td>
<td>NLC</td>
</tr>
<tr>
<td>Career Pilot</td>
<td>MVC</td>
</tr>
<tr>
<td>Fixed Base Operations</td>
<td>ECC</td>
</tr>
<tr>
<td>Avionics</td>
<td>MVC</td>
</tr>
<tr>
<td>Commercial Music</td>
<td>CVC</td>
</tr>
<tr>
<td>Diesel Mechanics</td>
<td>NLC</td>
</tr>
<tr>
<td>Electrical Technology</td>
<td>NLC</td>
</tr>
<tr>
<td>Engineering Technology</td>
<td>RLC</td>
</tr>
<tr>
<td>Food &amp; 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>Veterinary Technology</td>
<td>CVC</td>
</tr>
<tr>
<td>Vocational Nursing</td>
<td>ECC</td>
</tr>
</tbody>
</table>

Tuition

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

Additional Fees

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

Special Fees And Charges

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

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

Physical Education Activity Fee: $5 a semester.

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

(1) Official withdrawal:

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

Fall and Spring Semesters

<table>
<thead>
<tr>
<th>Period</th>
<th>Refund Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to the first class day</td>
<td>100%</td>
</tr>
<tr>
<td>During the first five class days</td>
<td>80%</td>
</tr>
<tr>
<td>During the second five class days</td>
<td>70%</td>
</tr>
<tr>
<td>During the third five class days</td>
<td>50%</td>
</tr>
<tr>
<td>After the fourth five class days</td>
<td>25%</td>
</tr>
<tr>
<td>After the fifth five class days</td>
<td>NONE</td>
</tr>
</tbody>
</table>

Summer Semesters

<table>
<thead>
<tr>
<th>Period</th>
<th>Refund Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to the first class day</td>
<td>100%</td>
</tr>
<tr>
<td>During the first, second or third class day</td>
<td>80%</td>
</tr>
<tr>
<td>During the fourth, fifth or sixth class day</td>
<td>50%</td>
</tr>
<tr>
<td>After the sixth class day</td>
<td>NONE</td>
</tr>
</tbody>
</table>

(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

<table>
<thead>
<tr>
<th>Period</th>
<th>Refund Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the first twelve class days</td>
<td>100%</td>
</tr>
<tr>
<td>After the twelfth class day</td>
<td>NONE</td>
</tr>
</tbody>
</table>

Summer Session

<table>
<thead>
<tr>
<th>Period</th>
<th>Refund Percentage</th>
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</thead>
<tbody>
<tr>
<td>During the first four class days</td>
<td>100%</td>
</tr>
<tr>
<td>After the fourth class day</td>
<td>NONE</td>
</tr>
</tbody>
</table>

(Continues following tuition schedule.)
### TUITION AND STUDENT SERVICES FEE
#### Fall and Spring Sessions

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credit Hours</th>
<th>Dallas County</th>
<th>Out-of-District</th>
<th>Out-of-State or Country</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Tuition Fee</td>
<td>Total</td>
<td>Tuition Fee Total</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>$36 $3</td>
<td>$39</td>
<td>100 $3 $103</td>
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<td>36 3</td>
<td>39</td>
<td>100 3 103</td>
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<td>4</td>
<td>48 4</td>
<td>52</td>
<td>132 4 136</td>
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<td>9</td>
<td>108 9</td>
<td>117</td>
<td>297 9 306</td>
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<td>120 10</td>
<td>130</td>
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<td>20</td>
<td>220 12</td>
<td>232</td>
<td>450 12 462</td>
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### TUITION
#### Summer Sessions

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credit Hours</th>
<th>Dallas County</th>
<th>Out-of-District</th>
<th>Out-of-State or Country</th>
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<tbody>
<tr>
<td></td>
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<td>Tuition $35</td>
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<td>Tuition Fee Total</td>
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<td>9</td>
<td>108</td>
<td>118</td>
<td>330 10 340</td>
</tr>
</tbody>
</table>

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

**TUITION REQUIREMENTS FOR LONG TERM:**

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

**SUMMER SESSION:**

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

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

*Provided he has established legal residence in the State of Texas, a student's county of residence is the county in which his legal guardian resides, if he is under 18 years of age. Students 18 years of age and older 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.

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

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.*

If you are a non-resident or an out-of-country student AND if you (or the parent on whom you are dependent) own property subject to ad valorem tax by the College District, you may qualify for a waiver of tuition to the In-District rate. Please check with the college Admissions Office for additional details.
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.

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.

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

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.

The student must submit the request for refund before the end of the semester or summer session for which the refund is requested. Cash refunds are not issued. Refund checks are mailed to the student at the address on file in the Admissions/Registrar's Office.

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

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

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

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 which is a required part of the enrollment process.

The assessment program includes the completion of a questionnaire which documents information on career and work plans, previous academic achievement and other relevant information. Assessment also includes an examination of individual skill levels in reading, writing and mathematics. Information on skills may come from ACT, SAT, or TASP 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, SAT, or TASP 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.

Students who did not have at least 3 college-level credit hours prior to the 1989 Fall Semester must take the TASP (Texas Academic Skills Program) test either prior to, or during, their semester of enrollment in 15 college-level credit hours. Should students fail either the reading, writing, or mathematics section of TASP, they will be required to continuously enroll in the appropriate remediation until the failed section is passed.

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 Fall, 1989, or thereafter, must take the TASP test 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 exempt from the TASP requirement. TASP scores may be utilized in place of the DCCCD Assessment Program. Students scoring below the state-determined level must continuously enroll in appropriate remediation until such time as the TASP Test is passed. 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 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>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 three hour course and earns an "A" accumulates 12 grade points for that course. A student’s grade point average is computed by adding the total grade point values for all courses and dividing by the number of credit hours attempted during the same period. For example, a student who takes the following courses and earns the following grades has a grade point average 2.93:

<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</td>
<td></td>
<td>Total Grade</td>
</tr>
<tr>
<td>Hours: 12</td>
<td></td>
<td>Points: 35</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.(1) is utilized to determine Suspension/Probation status, athletic participation eligibility, and financial aid eligibility. 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, honor rolls, and eligibility in Who’s Who in American Junior Colleges. It is also the G.P.A. which may be considered by four-year institutions when a student transfers.

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

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

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

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

Students who do not complete course requirements may receive a “WX” grade when the instructor determines that reasonable progress has been made and when the student can reenroll for course completion prior to the certification date in the next regular semester. 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, based on G.P.A.(1), 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, based on G.P.A.(2), or better. Grade points and hours earned in courses numbered 99 and below, Art 199, College Learning Skills 100, Developmental Communications 120, Human Development 100, Human Development 110, Library Skills 101, Music 199, and Theatre 199 cannot be used to meet graduation requirements.

Recommended Academic Load

The maximum academic load is 18 credit hours of course work per semester or five classes plus physical education. Students must receive permission of the appropriate college official to carry a heavier load. Employed students carrying a full load (12 credit hours or more) should not work more than 20 hours per week. Students working more hours should reduce their academic load proportionately. The recommended load limit for day or evening students who are employed full-time is six credit hours. The recommended load limit in a six-week summer session is six credit hours. A total of 14 credit 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.
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 college-level 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 college-level credit and average 3.8-4.0 are placed on the President's Honor Roll. Part-time students who take six-11 college-level credit hours and maintain a 3.5 or higher grade point average are placed on the Academic Recognition List. G.P.A.(2) is utilized to determine honor roll inclusion.

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, utilizing G.P.A.(1). Students may be removed from probation when they earn a 2.0 cumulative grade point average, utilizing G.P.A.(1). 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.
The 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. It includes both GPA(1) and GPA(2).

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

Students entering the DCCCD Fall 1988 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 which is common to all candidates for a degree.

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

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

Associate in Arts and Sciences Degree

Students must have a minimum of 61 credit hours, a grade of “C” or better in each of the three Core courses (English 101, Speech Communication 101, and math course numbered 100 or above), a grade point average of at least “C” (2.0), based on G.P.A.(2), and a passing score on all sections of TASP (for students entering the DCCCD Fall 1989 or thereafter) to receive the Associate in Arts and Sciences Degree. These 61 hours may be earned at any district college and must include:

- English 101 (3 credit hours) [A CORE COURSE REQUIREMENT]
- Speech Communication 101 (3 credit hours) [A CORE COURSE REQUIREMENT]
- A math course numbered 100 or above (3 credit hours) [A CORE COURSE REQUIREMENT]
  English 102 (3 credit hours).
- A sophomore literature course (3 credit hours) to be chosen from English 201, 202, 203, 204, 205, 206, 215, OR 216 (English 209 and English 210 do not meet the sophomore literature requirements.)
- Laboratory Science (8 credit hours) to be chosen from Astronomy, Biology, Chemistry, Geology, Physical Science, OR Physics. (For Astronomy to meet this requirement, the student must successfully complete Astronomy 101 in combination with 103, and Astronomy 102 in combination with 104)
- Humanities (3 credit hours) Humanities 101, Literature, Music 104, Philosophy 101, 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 four physical education activity hours may be counted as credit toward requirements for graduation. The G.P.A. for graduation is based on the credit earned for all DCCCD work completed and all transfer work. The following courses will not count toward graduation nor the G.P.A. for graduation: Courses numbered 099 and below, Art 199, College Learning Skills 100, Developmental Communications 120, Human Development 100, Human Development 110, Library Skills 101, Music 199 and Theatre 199.

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

  See Associate In Arts and Sciences Degree requirements chart that follows this page.

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), based on G.P.A.(2), and a passing score on all sections of TASP (for students entering the DCCCD Fall, 1989, or thereafter) to receive the Associate in Applied Arts and Sciences Degree. These 60 hours must include:

- English 101 OR Communications 131 (3 credit hours)  
  [A CORE COURSE REQUIREMENT]

- Speech Communication 101 (3 credit hours)  
  [A CORE COURSE REQUIREMENT]

- A math course numbered 100 or above (3 credit hours)  
  [A CORE COURSE REQUIREMENT]

- Six to eight credit hours chosen from TWO of the following clusters:
  - Laboratory Science: Astronomy, Biology, Chemistry, Geology, Physical Science, OR Physics. (For Astronomy to count as a lab science, the student must successfully complete Astronomy 101 in combination with 103 and Astronomy 102 in combination with 104

  -Behavioral/Social Science: Anthropology, Government, History, Human Development, Psychology, OR Sociology


  -Business: Business, Accounting, Management 136, Computer Information Systems, OR Economics. Cooperative Work Experience courses may not be used to meet Common Learning degree requirements

(Continues following chart on next page.)
ASSOCIATE IN ARTS AND SCIENCES DEGREE

IN ORDER TO BE ELIGIBLE TO RECEIVE AN ASSOCIATE IN ARTS AND SCIENCES DEGREE, A STUDENT MUST:

1. Complete a minimum of 61 credit hours
2. Receive a grade of "C" or better in each of three CORE courses
3. Have a passing score on all sections of TASP (for students entering the DCCCD Fall, 1989 or thereafter)
4. Complete 61 hours, including the following courses:

Students who plan to transfer to a four-year institution must consult the catalog of that institution to insure that selected courses will both transfer and apply toward the intended major. Material about transfer information is available in the Counseling Center.

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE COURSES</td>
<td></td>
</tr>
<tr>
<td>English 101</td>
<td>3</td>
</tr>
<tr>
<td>Speech Communication 101</td>
<td>3</td>
</tr>
<tr>
<td>Math (100 level or above courses)</td>
<td>3</td>
</tr>
<tr>
<td>Note: You must receive a grade of &quot;C&quot; or better in each of these courses.</td>
<td></td>
</tr>
<tr>
<td>&quot;See an advisor for the appropriate course selection for your major.&quot;</td>
<td></td>
</tr>
<tr>
<td>English 102</td>
<td>3</td>
</tr>
<tr>
<td>Sophomore Literature</td>
<td>3</td>
</tr>
<tr>
<td>(Select from English 201, 202, 203, 204, 205, 206, 215, or 216)</td>
<td></td>
</tr>
<tr>
<td>LAB SCIENCE</td>
<td>8</td>
</tr>
<tr>
<td>8 credit hours to be chosen from:</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td></td>
</tr>
<tr>
<td>Astronomy</td>
<td></td>
</tr>
<tr>
<td>Geology</td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td></td>
</tr>
<tr>
<td>or Physical Science</td>
<td></td>
</tr>
<tr>
<td>See an advisor for the appropriate course selection for your major.</td>
<td></td>
</tr>
<tr>
<td>HUMANITIES</td>
<td>3</td>
</tr>
<tr>
<td>3 credit hours to be chosen from:</td>
<td></td>
</tr>
<tr>
<td>Art 104</td>
<td></td>
</tr>
<tr>
<td>Humanities 101</td>
<td></td>
</tr>
<tr>
<td>Music 104</td>
<td></td>
</tr>
<tr>
<td>Philosophy 101</td>
<td></td>
</tr>
<tr>
<td>Theater 101</td>
<td></td>
</tr>
<tr>
<td>Foreign Language</td>
<td></td>
</tr>
<tr>
<td>or Literature</td>
<td></td>
</tr>
<tr>
<td>(Select from English 201, 202, 203, 204, 205, 206, 215, or 216)</td>
<td></td>
</tr>
<tr>
<td>BEHAVIORAL SCIENCE</td>
<td>3</td>
</tr>
<tr>
<td>3 credit hours to be chosen from:</td>
<td></td>
</tr>
<tr>
<td>Anthropology</td>
<td></td>
</tr>
<tr>
<td>Human Development</td>
<td></td>
</tr>
<tr>
<td>(with the exception of HD 100 and HD 110)</td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td></td>
</tr>
<tr>
<td>or Sociology</td>
<td></td>
</tr>
<tr>
<td>SOCIAL SCIENCE</td>
<td></td>
</tr>
<tr>
<td>History 101</td>
<td>3</td>
</tr>
<tr>
<td>History 102</td>
<td>3</td>
</tr>
<tr>
<td>Government 201</td>
<td>3</td>
</tr>
<tr>
<td>Government 202</td>
<td>3</td>
</tr>
<tr>
<td>Only 3 hours of History and 3 hours of Government may be earned through credit-by-exam.</td>
<td></td>
</tr>
<tr>
<td>BUSINESS</td>
<td>3</td>
</tr>
<tr>
<td>3 credit hours to be chosen from:</td>
<td></td>
</tr>
<tr>
<td>Accounting</td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td></td>
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<tr>
<td>Computer Information Systems</td>
<td></td>
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<tr>
<td>Economics</td>
<td></td>
</tr>
<tr>
<td>or Management 136</td>
<td></td>
</tr>
<tr>
<td>Cooperative Work Experience will not meet this requirement.</td>
<td></td>
</tr>
<tr>
<td>PHYSICAL EDUCATION</td>
<td>1</td>
</tr>
<tr>
<td>A maximum of 4 physical education activity hours may be counted toward graduation requirements</td>
<td></td>
</tr>
<tr>
<td>ELECTIVE CREDIT</td>
<td>16</td>
</tr>
<tr>
<td>Any credit course offered in the DCCCD will count toward graduation with the EXCEPTION of the following courses:</td>
<td></td>
</tr>
<tr>
<td>Courses numbered 099 and below</td>
<td></td>
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<tr>
<td>Art 199</td>
<td></td>
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<tr>
<td>College Learning Skills 100</td>
<td></td>
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<tr>
<td>Developmental Communications 120</td>
<td></td>
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<td>Human Development 100</td>
<td></td>
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<tr>
<td>Human Development 110</td>
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<td>Library Science 101</td>
<td></td>
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<tr>
<td>Music 199</td>
<td></td>
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<tr>
<td>Theater 199</td>
<td></td>
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</tbody>
</table>

Students wishing to transfer to a four-year institution must consult the catalog of the institutions to which they wish to transfer. These catalogs should be used by students working with an advisor in planning their academic program. Elective credit courses should be selected based on such an advisement process. The selection of science and math courses is frequently based on the four-year major. SEE AN ADVISOR FOR SELECTION OF APPROPRIATE COURSES.

TOTAL 61
Where a technical/occupation program heavily emphasizes a specific cluster as part of its requirements, students are encouraged to select from other clusters to satisfy this requirement. For example, students pursuing an A.A.A.S. degree in accounting must enroll in many courses from the business cluster as part of their program requirements. Therefore, to meet Common Learning requirements, the 6-8 additional hours should be selected from the other three clusters: Behavioral/Social Sciences, Humanities, or Laboratory Science.

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

Certificate 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, based on G.P.A.(2), 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, Development Communications 120, Human Development 100, Human Development 110, Library Skills 101, Music 199, and Theatre 199. Students working toward a certificate may be exempt from the TASP requirement.

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

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

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

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

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

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 Texas 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.

In order to aid students in transferring to other Texas public colleges and universities, the Texas Higher Education Coordinating Board has established procedures regarding the transfer of credit. The following procedures will be followed by public institutions of higher education in the resolution of transfer disputes involving lower division courses:

1. If a Texas public institution of higher education does not accept course credit earned by a student at a DCCCD college, that institution shall give written notice to the student and the DCCCD that the transfer of the course credit is denied.

2. The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with Board rules and/or guidelines.

3. If the transfer dispute is not resolved to the satisfaction of the student or the DCCCD within 45 days after the date the student received written notice of the denial, the institution that denies the transfer of the course credit shall notify the Texas Higher Education Coordinating Board Commissioner of its denial and the reason for the denial.

The Commissioner of higher education or the Commissioner's designee shall make the final determination about a dispute concerning the transfer of course credit and give written notice of the determination to the involved student and institutions.

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 Texas four-year institution. The AAS 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 AAS Degree can be found elsewhere in this catalog or from a counselor or advisor.

There are many advantages to completing the Associate in Arts and Sciences Degree program prior to transferring to a four-year institution. In addition to completing many of the requirements for a four-year degree program, students are able to attend college close to home, enjoy small class sizes, pay lower costs for tuition and fees, and take advantage of many personalized and creative programs. In addition, students who complete this degree may become more marketable in the work place should plans to complete the bachelor's degree become delayed or unobtainable. However, it is not required that a student complete the AAS 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. Working closely with a counselor or advisor, and utilizing current information from four-year institutions, students who plan to transfer are encouraged to follow the Associate in Arts and Sciences Degree plan as many of the required courses are often required at four-year institutions.

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
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 has several resources to assist 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.

A number of other materials are available to aid students who plan to transfer. 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 may be 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.

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, limitations 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.

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Technical/Occupational Programs

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

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

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

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

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

Credit By Examination

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

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

Students must be currently enrolled at 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 three (3) credit hours to apply toward the degree requirements in history and only three (3) credit hours to apply toward the degree requirements in

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 which is assessing the learning experiences.
3. A student is required to complete at least 12 semester hours of course work with the District, six of which are in the student’s major occupational area, prior to awarding of equivalent credits for non-traditional activities. The “CR” grade is awarded for non-traditional course work accepted for credit.
4. Credit may be granted for occupational courses approved by the Coordinating Board of Colleges and Universities.
5. The number of equivalent credits awarded may not exceed the total number of credits required for the student’s specific associate degree objective. No graduation, residency, degree or program requirements will be waived as a result of credits earned as provided by this policy.

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

High School Articulation/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 Re-
source Centers. Reading, writing and study guide assign-
ments 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 stu-
dents.

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. Tele-
courses 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 opportu-
nity to earn college credit for the development and achieve-
ment 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 or require-
  ment from the instructor
* declare a technical/occupational major or file a de-
  gree plan
* be currently enrolled in a course related to the major
  area of study;
* be approved by the instructor.

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

International Studies

Each year a number of 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 1990-91 can be secured from the District Office
of Student and International Programs (746-2410).

There are several semester-abroad programs avail-
able in France, Mexico, Spain, and 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 opportuni-
ties 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 communica-
tions and public speaking, is required for DCCCD associate
degrees.
Development Studies

Students whose assessment test scores (DCCCD, SAT, ACT, or TASCP) 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 student’s 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 which 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 supports 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 which 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 simple, 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. 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 of the Bill J. Priest Institute for Economic Development

The Business and Professional Institute (B.P.I.) manages and delivers training and education to businesses, industries, government agencies, and professional associations. The Institute custom designs training or provides college credit programs or request to be taught on any of the college campuses or on-site at an office or plant. The duration of training or services is customized 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, business forums, tele-conferencing, basic skills assessment, and small business development assistance.

The Bill J. Priest Institute for Economic Development

The B.J.P. Institute, in addition to the Business and Professional Institute, also includes the Edmund J. Kahn Job Training Center, the Small Business Development Center (SBDC), the Center for Government Contracting, the Business Incubation Center, the Child Care Center, and the International Trade Resource Center. Detailed information about each of these programs can be found in the section entitled, "Bill J. Priest Institute for Economic Development" or by calling 214-565-5700 to request more information.

VI. STUDENT DEVELOPMENT

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

Student Programs and Resources

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

Counseling Center Services

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

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

Tutoring Services

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

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

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

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

Health Center

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

Placement Services

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

Special Services

The Special Services Office offers a variety of support services to enable students with disabilities to participate in the full range of college experiences. Services are arranged to fit the individual needs of the student and may include sign language interpreters, notetakers, tutors, mobility assistants, readers, and loan of wheelchairs, audio tape recorders, talking calculators, taped textbooks, and oral testing (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 Police 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 Police 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 (FAF) of the College Scholarship Service must be completed using data from the Federal Income Tax Return. This form is used to provide an analysis of financial need. It may be obtained from a high school counselor or from any DCCCD Financial Aid office. The FAF is to be mailed directly to the College Scholarship Service with the required processing fee noted on the form. Allow 4 to 6 weeks for the processing. The student should mail the FAF at least one month before the priority deadline for the semesters for which the student is applying.

The Department of Education will randomly select 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. 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. All students receiving Pell Grants must also sign an Anti-Drug Abuse statement certifying that they will not violate drug laws, "in conducting any activity with the grant."

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. Applicants should contact the Financial Aid Office at the school to which they plan to attend for additional deadlines and requirements.

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 six credit hours each semester. When Congress appropriates full funding for the Pell Grant Program, applicants with an SAI of 0 may be eligible to receive a Pell Grant when enrolled in less than six credit hours. Students must apply each year.
Supplemental Educational Opportunity Grant (SEOG)

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

Texas Public Educational Grant (TPEG)

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

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

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

Scholarships

DCCCD Foundation Scholarships

The DCCCD Foundation provides a 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 and information concerning other requirements and deadlines 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. After July 1, 1988, the interest rate for first time borrowers will increase from 8% to 10% in the fifth year of repayment. The minimum payment will be $50 per month, and the loan must be repaid within 10 years. Lenders may charge a 5% loan origination fee on each loan in addition to the insurance premium charged on the loan. These charges will be deducted from the proceeds of the loan. Under the Supplemental Loans to Students (SLS) Program, independent undergraduate students may be eligible to borrow up to $4,000 per academic year. Recent legislation requires an undergraduate to complete a needs analysis to determine whether there is Pell or GSL eligibility before an SLS loan can be completed, however. The loan maximum is $20,000 for all the years of undergraduate study. The interest rate is variable, ranging from 9% to 12%. Repayment begins within 60 days after disbursement of the loan, except that the borrower is entitled to a deferment of the principal for at least half time enrollment. Most lenders will capitalize the interest if the payments are deferred.
Under the PLUS Program, parents may now borrow up to $4,000 per year for each dependent undergraduate student with the loan maximum for each eligible student of $20,000.

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

Hinson-Hazelwood College Student Loan Program (HHCSLP)

The Hinson-Hazelwood Loan is a state-funded Guaranteed Student Loan Program for students who are attending Texas colleges and are eligible to pay Texas resident tuition rates. All Hinson-Hazelwood Loan applicants must demonstrate financial need before a loan can be approved.

The loan limit has been raised to $2,625 for the first two years of undergraduate study and a maximum of $17,250 for all years of undergraduate study. The actual loan amount may be limited to less than this depending on the cost of attendance, other financial aid, and the family’s financial condition. A 5% loan origination fee and an insurance premium on the life of the student will be taken from the total amount of each loan. The interest rate currently is 7% per year simple interest. No interest or payments are paid by the student while enrolled at least half-time or during the six month grace period. The interest rate will remain the same throughout the life of the loan. The minimum payment will be $50 per month over a 5 to 10 year period depending on the total amount borrowed.

Emergency Short-Term Loans

The colleges of the DCCCD have limited short-term loan funds available which have been established by individuals and organizations, including the DCCCD Foundation, to meet emergency needs to students. Loans are usually limited in amount and bear no interest. These loans must be repaid within 60 days of the date of the loan. A late fee of $10 will be added for late payment. Delinquent loans are turned over to a collection agency or Justice of the Peace for recovery, and the student must pay the entire cost of collection. Because the funds are very limited, students should apply early if help is needed for registration costs.

Employment

College Work-Study Program (CWSP)

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

Student Assistants Employment Program (Non-Work-Study)

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

Off-Campus Employment

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

Tuition Exemption Programs

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

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 Programs

The Veteran’s Benefits Programs are coordinated by the Veterans’ Services 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. 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 and should consult them before taking developmental or television courses. 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 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' Services 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 that students maintain a 2.0 G.P.A. for each semester for which an award is received and complete a certain percentage of the courses funded. Course work attempted at any of the colleges of the DCCCD, when the student is not receiving financial aid, also must be considered. There is a limit of 75 credit hours on the period of time for which students may receive aid. Students must have a 2.0 G.P.A. at the end of two years. A copy of the complete policy is available at the Financial Aid Office.
1. PURPOSE

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

2. POLICIES, RULES, AND REGULATION

a. Interpretation of Regulations

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

b. Inherent Authority

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

c. Student Participation

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

d. Standards of Due Process

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

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

e. Prohibited Conduct

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

f. Definitions

In this code:

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

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

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

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

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

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

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

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

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

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

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

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

(13) "intentionally" means conduct that one desires 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.

(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 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 violates a published college regulation or policy.

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

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

g. Prohibited Conduct

The following misconduct is subject to disciplinary action:

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

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

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

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

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

(7) intentionally furnishing false information to the college.

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

(9) unauthorized use of computer hardware or software.

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

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

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

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

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

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

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

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

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

(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 "block" 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 (15) 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.
(3) Disposition

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

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

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

Administrative disposition means:

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

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

b. Student Discipline Committee

(1) Composition: Organization

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

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

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

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

(2) Notice

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

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

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

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

(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. Designated college representatives for the following groups may have space reserved if they choose to attend:
   - Faculty Association
   - College Newspaper
   - President
   Other persons may attend based on the seating available. The Chairman may limit seating accommodations based on the size of the facilities.

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

(iii) The VPSD shall read the complaint.

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

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

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

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

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

(ix) The committee shall state in writing each finding of a violation of a published college regulation or policy. Each committee member concurring in the finding shall sign the statement. The committee will make a determination based on the evidence presented.

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

(i) Persons present: the complainant, the VPSD and the student with a parent or guardian if desired. Designated college representatives for the following groups may have space reserved if they choose to attend:
   - Faculty Association
   - College Newspaper
   - President
   Other persons may attend based on the seating available. The Chairman may limit seating accommodations based on the size of the facilities.

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

(iii) The VPSD shall read the complaint.

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

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

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

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

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

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

(x) 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 may 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
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 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.

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

(4) has firsthand knowledge of the planning of a specific hazing incident involving a student in an educational institution, or firsthand knowledge that a specific hazing incident has occurred, and knowingly fails to report said incident.
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 180 days nor more than one year, or both such 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 commits or assists in the commission of hazing.

b. The above offense is a misdemeanor punishable by a fine of not less than $5,000 nor more than $10,000. 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.

3. Consent Not a Defense

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

4. Immunity from Prosecution

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

5. Definition

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

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

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

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

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

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

Student Grievance Procedure

1. Definition

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

2. Scope

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

3. Limitations

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

4. Procedures

Students who believe that they have a college-related grievance:

a. Should discuss it with the college employee most directly responsible for the condition which brought about the alleged grievance.

b. If discussion does not resolve the matter to the student's satisfaction, the student may appeal to the next level of authority. The student may consult with the Administrative Office to determine the next level of authority.

c. If an appeal does not resolve the grievance, the student may proceed to the appropriate Vice President with a written presentation of the grievance.

d. If the Vice Presidential level of appeal does not prove satisfactory to the student, the student may appeal the grievance to an appeal committee.

5. Exception To Procedures

Sexual Harassment:

All students and employees shall report complaints of sexual 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 to be heard must submit a request in writing to the VPSD.

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

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

d. The committee will be ad hoc and will consist of two (2) students, two (2) faculty members, and one (1) staff member who is either an administrator or a non-contractual employee. It is the responsibility of the President 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 deems necessary to govern the institution, including rules for the operation of parking and driving regulations, and the college campuses and any other property under institutional control.

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

c. Permits:

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

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

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

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

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

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

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

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

d. Driving on the wrong side of the roadway.

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

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

g. Parking trailers or boats on campus.

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

i. Failure to display a parking permit.

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

k. Reckless driving.

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

m. Violation of any state law regulating vehicular traffic.

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

a. Handicapped parking.

b. Fire lanes.

c. Courtyards.

d. "No Parking" zones.

e. Areas other than those designated for vehicular traffic.

f. Other unauthorized areas as designated by sign.

4. Citations:

a. Types: Citations shall be of two types:

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

(2) Court Citation: 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.

Communicable Disease Policy

The Board acknowledges the serious threat to our community and nation posed by the AIDS epidemic. This policy and other procedures developed by the Chancellor shall emphasize educating employees and students concerning AIDS and managing each case of AIDS individually with sensitivity, flexibility, and concern for the individual as well as employees and students. In addition, this policy defines and addresses other communicable diseases which from time to time arise in the colleges and District among students and employees.

The District's decisions concerning a person who has a communicable disease shall be based upon current and well-informed medical judgment which includes the nature of the disease, risk of transmission to others, symptoms and special circumstances of the person, and balancing identifiable risks and available alternatives to respond to a student or employee with a communicable disease.

Discrimination
   Students: No student will be required to cease attending a college or participating in college functions solely on the basis of diagnosis of a communicable disease.
   Employees: An employee who has a communicable disease will be treated in the same manner as other employees who have other illnesses or injuries.

Confidentiality
   The District shall comply with applicable statutes and regulations which protect the privacy of persons who have a communicable disease.

Education

   The Chancellor shall develop and maintain a comprehensive educational program regarding HIV infection for students and employees.

   Each college shall have a Communicable Disease Coordinator. The coordinator shall be a registered nurse who has received training in communicable diseases, particularly HIV infection. A student or employee who has a communicable disease is strongly encouraged to report the disease to the coordinator.

Counseling

   The Communicable Disease Coordinator shall refer students and employees to sources of testing for HIV infection and counseling upon voluntary request. An individual shall bear the expenses of such testing and counseling.
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<td>Electro-Mechanical</td>
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<td>Electronic Controls</td>
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<tr>
<td>Electronic Quality Control</td>
<td></td>
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<tr>
<td>Industrial Technology</td>
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DALLAS COUNTY COMMUNITY COLLEGE DISTRICT
1990-91 Technical/Occupational Programs Offered On Our Campuses

<table>
<thead>
<tr>
<th>Career Education Programs</th>
<th>EFC — Eastfield College</th>
<th>CVC — Cedar Valley College</th>
<th>ECC — El Centro College</th>
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<tbody>
<tr>
<td>Manufacturing Engineering</td>
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<td>Financial Management</td>
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<td>Fire Protection Technology</td>
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<td>Food And Hospitality Service</td>
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<td>Graphic Communications</td>
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<td>Interpreter Training Program</td>
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<td>Sign Language Studies</td>
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<td>Mid-Management</td>
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<td>Sales, Marketing &amp; Retail Management</td>
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<td>Transportation and Logistics Management</td>
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<td>Medical Laboratory Technology</td>
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<td>Motorcycle Mechanics</td>
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<td>General Office Certificate</td>
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<td>Ornamental Horticulture Technology</td>
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<tr>
<td>Greenhouse Florist</td>
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<td>Landscape Management</td>
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<tr>
<td>Landscape Nursery</td>
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<tr>
<td>Florist</td>
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<td>Landscape Gardener</td>
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<td>Outboard Marine Engine Mechanics</td>
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<td>Pattern Design</td>
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<td>Physical Fitness Technology</td>
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<tr>
<td>Radiologic Sciences</td>
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<td>Diagnostic Medical Sonography</td>
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<td>Radiography Technology</td>
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<td>Respiratory Care, Levels I and II</td>
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<td>Small Engine Mechanics</td>
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<td>Social Work Associate</td>
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<td>Human Services</td>
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<tr>
<td>Surgical Technology</td>
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<tr>
<td>Surgical Technology for Graduate R.N.</td>
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<tr>
<td>Veterinary Technology</td>
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<tr>
<td>Video Technology</td>
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<td>Vocational Nursing</td>
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<tr>
<td>Welding Technology</td>
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</table>
ACCOUNTING ASSOCIATE

Offered at all seven campuses

(Associate Degree)

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

The Associate in Applied Arts and Sciences Degree is awarded for successful completion of at least 66 credit hours as outlined below. Students desiring a less comprehensive program that includes some bookkeeping procedures and practices should consider the General Office Certificate. The General Office Certificate is available in the Office Careers Program.

CREDIT HOURS

SEMESTER I
ACC 201 Principles of Accounting I ................. 3
BUS 105 Introduction to Business .................. 3
ENG 101 Composition I .......................... 3
MTH 130 Business Mathematics or
MTH 111 Mathematics for Business and
Economics ........................................... 3
OFC 160 Office Calculating Machines .............. 3

15

SEMESTER II
ACC 202 Principles of Accounting II ............... 3
ENG 102 Composition .............................. 3
CIS 103 Introduction to Computer Information
Systems ............................................ 3
MGT 136 Principles of Management ................ 3
OFC 172 Beginning Typing* ......................... 3
SC 101 Introduction to Speech
Communication ...................................... 3

18

SEMESTER III
ACC 203 Intermediate Accounting I ................ 3
ACC 204 Managerial Accounting ................... 3
ACC 250 Microcomputer-Based Accounting
Applications ......................................... 3
ECO 201 Principles of Economics I ................ 3
+ Elective ........................................... 3
ACC 703 Cooperative Work Experience or
ACC 704 Cooperative Work Experience or
+ + Elective ......................................... 3-4

18-19

SEMESTER IV
ACC 238 Cost Accounting or
ACC 239 Income Tax Accounting ................... 3
BUS 234 Business Law ............................. 3
ECO 202 Principles of Economics II ............... 3
OFC 231 Business Communications ................. 3
+ + Elective ........................................... 3

15

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

+ Elective—must be selected from the following:

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<th>Hours</th>
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<tr>
<td>ANT 100</td>
<td>Introduction to Anthropology</td>
<td>3</td>
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<tr>
<td>GVT 201</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>GVT 202</td>
<td>American Government</td>
<td>3</td>
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<tr>
<td>HST 101</td>
<td>History of the United States</td>
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<tr>
<td>HST 102</td>
<td>History of the United States</td>
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<tr>
<td>HD 105</td>
<td>Basic Processes of Interpersonal Relationships</td>
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<tr>
<td>HD 106</td>
<td>Personal and Social Growth</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 103</td>
<td>Human Sexuality</td>
<td>3</td>
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<tr>
<td>PSY 131</td>
<td>Applied Psychology and Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology</td>
<td>3</td>
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<td>SOC 102</td>
<td>Social Problems</td>
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+ + Elective—must be selected from the following:

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ART 104</td>
<td>Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>ENG 201</td>
<td>British Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENG 202</td>
<td>British Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENG 203</td>
<td>World Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENG 204</td>
<td>World Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENG 205</td>
<td>American Literature</td>
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<td>ENG 206</td>
<td>American Literature</td>
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<tr>
<td>HUM 101</td>
<td>Introduction to the Humanities</td>
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<tr>
<td>MUS 104</td>
<td>Music Appreciation</td>
<td>3</td>
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<tr>
<td>PHI 101</td>
<td>Introduction to Philosophy</td>
<td>3</td>
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<tr>
<td>THE 101</td>
<td>Introduction to the Theatre</td>
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<tr>
<td>Foreign Language</td>
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+ + Electives—may be selected from the following:

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Any CIS or CS Programming Course</td>
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<tr>
<td>ACC 206</td>
<td>Business Finance</td>
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<tr>
<td>ACC 207</td>
<td>Intermediate Accounting II</td>
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<tr>
<td>ACC 238</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACC 239</td>
<td>Income Tax Accounting</td>
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<tr>
<td>ACC 703</td>
<td>Cooperative Work Experience</td>
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<tr>
<td>ACC 704</td>
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<tr>
<td>ACC 713</td>
<td>Cooperative Work Experience</td>
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<td>ACC 714</td>
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<tr>
<td>BUS 143</td>
<td>Personal Finance</td>
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<tr>
<td>MGT 237</td>
<td>Organizational Behavior</td>
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<tr>
<td>CIS 262</td>
<td>Contemporary Topics in Computer Information Systems</td>
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<td>CIS 265</td>
<td>Special Topics in Computer Information Systems</td>
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<tr>
<td>MKT 206</td>
<td>Principles of Marketing</td>
<td>3</td>
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</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.
AIR CONDITIONING AND REFRIGERATION - RESIDENTIAL

Cedar Valley, Eastfield, and North Lake only

(Associate Degree)

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

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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<table>
<thead>
<tr>
<th>SEMESTER I</th>
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<tbody>
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<tr>
<td>ACR 121</td>
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<td>ACR 122</td>
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<td>ACR 127</td>
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<tr>
<td>MTH 195</td>
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<td>MTH 139</td>
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<tr>
<td>ACR 142</td>
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<tr>
<td>PHY 131</td>
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<td>PSY 131</td>
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<tr>
<td>+ Electives</td>
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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.
REFRIGERATION -- RESIDENTIAL

Cedar Valley, Eastfield, and North Lake only

(Certificate)

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

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
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<td>ACR 121</td>
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Minimum Hours Required 30

+ Elective--must be selected from the following:

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<tr>
<td>BUS 105</td>
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<td>CIS 103</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>HUM 101</td>
<td>Introduction to the Humanities</td>
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<tr>
<td>MGT 136</td>
<td>Principles of Management</td>
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<td>MGT 153</td>
<td>Small Business Management</td>
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<td>PHY 131</td>
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<tr>
<td>SPA 101</td>
<td>Beginning Spanish</td>
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</table>
This program furnishes both the theory and practice required to qualify a person for employment in the various areas of the air conditioning and refrigeration industry. Special emphasis is placed on commercial and industrial air conditioning and refrigeration during the second year. Hands-on experience stresses operation and troubleshooting of medium and low temperature refrigeration and chilled water air conditioning systems.

<table>
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<th>CREDIT HOURS</th>
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<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>ACR 120 Principles of Refrigeration or 6</td>
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<td>ACR 121 Principles of Refrigeration I and (3)</td>
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<tr>
<td>ACR 122 Principles of Refrigeration II (3)</td>
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<tr>
<td>ACR 125 Principles of Electricity or 6</td>
</tr>
<tr>
<td>ACR 126 Principles of Electricity I and (3)</td>
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<tr>
<td>ACR 127 Principles of Electricity II (3)</td>
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<tr>
<td>MTH 195 Technical Mathematics I or</td>
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<td>MTH 139 Applied Mathematics (3)</td>
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<tr>
<td>SEMESTER II</td>
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<tr>
<td>ACR 130 Residential Cooling Systems or 6</td>
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<td>ACR 131 Residential Cooling Systems I and (3)</td>
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<tr>
<td>ACR 132 Residential Cooling Systems II (3)</td>
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<tr>
<td>ACR 140 Residential Heating Systems or 6</td>
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<tr>
<td>ACR 141 Residential Heating Systems I and (3)</td>
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<tr>
<td>ACR 142 Residential Heating Systems II (3)</td>
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<td>COM 131 Applied Communications or</td>
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<tr>
<td>ENG 101 Composition I (3)</td>
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<td>SEMESTER III</td>
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<td>ACR 221 Refrigeration Loads (3)</td>
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<td>ACR 222 Medium Temperature Refrigeration Systems (3)</td>
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<td>ACR 223 Low Temperature Refrigeration Systems (3)</td>
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<td>ACR 224 Refrigeration Equipment Selection (3)</td>
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<td>PSY 131 Applied Psychology and Human Relations or</td>
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<td>PSY 101 Introduction to Psychology (3)</td>
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<td>+ Elective (3-4)</td>
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<td>18-19</td>
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<tr>
<td>SEMESTER IV</td>
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<tr>
<td>ACR 222 Advanced Systems (3)</td>
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<td>ACR 224 System Testing and Balancing (3)</td>
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<td>ACR 228 Air Conditioning System Equipment Selection (3)</td>
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<td>ACR 230 Energy Conservation (3)</td>
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<tr>
<td>ACR 703 Cooperative Work Experience or (3)</td>
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<tr>
<td>+ + Elective (2-6)</td>
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<tr>
<td>SC 101 Introduction to Speech Communication (3)</td>
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</table>

Minimum Hours Required 66

+ Electives must be selected from the following:

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<tr>
<td>ACC 131</td>
<td>Bookkeeping I 3</td>
</tr>
<tr>
<td>ART 104</td>
<td>Art Appreciation 3</td>
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<td>BUS 105</td>
<td>Introduction to Business 3</td>
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<td>BUS 143</td>
<td>Personal Finance 3</td>
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<td>CIS 103</td>
<td>Introduction to Computer Information Systems 3</td>
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<tr>
<td>HUM 101</td>
<td>Introduction to the Humanities 3</td>
</tr>
<tr>
<td>MGT 153</td>
<td>Principles of Management 3</td>
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<tr>
<td>MGT 159</td>
<td>Small Business Management 3</td>
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<tr>
<td>MUS 104</td>
<td>Music Appreciation 3</td>
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<td>Applied Physics 4</td>
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<td>SPA 101</td>
<td>Beginning Spanish 4</td>
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+ + Electives must be selected from the following:

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<td>Contemporary Topics I 2</td>
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<td>Contemporary Topics II 2</td>
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<td>ACR 209</td>
<td>Contractor Estimating I 3</td>
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<td>ACR 210</td>
<td>Contractor Estimating II 3</td>
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<td>ACR 212</td>
<td>System Servicing 5</td>
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<td>ACR 213</td>
<td>System Servicing I 3</td>
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<tr>
<td>ACR 214</td>
<td>System Servicing II 3</td>
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</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.
**AUTO BODY TECHNOLOGY**

*Eastfield only*

(Associate Degree)

This program introduces the student to all facets of auto body repair and painting. Emphasis is placed upon the development of the necessary skills and knowledge required to function successfully in this industry. The program of study includes technical aspects of metal behavior combined with correct repair and refinishing procedures.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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<table>
<thead>
<tr>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>*AB 111</td>
<td>Basic Metal Principles</td>
<td>3</td>
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<tr>
<td>*AB 112</td>
<td>Applied Basic Metal Principles</td>
<td>2</td>
</tr>
<tr>
<td>*AB 121</td>
<td>Basic Paint Principles</td>
<td>3</td>
</tr>
<tr>
<td>*AB 122</td>
<td>Applied Basic Paint Principles</td>
<td>2</td>
</tr>
<tr>
<td>AB 245</td>
<td>Welding for Auto Body</td>
<td>3</td>
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<td>MTH 195</td>
<td>Technical Mathematics I</td>
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**16**

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<tr>
<td>*AB 113</td>
<td>Minor Metal Repair</td>
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<td>*AB 114</td>
<td>Applied Minor Metal Repair</td>
<td>2</td>
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<tr>
<td>*AB 123</td>
<td>Paint Blending and Spot Repair</td>
<td>3</td>
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<tr>
<td>*AB 124</td>
<td>Applied Paint Blending and Spot Repair</td>
<td>2</td>
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<tr>
<td>COM 131</td>
<td>Applied Communications or ENG 101</td>
<td>3</td>
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**17**

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<tr>
<td>*AB 211</td>
<td>Major Panel Replacement</td>
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<td>*AB 212</td>
<td>Applied Major Panel Replacement</td>
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<tr>
<td>AB 213</td>
<td>Major Collision and Frame Repair</td>
<td>3</td>
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<tr>
<td>SC 101</td>
<td>Introduction to Speech Communication</td>
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**14**

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<th>SEMESTER IV</th>
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<tr>
<td>AB 139</td>
<td>Body Shop Operations</td>
<td>3</td>
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<tr>
<td>AB 221</td>
<td>Advanced Paint Techniques</td>
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<tr>
<td>AB 235</td>
<td>Estimating</td>
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<td>AB 703</td>
<td>Cooperative Work Experience or (3)</td>
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**14-15**

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

+ Elective—must be selected from the following:

- ACC 131 Bookkeeping I ...............**3**
- ART 104 Art Appreciation ............**3**
- BUS 105 Introduction to Business . **3**
- CIS 103 Introduction to Computer Information Systems ...............**3**
- GVT 201 American Government ..........**3**
- HST 101 History of the United States ...............**3**
- HD 105 Basic Processes of Interpersonal Relationships ...............**3**
- HD 106 Personal and Social Growth ...............**3**
- HUM 101 Introduction to the Humanities ...............**3**
- MGT 136 Principles of Management ...............**3**
- MGT 153 Small Business Management ...............**3**
- PSY 131 Applied Psychology and Human Relations ...............**3**

*Must be enrolled concurrently in: AB 111/112, AB 113/114, AB 121/122, AB 123/124, and AB 211/212.

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.
AUTO BODY TECHNOLOGY

Eastfield only

(Certificate)

This program is designed to train a student in all facets of auto body repair and painting. Emphasis is placed upon those skills needed by the student to become a successful auto body repair person. This program offers the student a certificate in auto body technology upon successful completion of the program.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
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<td>*AB 111 Basic Metal Principles .......... 3</td>
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<td>*AB 112 Applied Basic Metal Principles ...... 2</td>
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<td>*AB 121 Basic Paint Principles .......... 3</td>
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<tr>
<td>*AB 122 Applied Basic Paint Principles ...... 2</td>
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<td>*AB 123 Paint Blending and Spot Repair Techniques .......... 3</td>
</tr>
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<td>*AB 124 Applied Paint Blending and Spot Repair Techniques .......... 2</td>
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<td>AB 245 Welding for Auto Body ............ 3</td>
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<td>*AB 114 Applied Minor Metal Repair ...... 2</td>
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<td>*AB 211 Major Panel Replacement .......... 3</td>
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<td>*AB 212 Applied Major Panel Replacement ...... 2</td>
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<td>AB 221 Advanced Paint Techniques .......... 3</td>
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<td>AB 222 Applied Advanced Paint Techniques .... 2</td>
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<td>SEMESTER III</td>
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<td>AB 139 Body Shop Operations .......... 3</td>
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<td>AB 213 Major Collision and Frame Repair .... 3</td>
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<td>AB 235 Estimating .......... 3</td>
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<td>AB 703 Cooperative Work Experience or (3)</td>
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<td>AB 714 Cooperative Work Experience .......... 4</td>
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Minimum Hours Required: ............ 45

*Must be enrolled concurrently in: AB 111/112, AB 113/114, AB 121/122, AB 123/124, and AB 211/212.
# AUTOMOTIVE TECHNOLOGY

**Cedar Valley and Eastfield only**

(Associate Degree)

The purpose of this program is to prepare students for entry level employment as an automotive technician. This program of study will include theory, diagnosis, repair, overhaul and maintenance of automobiles. Emphasis is placed on operational theory, practical skills and accepted shop procedures.

## CREDIT HOURS

### SEMESTER I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>AT 109</td>
<td>Minor Vehicle Service</td>
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<td>AT 110</td>
<td>Engine Repair I</td>
<td>4</td>
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<td>AT 112</td>
<td>Engine Repair II</td>
<td>4</td>
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<tr>
<td>COM 131</td>
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<td>ENG 101</td>
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<tr>
<td>AT 114</td>
<td>Engine Analysis and Tune-Up</td>
<td>4</td>
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<tr>
<td>AT 116</td>
<td>Fuel and Emission Systems</td>
<td>4</td>
</tr>
<tr>
<td>AT 119</td>
<td>Electrical Systems</td>
<td>3</td>
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<tr>
<td>PHY 131</td>
<td>Applied Physics</td>
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<td>SC 101</td>
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### SEMESTER III

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<th>Title</th>
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<td>AT 222</td>
<td>Heating and Air Conditioning</td>
<td>3</td>
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<tr>
<td>AT 223</td>
<td>Brake Systems</td>
<td>4</td>
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<tr>
<td>AT 225</td>
<td>Front End Systems</td>
<td>4</td>
</tr>
<tr>
<td>AT 248</td>
<td>Automotive Electronics</td>
<td>3</td>
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### SEMESTER IV

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<th>Course</th>
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<tr>
<td>AT 227</td>
<td>Standard Transmissions and Drive Trains</td>
<td>4</td>
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<tr>
<td>AT 229</td>
<td>Automatic Transmissions I</td>
<td>4</td>
</tr>
<tr>
<td>AT 231</td>
<td>Automatic Transmissions II</td>
<td>4</td>
</tr>
<tr>
<td>AT 703</td>
<td>Cooperative Work Experience or</td>
<td>3</td>
</tr>
<tr>
<td>AT 704</td>
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<td>(4)</td>
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Minimum Hours Required: 70

+ Elective—must be selected from the following:

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<td>AT 212</td>
<td>Special Automotive Applications</td>
<td>1</td>
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<td>AT 713</td>
<td>Cooperative Work Experience or</td>
<td>(3)</td>
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<tr>
<td>AT 714</td>
<td>Cooperative Work Experience</td>
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<tr>
<td>BUS 105</td>
<td>Introduction to Business</td>
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<tr>
<td>WE 101</td>
<td>Basic Welding and Cutting Practices</td>
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+ + Elective—must be selected from the following:

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<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tr>
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<td>Bookkeeping I</td>
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<td>ART 104</td>
<td>Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105</td>
<td>Introduction to Business</td>
<td>3</td>
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<td>CIS 103</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
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<td>GVT 201</td>
<td>American Government</td>
<td>3</td>
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<td>HST 101</td>
<td>History of the United States</td>
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<td>HD 105</td>
<td>Basic Processes of Interpersonal Relationships</td>
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<td>Introduction to the Humanities</td>
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<td>MGT 136</td>
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<td>MGT 153</td>
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<tr>
<td>PSY 131</td>
<td>Applied Psychology and Human Relations</td>
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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.
AUTOMOTIVE TECHNOLOGY

_Cedar Valley and Eastfield only_

(Certificate)

The purpose of this program is to train persons for entry level positions in the field of automotive technology. A certificate is issued upon successful completion of the program.

<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>AT 109</td>
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<tr>
<td>AT 110</td>
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<tr>
<td>AT 114</td>
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**SEMESTER III**

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<tr>
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<th>Course Title</th>
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<tbody>
<tr>
<td>AT 222</td>
<td>Heating and Air Conditioning</td>
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<td>AT 225</td>
<td>Front End Systems</td>
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**SEMESTER IV**

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<td>Automatic Transmissions I</td>
<td>4</td>
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<tr>
<td>AT 231</td>
<td>Automatic Transmissions II</td>
<td>4</td>
</tr>
<tr>
<td>AT 703</td>
<td>Cooperative Work Experience or (3)</td>
<td></td>
</tr>
<tr>
<td>AT 704</td>
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</table>

Minimum Hours Required .................................. 51
CHILD DEVELOPMENT ASSOCIATE

Brookhaven and Eastfield only

(Associate Degree)

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

CREDIT HOURS

SEMESTER I
CD 135 Introduction to Early Childhood Programs and Services** ........ 4
CD 140 Early Childhood Development, 0-3 Years** .................. 3
COM 131 Applied Communications or ENG 101 Composition I .......... 3
SOC 101 Introduction to Sociology ................................... 3
+ Elective ......................................................................... 3-4

16-17

SEMESTER II
CD 137 Early Childhood Learning Environments, Activities and Materials** .... 4
CD 141 Early Childhood Development, 3-5 Years** .................. 3
CD 702 Cooperative Work Experience or (2) CD 713 Cooperative Work Experience or (3) CD 804 Cooperative Work Experience .................. 4
PSY 101 Introduction to Psychology or PSY 131 Applied Psychology and Human Relations .................. 3
+ Elective ......................................................................... 3-4

15-18

SEMESTER III
CD 100 Directed Participation in Early Childhood Programs* or CD 233 Directed Participation in Early Childhood Programs .................. 4
CD 239 Studies in Child Guidance** .................................. 3
GVT 201 American Government ....................................... 3
SC 101 Introduction to Speech Communication .................. 3
+ Elective ......................................................................... 2-4
+ + Elective ...................................................................... 3

18-22

SEMESTER IV
CD 150 Nutrition Health and Safety of the Young Child** ............... 3
CD 200 Application of Child Development Learning Theories* or CD 244 Application of Child Development Learning Theories .................. 4
MTH 115 College Mathematics or MTH 130 Business Mathematics or MTH 139 Applied Mathematics .................. 3
SOC 203 Marriage and the Family ..................................... 3
+ + + Elective ..................................................................... 3-4

16-17

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

+ Electives—must be selected from the following:
CD 125 Infant and Toddler Learning Environments, Activities and Materials .................................. 4
CD 127 Early Childhood Development, 5-12 Years .................. 3
CD 128 Cultural Diversity in the Classroom .................. 3
CD 203 Parents and the Child Caregiver/Teacher .................. 3
CD 209 Early Childhood Development Special Projects .................. 3
CD 236 The Special Child: Growth and Development .................. 3
CD 250 Supportive Services for Exceptional Children .................. 3
CD 251 Learning Programs for Children with Special Needs .................. 3
CD 253 Abuse Within the Family ..................................... 3
CD 254 Introduction to Administration of Child Care Programs .................. 3
CD 256 Advanced Administrative Practices for Child Care .................. 3
CD 702 Cooperative Work Experience or (2) CD 713 Cooperative Work Experience or (3) CD 804 Cooperative Work Experience .................. 4
+ + 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
CIS 103 Introduction to Computer Information Systems .................. 3
MGT 153 Small Business Management .................................. 3
OFC 172 Beginning Typing ............................................. 3
+ + + Elective—must be selected from the following:
ART 104 Art Appreciation ............................................. 3
BIO 115 Biological Science ............................................. 4
MUS 104 Music Appreciation .......................................... 3
SPA 101 Beginning Spanish ............................................. 4
ITP 141 American Sign Language ...................................... 4

*CD 100 and CD 200 are taken as one-hour courses concurrently with the six (6) required CD courses (**) and two (2) of the following CD electives: CD 125, CD 127, CD 203, CD 254, or CD 256. CD 100 and CD 200 are repeated for credit for a total of eight (8) hours and are equivalent to CD 233 and CD 244.

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.
CHILD DEVELOPMENT –
ADMINISTRATIVE OPTION

Brookhaven and Eastfield only

(Certificate)

This certificate program will provide an opportunity for the student to study administrative procedures for child care facilities.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>CD 135</td>
</tr>
<tr>
<td>CD 140</td>
</tr>
<tr>
<td>CD 141</td>
</tr>
<tr>
<td>CD 254</td>
</tr>
<tr>
<td>COM 131</td>
</tr>
<tr>
<td>ENG 101</td>
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<tr>
<td>+ Elective</td>
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<tr>
<td></td>
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<tr>
<td>SEMESTER II</td>
</tr>
<tr>
<td>CD 150</td>
</tr>
<tr>
<td>CD 239</td>
</tr>
<tr>
<td>CD 256</td>
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<tr>
<td>SC 101</td>
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<tr>
<td>CIS 103</td>
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<tr>
<td>MTH 115</td>
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<tr>
<td>MTH 130</td>
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<tr>
<td>MTH 139</td>
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<tr>
<td>+ Elective</td>
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<tr>
<td></td>
</tr>
<tr>
<td>Minimum Hours Required:</td>
</tr>
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</table>

+ Electives—must be selected from the following:

| CD 100      | Directed Participation of Early Childhood Programs | 1 |
| CD 127      | Child Development, 5-12 years | 3 |
| CD 200      | Application of Child Development Learning Theories | 1 |
| CD 203      | Parents and the Child Caregiver | 3 |
| CD 209      | Early Childhood Special Projects | 3 |
| CD 253      | Abuse Within the Family | 3 |
| CD 713      | Cooperative Work Experience | 3 |
CHILD DEVELOPMENT —
CDA TRAINING CERTIFICATE

Brookhaven and Eastfield only
(Certificate)

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

<table>
<thead>
<tr>
<th>CREDIT</th>
<th>HOURS</th>
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</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
<td></td>
</tr>
<tr>
<td>CD 135</td>
<td>Introduction to Early Childhood Programs and Services</td>
</tr>
<tr>
<td>CD 140</td>
<td>Early Childhood Development, 0-3 Years</td>
</tr>
<tr>
<td>CD 150</td>
<td>Nutrition, Health and Safety of the Young Child</td>
</tr>
<tr>
<td>CD 239</td>
<td>Studies in Child Guidance</td>
</tr>
<tr>
<td>HD 106</td>
<td>Personal and Social Growth</td>
</tr>
<tr>
<td>+ Elective</td>
<td></td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>19-20</strong></td>
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</tbody>
</table>

| SEMESTER II | |
| CD 137 | Early Childhood Learning Environments, Activities and Materials | 4 |
| CD 141 | Early Childhood Development, 3-5 Years | 3 |
| CD 702 | Cooperative Work Experience or (2) | |
| CD 713 | Cooperative Work Experience or (3) | |
| CD 804 | Cooperative Work Experience | 4 |
| COM 131 | Applied Communications or | |
| ENG 101 | Composition I | 3 |
| + Elective | | 6-8 |
| **Total** | **18-22** |

Minimum Hours Required: 37

+ Electives—must be selected from the following:

| CD 125 | Infant and Toddler Learning Environments, Activities and Materials | 4 |
| CD 203 | Parents and the Child Caregiver/Teacher | 3 |
| CD 209 | Early Childhood Development Special Projects | 3 |
| CD 236 | The Special Child: Growth and Development | 3 |
| CD 250 | Supportive Services for Exceptional Children | 3 |
| CD 251 | Learning Programs for Children with Special Needs | 4 |
| CD 253 | Abuse Within the Family | 3 |
| CD 254 | Introduction to Administration of Child Care Programs | 3 |
| CD 256 | Advanced Administration Practices for Child Care Facilities | 3 |
| ITP 141 | American Sign Language | 4 |
CHILD DEVELOPMENT — INFANT-TODDLER OPTION

Brookhaven and Eastfield only

(Certificate)

This certificate program provides for an in-depth study of infant-toddler growth and development, programs, and services.

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

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Hours</th>
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<tr>
<td>CD 135</td>
<td>Introduction to Early Childhood Programs and Services</td>
<td>4</td>
</tr>
<tr>
<td>CD 140</td>
<td>Early Childhood Development, 0-3 Years</td>
<td>3</td>
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<tr>
<td>CD 239</td>
<td>Studies in Child Guidance</td>
<td>3</td>
</tr>
<tr>
<td>COM 131</td>
<td>Applied Communications or ENG 101</td>
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**SEMESTER II**

<table>
<thead>
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<tr>
<td>CD 150</td>
<td>Nutrition, Health and Safety of the Young Child</td>
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<tr>
<td>CD 125</td>
<td>Infant and Toddler Learning Environments, Activities and Materials</td>
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<tr>
<td>CD 203</td>
<td>Parents and the Child Caregiver/Teacher</td>
<td>3</td>
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<tr>
<td>SC 101</td>
<td>Introduction to Speech Communication</td>
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<tr>
<td>CD 253</td>
<td>Abuse Within the Family</td>
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<tr>
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Minimum Hours Required: 35

+ Electives—must be selected from the following:

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<th>Course Title</th>
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<td>CD 100</td>
<td>Directed Participation of Early Childhood Programs</td>
<td>1</td>
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<tr>
<td>CD 200</td>
<td>Application of Child Development Learning Theories</td>
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<td>CD 209</td>
<td>Early Childhood Special Projects</td>
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<td>CD 713</td>
<td>Cooperative Work Experience</td>
<td>3</td>
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<tr>
<td>SOC 203</td>
<td>Marriage and the Family</td>
<td>3</td>
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# CHILD DEVELOPMENT – SPECIAL CHILD CERTIFICATE

Brookhaven and Eastfield only

(Certificate)

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

## CREDIT HOURS

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<tr>
<th>SEMESTER I</th>
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<tr>
<td></td>
<td>Years</td>
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<td>CD 150</td>
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<tr>
<td></td>
<td>and Safety of</td>
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<td></td>
<td>the Young Child</td>
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<td>Growth and</td>
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<td>Development</td>
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<td>CD 239</td>
<td>Studies in Child</td>
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<td>Personal and</td>
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<thead>
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<tr>
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<td>CD 251</td>
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<td>CD 804</td>
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<td></td>
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<td>Communications</td>
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<td>3-4</td>
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</table>

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

+ Elective—must be selected from the following:

| CD 125 | Infant and Toddler Learning Environments, Activities and Materials | 4 |
| CD 127 | Early Childhood Development, 5-12 Years | 3 |
| CD 253 | Abuse Within the Family | 3 |
| ITP 141 | American Sign Language | 4 |
COMPUTER INFORMATION SYSTEMS – BUSINESS COMPUTER INFORMATION SYSTEMS

Offered at all seven campuses

(Associate Degree)

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

<table>
<thead>
<tr>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>CIS 103 Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105 Introduction to Business or MGT 136 Principles of Management</td>
<td>3</td>
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<tr>
<td>MTH 111 Mathematics for Business and Economics I</td>
<td>3</td>
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<td>ENG 101 Composition I</td>
<td>3</td>
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<tr>
<td>+ Elective</td>
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<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>CIS 162 COBOL Programming I</td>
<td>4</td>
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<tr>
<td>MTH 112 Mathematics for Business and Economics II</td>
<td>3</td>
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<tr>
<td>SC 101 Introduction to Speech Communication</td>
<td>3</td>
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<tr>
<td>CIS 150 Computer Program Logic and Design</td>
<td>3</td>
</tr>
<tr>
<td>ACC 201 Principles of Accounting I*</td>
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<table>
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<th>SEMESTER III</th>
<th>CREDIT HOURS</th>
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<tr>
<td>CIS 164 COBOL Programming II</td>
<td>4</td>
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<tr>
<td>ECO 201 Principles of Economics I</td>
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</tr>
<tr>
<td>ACC 202 Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>+ + Elective</td>
<td>3</td>
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<td>+ + + Elective</td>
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<table>
<thead>
<tr>
<th>SEMESTER IV</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>CIS 210 Assembly Language I</td>
<td>4</td>
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<tr>
<td>ECO 202 Principles of Economics II</td>
<td>3</td>
</tr>
<tr>
<td>Any CIS/CS or Accounting course</td>
<td>3</td>
</tr>
<tr>
<td>+ + + + Elective</td>
<td>3-4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13-14</strong></td>
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</tbody>
</table>

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

+ Elective—must be selected from the following:

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

+ + Elective—must be selected from the following:

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

+ + + Recommended Electives

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

Any 200 level accounting course not listed.

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

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

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

- CIS 172 or CS 122
- CIS 210 or CS 211

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

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

Offered at all seven campuses

(Associate Degree)

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

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
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<td>CIS 103</td>
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<tr>
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<td>ENG 101</td>
</tr>
<tr>
<td>PSY 131</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

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

| SEMESTER III |
| CIS 164      | COBOL Programming II | 4 |
| CIS 205      | JCL and Operating Systems | 4 |
| ACC 202      | Principles of Accounting II | 3 |
| + Elective   | + Elective | 3-4 |
|              | Total Semester III | 17-18 |

| SEMESTER IV  |
| CIS 210      | Assembly Language I | 4 |
| CIS 225      | Systems Analysis and Design | 4 |
| CIS 258      | On-Line Applications or Data Base Systems | 4 |
| + + + Elective | + + + Elective | 3-4 |
|              | Total Semester IV | 15-18 |

Minimum Hours Required | 63

+ Electives—must be selected from the following:

Any CIS or CS course (including CIS 701, 703, 704, 713 or 714).
ACC 204 Managed Accounting | 3
ACC 238 Cost Accounting | 3
ACC 250 Microcomputer-Based Accounting Applications | 3

+ + Electives—must be selected from the following:

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

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

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

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

CIS 172 or CS 122
CIS 210 or CS 211

*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.
DIGITAL ELECTRONICS TECHNOLOGY

Eastfield only

(Associate Degree)

This curriculum is designed to prepare a graduate to work as a technician on devices that require digital circuits such as computers, test equipment, automatic control units and central distribution systems. The student will learn schematic interpretation, test equipment usage, and technical communications.

<table>
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<td><strong>SEMESTER I</strong></td>
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<tr>
<td>ET 190 D.C. Circuits and Electrical Measurements* .................. 4</td>
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<tr>
<td>ENG 101 Composition I ........................................ 3</td>
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<tr>
<td>MTH 195 Technical Mathematics I** .................................. 3</td>
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<tr>
<td>PSY 101 Introduction to Psychology or Psychology 131 Applied Psychology and Human Relations ........................................ 3</td>
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<td>+ Elective ......................................................... 3</td>
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<tr>
<td><strong>Total</strong> ........................................ 16</td>
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</table>

| **SEMESTER II** |
| ET 191 A.C. Circuits* ........................................ 4 |
| ET 192 Digital Computer Principles .................................. 3 |
| ET 193 Active Devices .................................................. 4 |
| SC 101 Introduction to Speech Communication ......................... 3 |
| MTH 196 Technical Mathematics II .................................... 3 |
| **Total** ........................................ 17 |

| **SEMESTER III** |
| ET 260 Sinusoidal Circuits ........................................ 4 |
| ET 263 Digital Computer Theory .................................... 4 |
| ET 266 Computer Applications ........................................ 4 |
| + + Elective(s) ......................................................... 4 |
| **Total** ........................................ 16 |

| **SEMESTER IV** |
| ET 238 Linear Integrated Circuits .................................... 4 |
| ET 264 Digital Systems .................................................. 4 |
| ET 265 Digital Research .................................................. 3 |
| ET 267 Microprocessors .................................................. 4 |
| **Total** ........................................ 15 |

Minimum Hours Required ........................................ 64

**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

Eastfield and Mountain View only

(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.

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<tr>
<td>DFT 135 Reproduction Processes</td>
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<tr>
<td>DFT 183 Basic Drafting</td>
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<tr>
<td>COM 131 Applied Communications or</td>
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<td>ENG 101 Composition I</td>
<td>3</td>
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<td>MTH 195 Technical Mathematics I or</td>
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<tr>
<td>MTH 101 College Algebra</td>
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<tr>
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<td>DFT 245 Computer Aided Design</td>
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<td>+ Cooperative Work Experience</td>
<td>3-4</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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<td>PSY 131 Applied Psychology and Human Relations</td>
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<tr>
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<tr>
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<tr>
<td>DFT 248 Advanced CAD-Mechanical or</td>
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<td>DFT 249 Advanced CAD-Architectural</td>
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<tr>
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<tr>
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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.
DRAFTING AND COMPUTER AIDED DESIGN - ELECTRONIC DESIGN OPTION

Eastfield only

(associate degree)

This program prepares the student for employment in a wide range of electronic industries as a drafter or engineering aide. Information in related fields is provided to enable the student to work effectively with the engineer and professional staff. Cooperative work experience (co-op) can be a learning activity within the program.

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<tr>
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<tr>
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</table>

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

+CFT Courses—must be selected from the following:

- DFT 232 Technical Illustration .................................. 3
- DFT 242 Advanced Integrated Circuit Design .................. 3
- DFT 247 Advanced Printed Circuit Design ..................... 3
- DFT 249 Advanced CAD - Architectural ....................... 3
- DFT 250 Sheet Metal Design .................................. 3
- DFT 252 Advanced Computer Aided Design .................... 3
- DFT 255 Selected Topics in Drafting .......................... 3
- DFT 704 Cooperative Work Experience ....................... 4
- DFT 714 Cooperative Work Experience ....................... 4
- DFT 803 Cooperative Work Experience ....................... 3
- DFT 813 Cooperative Work Experience ....................... 3
- EGR 106 Descriptive Geometry ................................ 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 136 Principles of Management ............................ 3
- MGT 153 Small Business Management .......................... 3
- MGT 160 Principles of Purchasing ............................ 3
- MUS 104 Music Appreciation .................................. 3
- PHI 101 Introduction to Philosophy .......................... 3
- SPA 101 Beginning Spanish .................................... 4
- THE 101 Introduction to Theatre ............................ 3

**Elective—must be selected from the following:

- BPR 177 Blueprint Reading ..................................... 2
- BPR 178 Blueprint Reading ..................................... 2
- CIS 103 Introduction to Computer Information Systems .... 3
- ET 191 AC Circuits .......................................... 3
- GA 120 Printing Fundamentals ................................. 3
- OCF 176 Keyboarding ......................................... 1

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.
ELECTRONIC TELECOMMUNICATIONS

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

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

| CREDIT HOURS |

| SEMESTER I | ET 190 DC Circuits and Electrical Measurements | 4 |
| ET 191 AC Circuits | 4 |
| ENG 101 Composition I | 3 |
| MTH 195 Technical Mathematics I* | 3 |
| PSY 101 Introduction to Psychology or Applied Psychology and Human Relations | 3 |

| SEMESTER II | ET 102 Introduction to Telecommunications | 3 |
| ET 103 Introduction to Telecommunications Laboratory | 1 |
| ET 192 Digital Computer Principles | 3 |
| ET 193 Active Devices | 4 |
| SC 101 Introduction to Speech Communication | 3 |
| MTH 196 Technical Mathematics II | 3 |

| SEMESTER III | ET 290 Advanced Electronic Devices or Sinusoidal Circuits | 4 |
| ET 260 Linear Integrated Circuits Applications or Linear Integrated Circuits | 4 |
| ET 291 Telephony Switching Systems | 4 |
| ET 293 Basic Radio Circuity | 4 |

| SEMESTER IV | ET 294 High Frequency Transmission Systems | 4 |
| ET 295 Telecommunication Signaling | 4 |
| ET 297 System Installation and Testing | 3 |
| + Elective | 3 |

Minimum Hours Required 65

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

+ Electives—must be chosen from the following:

| ACC 131 Bookkeeping I | 3 |
| ART 104 Art Appreciation | 3 |
| BUS 105 Introduction to Business | 3 |
| BUS 143 Personal Finance | 3 |
| CIS 103 Introduction to Computer Information Systems | 3 |
| HUM 101 Introduction to the Humanities | 3 |
| MGT 136 Principles of Management | 3 |
| MGT 153 Small Business Management | 3 |
| MUS 104 Music Appreciation | 3 |
| OFC 172 Beginning Typing | 3 |
| PHY 131 Applied Physics | 4 |
| SPA 101 Beginning Spanish | 4 |

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

_Eastfield only_

_(Associate Degree)_

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

**CREDIT HOURS**

<table>
<thead>
<tr>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>GA 120 Printing Fundamentals</td>
<td>3</td>
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<tr>
<td>GA 136 Beginning Copy Preparation</td>
<td>3</td>
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<tr>
<td>ENG 101 Composition I or</td>
<td></td>
</tr>
<tr>
<td>COM 131 Applied Communications</td>
<td>3</td>
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<tr>
<td>JN 101 Introduction to Mass</td>
<td>3</td>
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<tr>
<td>Communications</td>
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<tr>
<td>OFC 172 Beginning Typing</td>
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<tr>
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<tr>
<td>GA 134 Basic Camera Operations</td>
<td>3</td>
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<tr>
<td>GA 140 Beginning Offset Printing</td>
<td>3</td>
</tr>
<tr>
<td>MTH 130 Business Mathematics or</td>
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<tr>
<td>MTH 115 College Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>SC 101 Introduction to Speech Communication</td>
<td>3</td>
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<td>+ Elective</td>
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<tbody>
<tr>
<td>GA 142 Basic Typesetting</td>
<td>3</td>
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<tr>
<td>GA 234 Intermediate Camera Operations</td>
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<tr>
<td>GA 236 Advanced Copy Preparation</td>
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<td>GA 704 Cooperative Work Experience or</td>
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<tr>
<td>PHO 110 Introduction to Photography and Photo-Journalism</td>
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<th>SEMESTER IV</th>
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<tbody>
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<td>GA 240 Advanced Offset Printing or</td>
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<td>GA 242 Intermediate Typesetting</td>
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<tr>
<td>JN 102 News Gathering and Writing or</td>
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<td>PHO 111 Advanced Photography and Photo-Journalism</td>
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<tr>
<td>PSY 101 Introduction to Psychology or</td>
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<td>PSY 131 Applied Psychology and Human Relations</td>
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<td>+ + Elective</td>
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</table>

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

_Electives—must be selected from the following:_

| GA 204 Electronic Publishing          | 4 |
| GA 206 Graphic Projects               | 3 |
| GA 225 Special Topics                 | 3 |
| CIS 103 Introduction to Computer Information Systems | 3 |
| DFT 232 Technical Illustrations       | 3 |
| JN 103 News Gathering and Writing     | 3 |
| PHO 111 Advanced Photography and Photo-Journalism | 3 |
| PHO 207 Photography for Publication   | 3 |

_Electives—must be selected from the following:_

| ACC 131 Bookkeeping I                 | 3 |
| BUS 105 Introduction to Business      | 3 |
| MGT 136 Principles of Management     | 3 |
| MGT 153 Small Business Management    | 3 |

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

Eastfield only

(Certificate)

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

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<td>SEMESTER I</td>
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<td>GA 120 Printing Fundamentals 3</td>
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<td>GA 136 Beginning Copy Preparation 3</td>
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<td>COM 131 Applied Communications 3</td>
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<tr>
<td>JN 101 Introduction to Mass Communications 3</td>
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<tr>
<td>GA 134 Basic Camera Operations 3</td>
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Minimum Hours Required 30

+ Elective — must be selected from the following:

GA 225 Special Topics 3
GA 205 Graphic Projects 3
CIS 103 Introduction to Computer Information Systems 3
DFT 232 Technical Illustration 3
JN 103 News Gathering and Writing 3
PHO 111 Advanced Photography and Photo-Journalism 3
INTERPRETER TRAINING PROGRAM

Eastfield only

(Associate Degree)

This program is designed to educate individuals to work with the deaf people, agencies and educational institutions. Course work will provide skills to work as an interpreter for the community, a vocational communication specialist, educational interpreter, interpreter aide in the schools and an aide for multiply handicapped deaf children or adults.

<table>
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<td>ITP 141 American Sign Language I ... 4</td>
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<td>ITP 144 Psychosocial Aspects of Deafness ... 3</td>
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<td>ITP 148 Receptive Fingerspelling ... 1</td>
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<td>ITP 147 Language Development of the Deaf ... 3</td>
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<td>ITP 150 Management Techniques for the Interpreter/Aide ... 4</td>
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<td>ITP 240 American Sign Language III ... 4</td>
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<td>ITP 250 Interpreting: Sign to Voice ... 3</td>
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<td>BIO 101 General Biology ... 4</td>
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<td>SC 101 Introduction to Speech Communication ... 3</td>
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<td>ITP 251 Education/Specialized Signs ... 4</td>
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<td>ITP 253 Interpreting: Voice to Sign ... 3</td>
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Minimum Hours Required ... 63

+Electives — must be selected from the following:

| ART 104 | Art Appreciation | 3 |
| HUM 101 | Introduction to the Humanities | 3 |
| MUS 104 | Music Appreciation | 3 |
| PHI 101 | Introduction to Philosophy | 3 |
| THE 101 | Introduction to the Theatre | 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.
INTERPRETER TRAINING
PROGRAM —
SIGN LANGUAGE STUDIES

Eastfield only
(Certificate)

This certificate offers entry level skills toward the development of sign language competency.

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<td>SEMESTER I</td>
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<td>ITP 148</td>
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<td>ENG 101</td>
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| SEMESTER II   |
| ITP 143       | American Sign Language II | 4 |
| ITP 147       | Language Development of the Deaf | 3 |
| ITP 702       | Cooperative Work Experience | 2 |
| ENG 102       | Composition II | 3 |
| + Elective    | **Total** | **15-16** |

Minimum Hours Required: 29

++ Elective — must be selected from the following:

| ITP 150 | Management Techniques for the Interpreter/Aide | 4 |
| ITP 231 | Interpreting: Ethics and Specifics | 3 |
| ITP 247 | Special Problems in Deafness | 3 |
| ITP 248 | Rehabilitation of the Multiply-Handicapped Deaf | 3 |
MANAGEMENT CAREERS —
ADMINISTRATIVE MANAGEMENT
OPTION

Offered at all seven campuses

(Associate Degree)

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

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<tr>
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</tr>
<tr>
<td>ENG 101 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MTH 111 Mathematics for Business and Economics I or MTH 130 Business Mathematics</td>
<td>3</td>
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<tr>
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<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKT 206 Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>ACC 201 Principles of Accounting I</td>
<td>3</td>
</tr>
<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>
<tr>
<td>+ + Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
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<table>
<thead>
<tr>
<th>SEMESTER III</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>ACC 202 Principles of Accounting II</td>
<td>3</td>
</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>
</tr>
<tr>
<td>SC 101 Introduction to Speech Communication</td>
<td>3</td>
</tr>
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<td></td>
<td>15</td>
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<table>
<thead>
<tr>
<th>SEMESTER IV</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 242 Human Resources Management</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>
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Minimum Hours Required: 63

Credit – must be selected from the following:

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

Foreign Language

+ + Electives – must be selected from the following:

<table>
<thead>
<tr>
<th>MGT 153</th>
<th>Small Business Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 171</td>
<td>Introduction to Supervision</td>
</tr>
<tr>
<td>MGT 212</td>
<td>Special Problems in Business</td>
</tr>
<tr>
<td>MGT 704</td>
<td>Cooperative Work Experience</td>
</tr>
<tr>
<td>MKT 137</td>
<td>Principles of Retailing</td>
</tr>
<tr>
<td>MKT 230</td>
<td>Salesmanship</td>
</tr>
<tr>
<td>MKT 233</td>
<td>Advertising and Sales Promotion</td>
</tr>
<tr>
<td>OFC 150</td>
<td>Office Calculating Machines</td>
</tr>
<tr>
<td>OFC 172</td>
<td>Beginning Typing</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

Offered at all seven campuses

(Associate Degree)

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

CREDIT HOURS

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 136</td>
<td>Principles of Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MGT 171</td>
<td>Introduction to Supervision</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MGT 704</td>
<td>Cooperative Work Experience</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BUS 105</td>
<td>Introduction to Business</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 101</td>
<td>Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SC 101</td>
<td>Introduction to Speech</td>
<td>3</td>
<td></td>
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<tr>
<th>SEMESTER II</th>
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<tbody>
<tr>
<td>MGT 242</td>
<td>Human Resources Management</td>
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<tr>
<td>MGT 714</td>
<td>Cooperative Work Experience</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CIS 103</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 111</td>
<td>Mathematics for Business and Economics I or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTH 130</td>
<td>Business Mathematics</td>
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<td></td>
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<td>ENG 102</td>
<td>Composition II</td>
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</thead>
<tbody>
<tr>
<td>MGT 237</td>
<td>Organizational Behavior</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MGT 804</td>
<td>Cooperative Work Experience</td>
<td>4</td>
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</tr>
<tr>
<td>ACC 201</td>
<td>Principles of Accounting I</td>
<td>3</td>
<td></td>
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<tr>
<td>ECO 201</td>
<td>Principles of Economics I</td>
<td>3</td>
<td></td>
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<td>13</td>
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</table>

<table>
<thead>
<tr>
<th>SEMESTER IV</th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>MGT 244</td>
<td>Problem Solving and Decision Making</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MGT 814</td>
<td>Cooperative Work Experience</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>+ Elective</td>
<td></td>
<td>3</td>
<td></td>
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<tr>
<td>+ + Elective</td>
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<td>3</td>
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Minimum Hours Required: 61

+ Elective—must be selected from the following:

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

Foreign Language

+ + Elective—must be selected from the following:

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>ANT 100</td>
<td>Introduction to Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>AST 101</td>
<td>Descriptive Astronomy</td>
<td>3</td>
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<tr>
<td>BIO 115</td>
<td>Biological Science</td>
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<tr>
<td>CHM 115</td>
<td>Chemical Science</td>
<td>4</td>
</tr>
<tr>
<td>GEO 101</td>
<td>Physical Geology</td>
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</tr>
<tr>
<td>GVT 201</td>
<td>American Government</td>
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<td>HST 101</td>
<td>History of the United States</td>
<td>3</td>
</tr>
<tr>
<td>HD 105</td>
<td>Basic Processes of Interpersonal Relationships</td>
<td>3</td>
</tr>
<tr>
<td>PSC 118</td>
<td>Physical Science</td>
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<tr>
<td>PHY 117</td>
<td>Concepts in Physics</td>
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</tr>
<tr>
<td>PSY 101</td>
<td>Introduction to Psychology</td>
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<tr>
<td>SOC 101</td>
<td>Introduction to Sociology</td>
<td>3</td>
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</tbody>
</table>

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

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 – TRANSPORTATION AND LOGISTICS MANAGEMENT OPTION

Eastfield only

(Associate Degree)

The Transportation and Logistics Management Option is designed to prepare trained entry-level personnel for the transportation industry with the ability to advance into management positions such as traffic manager, terminal manager, and safety specialist.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
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<tr>
<td>TRT 146</td>
</tr>
<tr>
<td>BUS 105</td>
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<td>MTH 111</td>
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<td>MTH 130</td>
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<tr>
<td>TRT 145</td>
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<tr>
<td>ACC 201</td>
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<tr>
<td>SC 101</td>
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<td>+ Elective or Cooperative Work Experience</td>
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<td>TRT 215</td>
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<td>CIS 103</td>
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<td>ECO 201</td>
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<td>MKT 206</td>
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<td>PSY 131</td>
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<td>PSY 101</td>
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<td>SEMESTER IV</td>
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<td>TRT 243</td>
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<tr>
<td>TRT 247</td>
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<tr>
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<td>TRT 703</td>
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<td>TRT 713</td>
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<td>TRT 803</td>
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<td>ACC 202</td>
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<td>MGT 237</td>
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<td>MKT 233</td>
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<td>MTH 202</td>
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<td>OFC 231</td>
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<td>HUM 101</td>
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<tr>
<td>ENG 206</td>
</tr>
<tr>
<td>MUS 104</td>
</tr>
<tr>
<td>PHI 101</td>
</tr>
<tr>
<td>THE 101</td>
</tr>
<tr>
<td>Foreign Language</td>
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</tbody>
</table>

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.
OFFICE TECHNOLOGY

Offered at all seven campuses

(Associate)

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

CREDIT
HOURS

CORE CURRICULUM

(For all first year students in Office Careers)

SEMESTER I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MTH 130</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>CIS 103</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>OFC 160</td>
<td>Office Calculating Machines</td>
<td>3</td>
</tr>
<tr>
<td>OFC 172</td>
<td>Beginning Typing*</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Semester I Credits**: 18

SEMESTER II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ENG 102</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>OFC 150</td>
<td>Automated Filing Procedures</td>
<td>3</td>
</tr>
<tr>
<td>OFC 162</td>
<td>Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>OFC 173</td>
<td>Intermediate Typing*</td>
<td>3</td>
</tr>
<tr>
<td>ACC 131</td>
<td>Bookkeeping I or principles of Accounting</td>
<td>3</td>
</tr>
<tr>
<td>OFC 179</td>
<td>Office Information Systems</td>
<td></td>
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<tr>
<td></td>
<td>Concepts**#</td>
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<tr>
<td>OFC 182</td>
<td>Introduction to Word Processing**#</td>
<td>1</td>
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</tbody>
</table>

**Total Semester II Credits**: 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 145 equivalent to 143 and 144

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

#Richland students must take OFC 190.

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 TECHNOLOGY --
ADMINISTRATIVE ASSISTANT Option

Offered at all seven campuses

(Associate Degree)

The primary objective of the Administrative Assistant Option to the Office Technology 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>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTERS I and II</td>
</tr>
<tr>
<td>Core Curriculum ..................................... 36</td>
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<tr>
<td>36</td>
</tr>
<tr>
<td>SEMESTER III</td>
</tr>
<tr>
<td>OFC 231 Business Communications ..................... 3</td>
</tr>
<tr>
<td>SC 101 Introduction to Speech Communication 3</td>
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<tr>
<td>PSY 131 Applied Psychology and Human Relations or</td>
</tr>
<tr>
<td>HD 105 Basic Processes of Interpersonal Relationships ..................................... 3</td>
</tr>
<tr>
<td>OFC 185 Basic Machine Transcription** ............. 1</td>
</tr>
<tr>
<td>OFC 282 Word Processing Applications .............. 1</td>
</tr>
<tr>
<td>OFC 273 Advanced Typing Applications* ............. 2</td>
</tr>
<tr>
<td>OFC 159 Beginning Shorthand or</td>
</tr>
<tr>
<td>OFC 103 Speedwriting .................................. 4</td>
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<tr>
<td>17</td>
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<tr>
<td>SEMESTER IV</td>
</tr>
<tr>
<td>HUM 101 Introduction to the Humanities ............. 3</td>
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<tr>
<td>OFC 283 Specialized Software I ....................... 1</td>
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<td>MGT 136 Principles of Management or</td>
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<tr>
<td>MGT 237 Organizational Behavior .................... 3</td>
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<td>OFC 166 Intermediate Shorthand or</td>
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<td>OFC 106 Speedwriting Dictation and Transcription ..................................... 4</td>
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<td>OFC 703 Cooperative Work Experience or</td>
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<td>OFC 704 Cooperative Work Experience ............. 3-4</td>
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</tbody>
</table>

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 TECHNOLOGY -- LEGAL SECRETARY OPTION

Offered at all seven campuses
( Associate Degree)

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

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTERS I and II</td>
</tr>
<tr>
<td>Core Curriculum</td>
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<tr>
<td>SEMESTER III</td>
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<tr>
<td>OFC 231 Business Communications</td>
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<tr>
<td>SC 101 Introduction to Speech Communication</td>
</tr>
<tr>
<td>PSY 131 Applied Psychology and Human Relations or HD 105 Basic Processes of Interpersonal Relationships</td>
</tr>
<tr>
<td>OFC 185 Basic Machine Transcription**</td>
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<tr>
<td>OFC 282 Word Processing Applications</td>
</tr>
<tr>
<td>OFC 273 Advanced Typing Applications*</td>
</tr>
<tr>
<td>HUM 101 Introduction to the Humanities</td>
</tr>
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<tr>
<td>SEMESTER IV</td>
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<tr>
<td>BUS 234 Business Law</td>
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<td>OFC 167 Legal Terminology and Transcription</td>
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<td>OFC 274 Legal Secretarial Procedures</td>
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<td>OFC 285 Applied Machine Transcription</td>
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<td>OFC 703 Cooperative Work Experience or OFC 704 Cooperative Work Experience</td>
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Minimum Hours Required: 65

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

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

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

Offered at all seven campuses

(Certificate)

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

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<td>SEMESTER I</td>
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<td>MTH 130 Business Mathematics .................. 3</td>
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<td>OFC 160 Office Calculating Machines ............ 3</td>
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<td>OFC 172 Beginning Typing* .................... 3</td>
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<td>BUS 105 Introduction to Business ............... 3</td>
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<td>CIS 103 Introduction to Computer Information Systems ........ 3</td>
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| SEMESTER II   |
| OFC 162 Office Procedures .................... 3 |
| OFC 173 Intermediate Typing** ................. 3 |
| OFC 190 Principles of Word Processing** ....... 4 |
| OFC 231 Business Communications ................ 3 |
| ACC 131 Bookkeeping I or ACC 201 Principles of Accounting ........ 3 |
| 16            |

Minimum Hours Required: .......................... 34

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

**NOTE: OFC 190 equivalent to 179, 182 and 185
OFFICE TECHNOLOGY
OFFICE INFORMATION
SYSTEMS SPECIALIST

Offered at all seven campuses

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

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

CREDIT HOURS

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

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

SEMESTER III
SC 101 Introduction to Speech Communication ............ 3
PSY 131 Applied Psychology and Human Relations or
HD 105 Basic Processes of Interpersonal Relations ........ 3
OFC 150 Automated Filing Procedures .................... 3
OFC 231 Business Communications ....................... 3
OFC 283 Specialized Software I*** or
OFC 284 Specialized Software II*** ..................... 1
OFC 285 Applied Machine Transcription ................. 1
+ Elective .................................................. 3

SEMESTER IV
BUS 237 Organizational Behavior or
MGT 136 Principles of Management ...................... 3
OFC 703 Cooperative Work Experience or
OFC 704 Cooperative Work Experience or
Elective(s) ............................................... 3-4
+ Electives ............................................... 3
+ + Electives ............................................. 3

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

+ Electives—must be selected from the following:
OFC 182 Introduction to Word Processing*** ........... 1
OFC 282 Word Processing Applications*** ............... 1
OFC 283 Specialized Software I or
OFC 284 Specialized Software II*** ..................... 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 145 equivalent to 143 and 144
OFC 190 Equivalent to 179, 182 and 185

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

#Richland students must take OFC 190.

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.
SOCIAL WORK ASSOCIATE

Eastfield only

( Associate Degree)

The Social Work Associate Program is designed to prepare individuals interested in working with people to obtain entry-level employment in public and private social service agencies. The social service worker is equipped with skills, knowledge, values, and sensitivity to effectively serve human needs in a variety of community settings. Students have the options to select courses that will prepare them to work in general social services or specialized social services for chemical abuse or the aging.

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Minimum Hours Required                      60

+ Electives – must be selected from the following:

|               |
| SW 226        | Nursing Home Activity Director Training | 4 |
| SW 228        | Special Topics in Social Services       | 3 |
| SW 232        | Human Behavior and Social Environment   | 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.
SOCIAL WORK – HUMAN SERVICES

Eastfield only

(Certificate)

This certificate program provides training in three areas: child development, social work, and interpreter training. Students will attain interdisciplinary competencies and select one area in which to do their cooperative work experience. Students completing this certificate may choose to obtain entry level jobs in the human services field or continue their associate degree work in one of the three areas.

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<td>Minimum Hours Required ....................... 32</td>
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</table>
ACCOUNTING

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

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

(ACC) 201 Principles Of Accounting I (3)
This course covers the theory and practice of measuring and interpreting financial data for business units. Topics include the operating cycle, the preparation of financial statements, depreciation, inventory valuation, and credit losses. (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, career planning, interpersonal skills, and an exit session. (1 Lec., 15 Lab.)
hours per week for a total of three credit hours. Seminar topics include an orientation session, setting and writing job objectives, and additional independent study of business topics. The independent study topics in this course must be different from those included in the previous cooperative education course. (1 Lec., 15 Lab.)

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

AIR CONDITIONING AND REFRIGERATION

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

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

(ACR) 120 Principles Of Refrigeration II (3)
This course is a comprehensive course that includes Air Conditioning 121 and 122. Students may register in the comprehensive course or the inclusive courses. The physical principles applying to refrigeration systems are studied including thermodynamics, gas laws, heat transfer, refrigerants, pressure-enthalpy diagrams, vapor compression systems, safety procedures and the proper safe use of handtools. Laboratory fee. (4 Lec., 5 Lab.)

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

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

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

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

(ACR) 127 Principles Of Electricity II (3)
Prerequisite: Air Conditioning and Refrigeration 126. This course continues the study of electricity applied to air conditioning and refrigeration. Emphasis is placed on the construction and diagnosis of complex electrical circuits and alternating current motors used in the air conditioning and refrigeration service industry. Laboratory fee. (2 Lec., 2 Lab.)

(ACR) 130 Residential Cooling Systems (6)
Prerequisites: Air Conditioning and Refrigeration 120 and 125. This course is a comprehensive course that includes Air Conditioning 131 and 132. Students may register in the comprehensive course or the inclusive courses. This course covers compressors, condensers, evaporators, metering devices, pipe sizing, piping practices, seasonal maintenance, electrical systems, system troubleshooting and system installation. Laboratory fee. (4 Lec., 5 Lab.)

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

(ACR) 132 Residential Cooling Systems II (3)
Prerequisite: Air Conditioning and Refrigeration 131. This course includes pipe sizing, piping practices, seasonal maintenance, system troubleshooting and system installation. Laboratory fee. (2 Lec., 3 Lab.)
(ACR) 140 Residential Heating Systems (6)
Prerequisites: Air Conditioning and Refrigeration 120 and 125. This course is a comprehensive course that includes Air Conditioning 141 and 142. Students may register in the comprehensive course or the inclusive courses. The servicing of residential heating systems is studied. Topics include gas-fired furnaces, electric furnaces, heat pumps, control circuits and other related topics. Laboratory fee. (4 Lec., 5 Lab.)

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

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

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

(ACR) 209 Contractor Estimating I (3)
Prerequisites: Air Conditioning and Refrigeration 122 and 127. This course is a study of the procedures and principles used in the industry by service contractors. Laboratory fee. (2 Lec., 3 Lab.)

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

(ACR) 212 System Servicing (8)
Prerequisites: Air Conditioning and Refrigeration 130 and 125. This course is a comprehensive course that includes Air Conditioning 213 and 214. Students may register in the comprehensive course or the inclusive courses. This course includes psychrometric air properties, system balancing, the service of humidifiers and electronic air cleaners, advanced system troubleshooting, and system installation. Laboratory fee. (4 Lec., 5 Lab.)

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

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

(ACR) 221 Refrigeration Loads (3)
Prerequisites: Air Conditioning and Refrigeration 130 and 140. This course focuses on the analysis and estimation of refrigeration loads for medium and low temperature systems. Product storage data and procedures for calculating loads with a variety of products and refrigeration equipment are included. Laboratory fee. (2 Lec., 2 Lab.)
(ACR) 222 Advanced Systems (3)
Prerequisite: Air Conditioning and Refrigeration 221. Large commercial and industrial air conditioning systems are introduced. Basic system designs, equipment and control systems are the main topics. Instruction on air handling units, air volume boxes, centrifugal chillers, absorption systems, cooling towers, water treatment, and chilled water systems is included. Laboratory fee. (2 Lec., 3 Lab.)

(ACR) 223 Medium Temperature Refrigeration Systems (3)
Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 221. Service and installation procedures for medium temperature equipment as found in food stores, warehouses, distribution centers, and processing plants are presented. Particular attention is given to electrical and mechanical features and to defrost subsystems. Laboratory fee. (2 Lec., 3 Lab.)

(ACR) 224 System Testing And Balancing (3)
Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 222. Concepts and procedures for determining the effectiveness and efficiency of an air conditioning system are studied. System balance, capacity, load requirements and energy consumption are considered. Also included are the performance data and the use of test instruments for measurement of air flow, water flow, energy consumption, and recording of temperature. Laboratory fee. (2 Lec., 2 Lab.)

(ACR) 227 Low Temperature Refrigeration Systems (3)
Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 221. Service and installation procedures for low temperature equipment as found in food stores, warehouses, distribution centers, and industrial plants are presented. Particular attention is given to electrical and mechanical characteristics and to defrost system requirements. Laboratory fee. (2 Lec., 3 Lab.)

(ACR) 228 Air Conditioning System Equipment Selection (3)
Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 222. Methods of equipment selection are covered for air conditioning load requirements. Consideration is given to system layout, utility service, control schemes, duct sizing, and installation practices. Laboratory fee. (2 Lec., 3 Lab.)

(ACR) 229 Refrigeration Equipment Selection (3)
Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 223 or 227. This course presents a procedure for selecting equipment and estimating the capacity of commercial refrigeration systems. Consideration is given to component compatibility, system continuity control, balancing, and efficiency. Laboratory fee. (2 Lec., 2 Lab.)

(ACR) 230 Energy Conservation (3)
Prerequisite: Credit or enrollment in Air Conditioning and Refrigeration 229. The flow of energy in an air conditioning or refrigeration system is examined in depth. Emphasis is on cost effectiveness and energy savings. Practical situations are examined where industry offers a range of equipment or construction designs using various sources of energy with different degrees of efficiency. Laboratory fee. (2 Lec., 2 Lab.)

(ACR) 703 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Air Conditioning/Refrigeration program or Instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include job interview and job application techniques, job site interpersonal relations, and employer expectations of employees. (1 Lec., 15 Lab.)

(ACR) 704 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Air Conditioning/Refrigeration program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include job interview and job application techniques, job site interpersonal relations, and employer expectations of employees. (1 Lec., 20 Lab.)

(ACR) 713 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Air Conditioning program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 15 Lab.)

(ACR) 714 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Air Conditioning program or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of topics which include preparation of resumes, changing jobs, supervising subordinates, and building self-esteem. (1 Lec., 20 Lab.)
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) 102 World Regional Geography (3)
A study of major developing and developed regions with emphasis on awareness of prevailing world conditions and developments, including emerging conditions and trends, and awareness of diversity of ideas and practices to be found in those regions. Course content may include one or more regions. (3 Lec.)

(ANT) 104 American Indian Culture (3)
Native Americans are studied from three perspectives: Native American history and prehistory; traditional Indian cultures; and native Americans today. The latter theme stresses current topics such as discrimination, poverty, employment, reservations, The Bureau of Indian Affairs, self-determination, health care, etc. (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.)

(ANT) 231 Introduction To Archeology (3)
This course is an anthropological approach to archeology. Topics include an Introduction to the study of humanity's past. How archeologists retrieve, process, analyze and interpret surviving prehistoric materials is covered, as well as a survey of world prehistory through neolithic times. (3 Lec.)

ART

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

(ART) 105 Survey Of Art History (3)
This course covers the history of art from prehistoric time through the Renaissance. It explores the 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)
Prerequisites: 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) 203 Art History (3)
Prerequisites: Art 105 and Art 106. The development of the art of western culture during the Renaissance Period is presented. Emphasis is on the development of Renaissance art in Northern and Southern Europe. (3 Lec.)

(ART) 204 Art History (3)
Prerequisites: Art 105 and Art 106. The development of the art of western culture from the late 19th century through today is presented. Emphasis is on the development of modern art in Europe and America. (3 Lec.)

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

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

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

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

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

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

(ART) 217 Watercolor I (3)
Prerequisites: Art 110, Art 111, and Art 115 or demonstrated competence approved by the instructor. This course explores studio techniques in water base media. Emphasis is placed on exploration of a variety of modes and techniques as a means to original expression. (2 Lec., 4 Lab.)
(ART) 218 Watercolor II (3)
Prerequisite: Art 217. This course continues the development of skills in water base media. (2 Lec., 4 Lab.)

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

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

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

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

ASTRONOMY

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

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

(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.)

(ART) 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.)

AUTO BODY

(AB) 111 Basic Metal Principles (3)
Prerequisite: Concurrent enrollment in Auto Body 112. The use of hand and air tools is covered. Filling of plastic is included. Preparing the metal, sanding, masking, and priming surfaces on minor damages are emphasized. Laboratory fee. (90 Contact Hours)

(AB) 112 Applied Basic Metal Principles (2)
Prerequisite: Concurrent enrollment in Auto Body 111. This course emphasizes hands-on use of hand and air tools used in metal repair. Techniques covered in Auto Body 111 will be applied to minor repair. Laboratory fee. (60 Contact Hours)

(AB) 113 Minor Metal Repair (3)
Prerequisite: Concurrent enrollment in Auto Body 114. Body construction and sheet metal alignment are studied. Emphasis is on the various techniques of applying plastic to minor damages. Laboratory fee. (90 Contact Hours)

(AB) 114 Applied Minor Metal Repair (2)
Prerequisite: Concurrent enrollment in Auto Body 113. This course emphasizes the hands-on techniques used in sheet metal alignment and damage correction. Procedures and tools included in Auto Body 113 will be covered. Laboratory fee. (60 Contact Hours)

(AB) 121 Basic Paint Principles (3)
Prerequisite: Concurrent enrollment in Auto Body 122. This course presents the use of sanders and other equipment. Sanding and applying primer and paint are stressed. The use and operation of the spray gun are covered. Laboratory fee. (90 Contact Hours)

(AB) 122 Applied Basic Paint Principles (2)
Prerequisite: Concurrent enrollment in Auto Body 121. This course will cover hands-on techniques in the use of power and hand sanding as well as use of the spray gun. The techniques included in Auto Body 121 will be covered. Laboratory fee. (60 Contact Hours)

(AB) 123 Paint Blending And Spot Repair Techniques (3)
Prerequisite: Concurrent enrollment in Auto Body 124. The use of manufacturers' codes, mass and tint tone methods, and color selection are examined. Initial color matching, correction, and color tinting are covered. Spray gun maintenance, operation, patterns and corrective adjustments receive particular attention. Polishing, touch-up, and
detailing procedures are studied. Topics include the use of rubbing compounds, polishes, and buffing techniques. Minor surface repairs are also included. Laboratory fee. (90 Contact Hours)

(AB) 124 Applied Blending And Spot Repair Techniques (2)
Prerequisite: Concurrent enrollment in Auto Body 123. This course examines potential problems that occur in the application of the finish on today's automobile. Recognition, prevention, and correction of problems are stressed. Laboratory fee. (60 Contact Hours)

(AB) 139 Body Shop Operations (3)
The basic business principles of managing an automobile service shop are studied. Emphasis is on management functions, financial analysis, and governmental regulations. (48 Contact Hours)

(AB) 211 Major Panel Replacement (3)
Prerequisite: Concurrent enrollment in Auto Body 212. The use of power tools and cutting tools is presented. Emphasis is on the repair and replacement of panels. Laboratory fee. (90 Contact Hours)

(AB) 212 Applied Major Panel Replacement (2)
Prerequisite: Concurrent enrollment in Auto Body 211. This course emphasizes repair and replacement of panels on in-service automobiles. The adjustment, repair and replacement of equipment and minor electrical apparatus are also covered. Laboratory fee. (60 Contact Hours)

(AB) 213 Major Collision And Frame Repair (3)
Students learn to use power frame alignment equipment through lecture, demonstration, and actual job repairs. Laboratory fee. (90 Contact Hours)

(AB) 221 Advanced Paint Techniques (3)
This course focuses on the development of painting skills. Emphasis is on mixing colors, matching colors, and texture. Special decorative effects are also covered, such as simulated wood and vinyl application. Transfer repair, renewal, removal, film application, painting and taping techniques are included. Laboratory fee. (90 Contact Hours)

(AB) 222 Applied Advanced Paint Techniques (2)
Prerequisite: Credit or concurrent enrollment in Auto Body 221. This course further develops painting skills with hands-on training, emphasizing mixing colors and matching color and texture of paint on in-service automobiles. Laboratory fee. (60 Contact Hours)

(AB) 225 Special Auto Body Applications (1)
This is a development course designed to allow students to program their own specialized objectives under instructional supervision. This will permit the student to upgrade existing skills or develop a new skill. This course may be repeated for credit as topics vary for a maximum of three credit hours. Laboratory fee. (30 Contact Hours)

(AB) 235 Estimating (3)
The procedures for estimating damage on automobiles are presented. (3 Lec.)

(AB) 245 Welding For Auto Body (3)
This course covers the basics of oxyacetylene welding, spot welding (electric), and electric arc welding. Laboratory fee. (90 Contact Hours)

(AB) 703 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Auto Body Technology program or instructor approval. This introductory course combines productive work experience with academic study. The student, employer and Instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminars consist of Introduction to co-op, writing objectives of co-op, painting seminar, and frame repair seminar. (1 Lec., 15 Lab.)

(AB) 714 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Auto Body Technology program or instructor approval. This advanced course combines productive work experience with academic study. The student, employer and Instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminars consists of human relations, adjustment on the job, vertical and horizontal working relationships; and fundamentals of good working relationships. (1 Lec.; 20 Lab.)
AUTOMOTIVE TECHNOLOGY

(AT) 109 Minor Vehicle Service (3)
This course introduces shop operations, customer relations, flat rate manuals, service manuals, safety, organizational design, pay structure, equipment, tools and basic operational theories. Also included are service procedures for lubrication, batteries, the cooling system, wheels and tires and new car pre-delivery service. Laboratory fee. (90 Contact Hours)

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

(AT) 112 Engine Repair II (4)
Prerequisite: Credit or concurrent enrollment in Automotive Technology 110. This course is a continuation of Automotive Technology 110. Engine rebuilding is continued with emphasis on in-service automotive repair. Laboratory fee. (120 Contact Hours)

(AT) 114 Engine Analysis And Tune-Up (4)
Techniques for diagnosing the automobile engine and other areas are covered. Electronics and conventional ignition systems are stressed. Carburetion and fuel injection systems are introduced. Complete tune-up procedures, using the latest test equipment are studied to insure the proper application to the automobile. Laboratory fee. (120 Contact Hours)

(AT) 116 Fuel And Emission Systems (4)
This course covers the principles and functions of the automotive fuel system including the carburetor, fuel pump, gas tank and emission control systems. Diagnosis and repair and adjustment of emission control systems, repair and adjustment of the carburetor, fuel injection and their components are stressed. Laboratory fee. (120 Contact Hours)

(AT) 119 Electrical Systems (3)
This course covers the automobile electrical system, including batteries, wiring, lighting, alternators, generators, starters and voltage regulators. The use of electrical test equipment and schematics are covered. The proper care and use of tools is stressed. Laboratory fee. (90 Contact Hours)

(AT) 212 Special Automotive Applications (1)
This is a skill development course designed to allow students to program their own specialized objectives under instructional supervision. This course will permit the student to upgrade existing skills or develop a new skill. This course may be repeated for credit as topics vary for a maximum of three credit hours. Laboratory fee. (30 Contact Hours)

(AT) 222 Heating And Air Conditioning Systems (3)
This course focuses on the principles of operation and service techniques applied to automobile and air conditioning systems. Topics include components, testing, diagnosing, charging and repair practices. Laboratory fee. (90 Contact Hours)

(AT) 223 Brake Systems (4)
This course covers diagnosis and repair of both drum and disc brake systems, power brake boosters, master cylinders, wheel cylinders and related component parts. Laboratory fee. (120 Contact Hours)

(AT) 225 Front End Systems (4)
This course will cover the proper techniques and procedures for complete front-end service, wheel alignment, replacement of worn parts, balancing wheels and related front-end and steering mechanisms. Laboratory fee. (120 Contact Hours)

(AT) 227 Standard Transmission And Drive Trains (4)
This course includes the operating principles, construction, and maintenance of the manual transmission and related drive-train components. Laboratory fee. (120 Contact Hours)

(AT) 229 Automatic Transmissions I (4)
The theory, operation and diagnosis of automatic transmissions are studied. Rebuilding of automatic transmissions is introduced. Laboratory fee. (120 Contact Hours)

(AT) 231 Automatic Transmissions II (4)
Prerequisite: Credit or concurrent enrollment in Automotive Technology 229. This course is a continuation of Automotive Technology 229. Transmission rebuilding is continued with emphasis on in-service automobile repair. Laboratory fee. (120 Contact Hours)

(AT) 248 Automotive Electronics (3)
Prerequisite: Automotive Technology 119 or demonstrated competency approved by the instructor. A study of solid state and microprocessor electronics used in the automotive electrical system with emphasis on diagnostic and troubleshooting procedures and use of test equipment. Laboratory fee. (90 Contact Hours)

(AT) 703 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Automotive 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 experience. Students must develop new learning objectives each semester. The seminars consist of topics which include introduction to co-op, orientation for developing the learning plan, workplace procedures and ethics; preparation of repair orders, war-
ranty claims and related documentation; developing service-oriented attitudes on the job; and Investigation of automotive-related careers. (1 Lec., 15 Lab.)

(AT) 704 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Automotive 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 experience. Students must develop new learning objectives each semester. The seminars consist of topics which include Introduction to co-op, orientation for developing the learning plan, workplace procedures and ethics; preparation of repair orders, warranty claims and related documentation; developing service-oriented attitudes on the job; and Investigation of automotive-related careers. (1 Lec., 15 Lab.)

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

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

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

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

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

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

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

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

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

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

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

(BIO) 218 Field Biology (3)
Local plant and animal life are surveyed in relationship to the environment. Aquatic and terrestrial communities are studied with reference to basic ecological principles and techniques. Emphasis is upon classification, identification, and collection of specimens in the field. This course may be repeated for credit. (2 Lec., 4 Lab.)

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

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

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

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

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

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

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

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

BUSINESS

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

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

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

CHEMISTRY

(CHM) 101 General Chemistry (4)
Prerequisites: Developmental Mathematics 093 or equivalent and any one of the following: high school chemistry, Chemistry 115, or the equivalent. This course is for science and science-related majors. Fundamental concepts of chemistry are presented including states and properties of matter, the periodic table, chemical reaction types and energy relationships, chemical bonding, atomic and molecular structure, stoichiometry, gas laws and solutions. Laboratory fee. (3 Lec., 3 Lab.)

(CHM) 102 General Chemistry (4)
Prerequisite: Chemistry 101. This course is for science and science-related majors. It is a continuation of Chemistry 101. Previously learned and new concepts are applied. Topics include reaction kinetics and chemical equilibrium, acids, bases, salts and buffers, thermodynamics, colligative properties of solutions, electrochemistry, transition-metal chemistry, nuclear chemistry, qualitative inorganic analysis and an introduction to organic chemistry. Laboratory fee. (3 Lec., 3 Lab.)

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

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

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

(CHM) 201 Organic Chemistry I (4)
Prerequisite: Chemistry 201. 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., 4 Lab.)

(CHM) 202 Organic Chemistry II (4)
Prerequisite: Chemistry 201. This course is for science and science-related majors. It is a continuation of Chemistry 201. Topics studied include properties and synthesis of aliphatic and aromatic systems of aldehydes, ketones, carboxylic acids, esters, ethers, amines, alcohols, and amides. Further topics include polyfunctional and heterocyclic compounds, amino acids, proteins, lipids and carbohydrates. Laboratory includes qualitative organic analysis. Laboratory fee. (3 Lec., 4 Lab.)
(CHM) 203 Quantitative Analysis (4)
Prerequisite: Chemistry 102, Mathematics 101. A survey of methods used in analytical chemistry: gravimetric and volumetric methods based on equilibria, oxidation-reduction, and acid-base theory, spectrophotometry, chromatography and electroanalytical chemistry. (2 Lec., 6 Lab.)

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

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

CHILD DEVELOPMENT

(CD) 100 Directed Participation Of Early Childhood Programs (1)
This course provides in-depth observation and participation experiences and activities with young children at the Parent/Child Study Center and other appropriate child-care facilities. It is repeated four times concurrently with required Child Development core or elective courses. (30 Contact Hours)

(CD) 125 Infant And Toddler Learning Environments Activities And Materials (4)
This course is a study of appropriate learning experiences for infants and toddlers in child-care facilities. Emphasis is on quality environments, learning activities, materials and effective teaching techniques. The laboratory experience includes observing and participating in the Parent/Child Study Center and community child-care facilities. Laboratory fee. (3 Lec., 2 Lab.)

(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) 128 Cultural Diversity In The Classroom (3)
This course is a study of diverse cultures. Emphasis is on research, community organizations, teaching techniques and appropriate early childhood classroom activities. (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) 200 Application Of Learning Theories (1)
This course provides application of child development learning theories with young children at the Parent/Child learning Study Center and other appropriate child-care facilities. It is repeated four times concurrently with required Child Development core or elective courses. (30 Contact Hours)

(CD) 203 Parents And The Child Caregiver/Teacher (3)
Relationships between caregivers, teachers and parents of young children are studied. Emphasis is on ways to develop parental involvement in child-care facilities. The course includes observation and participation with teachers, parents, and young children in group settings. (3 Lec.)
CD 209 Early Childhood Development Special Projects (3)
Registration for this course must be preceded by an interview with a child development instructor. A particular dimension of child-care is explored in depth by the student in an individual project. Participation in a designated child-care center or facility directly related to the student's special project is included. This course is repeatable for credit as topics vary. (3 Lec.)

CD 233 Directed Participation Of Early Childhood Programs (4)
This course provides in-depth observation and participation experiences and activities with young children at the Parent/Child Study Center and other appropriate child-care facilities. Laboratory fee. (2 Lec., 5 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 239 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 244 Application Of Child Development Learning Theories (4)
This course provides application of child development learning theories with young children at the Parent/Child Study Center and other appropriate child-care facilities. Laboratory fee. (2 Lec., 5 Lab.)

CD 250 Supportive Services For Exceptional Children (3)
The focus of this course is on identifying local, state, and 10 national resources for exceptional children and their families. Referral and resource information for special children is gathered through field studies, community involvement, and independent activities. (3 Lec.)

CD 251 Learning Programs For Children with Special Needs (4)
This course focuses on successful model programs for encouraging maximum learning from young children with special needs. Materials, activities, and methods of working with children are examined. Laboratory fee. (2 Lec., 5 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.)

CD 254 Introduction To Administration Of Child Care Programs (3)
The management of preschool/day care centers is studied. Topics include budgeting, record-keeping, food, health and referral services, and personnel practices. Laboratory fee. (2 Lec., 2 Lab.)
(CD) 256 Advanced Administrative Practices For Child Care Facilities (3)
Prerequisite: Child Development 254. This course is a study of advanced administrative procedures for child-care programs. Topics include planning, financial management, personnel policies, evaluation, leadership styles, and facility design. Laboratory fee. (2 Lec., 2 Lab.)

(CD) 702 Cooperative Work Experience (2)
Prerequisites: Completion of two courses in the Child Development 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. Instructor and employer will evaluate the student's job performance. The seminars consist of introduction to co-op, orientation to job learning objectives, writing learning plan and developing college degree plan. (1 Lec., 10 Lab.)

(CD) 713 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Child Development 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. Instructor and employer will evaluate the student's job performance. The seminars consist of exploring education, planning for work, exploring personal and social growth, clarifying career goals and developing individual potential. (1 Lec., 15 Lab.)

(CD) 804 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Child Development 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 experience. Instructor and employer will evaluate the student's job performance. The seminars consist of discussing life's transitions (professional and personal), developing communication skills, appraising self and career performance and exploring stress management techniques. (1 Lec., 20 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 work-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) 111 Data Entry Applications And Concepts (3)
Prerequisite: Office Careers 176 or one year typing in high school or demonstrated competence approved by the instructor. This course provides hands-on experience using a personal computer for data entry applications. Students will learn to use a data entry utility program to create, change, and modify data sets, as well as enter variable data. Speed and accuracy will be stressed. Laboratory fee. (2 Lec., 4 Lab.)

(CIS) 114 Problem Solving With The Computer (4)
Prerequisites: Business 105 or Management 136 and Computer Information Systems 103 or Computer Information Systems 108, or demonstrated proficiency approved by instructor. This course explores methods of solving business problems with the use of a microcomputer. Analysis and design methods are studied and applied to practical situations involving various business functions. Data security and privacy issues are also considered. (3 Lec., 2 Lab.)
(CIS) 116 Operations I (4)
Prerequisite: Credit or concurrent enrollment in Computer Information Systems 103 or Computer Information Systems 108 or demonstrated competence approved by the instructor. The interrelationships among computer systems, hardware, software, and personnel are covered. Topics include the role of personnel in computer operations, data entry, scheduling, data control, and librarian functions, the importance of job documentation, standards manuals, error logs, operating procedures, job control language, and the flow of data between the user and the data processing department. Laboratory fee. (3 Lec., 4 Lab.)

(CIS) 118 Text Processing Applications (3)
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) 126 Operations II (4)
Prerequisites: Computer Information Systems 103 or Computer Information Systems 116 or demonstrated competence approved by the instructor. Concepts and functions of an operating system in a multiprocessing environment are presented. Topics include system commands, interpretation of messages and codes, maintaining data and physical security, and an introduction to data communications, data base management systems, and query languages used on mainframes and microcomputer systems. Laboratory fee. (3 Lec., 4 Lab.)

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

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

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

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

(CIS) 167 C Programming (4)
Prerequisite: Six credit hours in programming language courses or demonstrated competence approved by the instructor. This course covers the fundamentals of the C Programming language. Topics include structured programming and problem solving techniques. Laboratory fee. (3 Lec., 4 Lab.)
(CIS) 169 4th Generation Languages (4)
Prerequisite: Three credit hours in a programming language course or demonstrated competence approved by the instructor. This course presents an introduction to 4th generation languages and their relationship to software productivity. Topics include survey and definition of available products and their uses, current functions, evaluation standards, selection and implementation. Laboratory fee. (3 Lec., 4 Lab.)

(CIS) 170 RPG Programming (3)
Prerequisite: Three credit hours in a programming language course or demonstrated competence approved by the instructor. This course introduces programming skills using the RPG II language. Topics include basic listings with levels of 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 using registers, selected macro instructions, introductory table concepts, editing printed output, and reading memory dumps. Laboratory fee. (3 Lec., 4 Lab.)

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

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

(CIS) 220 Assembly Language II (4)
Prerequisite: Computer Information Systems 210 or demonstrated competence approved by the instructor. Advanced programming skills will be developed using a current mainframe assembler language. Topics include advanced fixed point operations, indexing, disk file organization and maintenance, advanced table concepts, data and bit manipulation techniques, macro writing, sub-program 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 operating system concepts and includes scheduling, data and memory management, the use of batch files, and "path techniques" to facilitate efficient use of secondary storage. Back-up techniques, operating system commands, and operating system enhancer programs and utilities will be analyzed. Laboratory fee. (3 Lec., 3 Lab.)

(CIS) 223 PC Hardware (3)
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, trouble-shoot minor hardware problems, and prepare and modify short assembler language programs. Laboratory fee. (2 Lec., 2 Lab.)
(CIS) 225 Systems Analysis And Design (4)
Prerequisite: Computer Information Systems 164 or demonstrated competence approved by the instructor. This course introduces and develops skills to analyze existing business systems, 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) 256 Computer Center Management (3)
Prerequisites: Computer Information Systems 103 and 116 or demonstrated competence approved by the instructor. The management of a computer center is examined. Topics include introduction to management theory, personnel management, production, scheduling, and processing within a computer center. Methods for computer selection and evaluation are also presented. (3 Lec.)

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

(CIS) 260 Contemporary Topics In Computer Information Systems (1)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Recent developments and topics of current interest are studied. May be repeated when topics vary. (1 Lec.)

(CIS) 262 Contemporary Topics In Computer Information Systems (3)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Recent developments and topics of current interest are studied. May be repeated when topics vary. (3 Lec.)

(CIS) 263 Special Topics In Computer Information Systems (3)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Current developments in the rapidly changing field of computer information systems are studied. May be repeated when topics vary. Laboratory fee. (2 Lec., 2 Lab.)

(CIS) 265 Special Topics In Computer Information Systems (4)
Prerequisite: Will vary based on topics covered and will be annotated in each semester's class schedule. Current developments in the rapidly changing field of computer information systems are studied. May be repeated as topics vary. Laboratory fee. (3 Lec., 4 Lab.)

(CIS) 272 Advanced BASIC Techniques (3)
Prerequisite: Computer Information Systems 172 or demonstrated competence approved by the instructor. This course continues the development of programming skills using the BASIC language and its application to typical business problems. Laboratory fee. (2 Lec., 2 Lab.)
(CIS) 280 Applied Studies (3)
Prerequisites: Computer Information Systems 223 and twelve additional credit hours from this option or demonstrated competence approved by instructor. This course applies PC analyst skills to real world situations. Topics include planning and implementing solutions to business-related problems, incorporating student knowledge of hardware, software, applications packages, training, documentation, communication skills, and problem solving skills. (3 Lec.)

(CIS) 701 Cooperative Work Experience (1)
Prerequisite: Completion of two courses in the Computer Information Systems program or Instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Student must develop new learning objectives each semester. The seminar consists of topics which include job interview and application techniques, job site interpersonal relations, preparation of resumes, building self-esteem, setting and writing job objectives, time and stress management techniques, career interest/aptitude test, evaluation and planning, vendor presentation and professional development. (1 Lec., 5 Lab.)

(CIS) 703 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Computer Information Systems program or Instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Student must develop new learning objectives each semester. The seminar consists of topics which include job interview and application techniques, job site interpersonal relations, preparation of resumes, building self-esteem, setting and writing job objectives, time and stress management techniques, career interest/aptitude test, evaluation and planning, vendor presentation and professional development. (1 Lec., 5 Lab.)

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

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

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

COMPUTER SCIENCE

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

(CS) 112 Computing Science II (3)
Prerequisites: Computer Science 111 and Math 101 or demonstrated competence approved by the instructor. This course is a continuation of Computer Science 111 and is designed to meet the requirements for a degree in computer science or a related field. Topics 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)
Prerequisites: Developmental Math 093 and Computer Science 111 or Computer Information Systems 103 or demonstrated competence approved by the instructor. This course is an introduction to the PL/I programming language. Emphasis is placed upon the structured approach to program design using both mathematical and business applications. Topics include string processing, simple data structures, internal search/sort techniques, and sequential file processing. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 211 Assembly Language (3)
Prerequisite: Computer Science 112 or demonstrated competence approved by the instructor. This course is designed to meet the requirements for a degree in computer science or a related field. Topics covered include a study of assembly language programming, machine representation of data and instructions, and addressing techniques. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 221 Introduction To Computer Organization (3)
Prerequisite: Computer Science 112 or demonstrated competence approved by the instructor. This course introduces the organization and structuring of the major hardware components of computers, the mechanics of information transfer and control within a digital computer system, and the fundamentals of logic design. Laboratory fee. (2 Lec., 2 Lab.)

(CS) 222 Introduction To File Processing (3)
Prerequisite: Computer Science 112 or demonstrated competence approved by the instructor. This course introduces the concepts and techniques of structuring data. Experience is provided in the use of secondary storage devices and applications of data structures and file processing techniques. Laboratory fee. (2 Lec., 2 Lab.)

DANCE

(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.)
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 Lee.)

(DC) 120 Communication Skills (3)
This course is for students with significant communication problems. It is organized around skill development, and students may enroll at any time (not just at the beginning of a semester) upon the referral of an instructor. Emphasis is on individual needs and personalized programs. Special attention is given to oral language. Contacts are made with other departments to provide other ways of learning for the students. (2 Lec., 2 Lab.)

DEVELOPMENTAL LEARNING

(DL) 094 Learning Skills Improvement (1)
Learning skills are strengthened. Emphasis is on individual needs and personalized programs. This course may be repeated for a maximum of three credits. (2 Lab.)

DEVELOPMENTAL MATHEMATICS


(DM) 090 Pre Algebra Mathematics (3)
This course is designed to develop an understanding of fundamental operations using whole numbers, fractions, decimals, and percentages and to strengthen basic skills in mathematics. The course is planned primarily for students who need to review basic mathematical processes. This is the first three-hour course in the developmental mathematics sequence. (3 Lec.)

(DM) 091 Elementary Algebra (3)
Prerequisite: Developmental Mathematics 090 or an appropriate assessment test score. This is a course in introductory algebra which includes operations on real numbers, polynomials, special products and factoring, rational expressions, and linear equations and inequalities. Also covered are graphs, systems of linear equations, exponents, roots, radicals, and quadratic equations. (3 Lec.)

(DM) 093 Intermediate Algebra (3)
Prerequisite: One year of high school algebra and an appropriate assessment test score or Developmental Mathematics 091. This course includes further development of the terminology of sets, operations on sets, properties of real numbers, polynomials, rational expressions, linear equations and inequalities, the straight line, systems of linear equations, exponents, roots, and radicals. Also covered are products and factoring, quadratic equations and inequalities, absolute value equations and inequalities, relations, functions, and graphs. (3 Lec.)

DEVELOPMENTAL READING

Students can improve their performance in English courses by enrolling in Developmental Reading courses. Developmental Reading 090 and 091 are valuable skill development courses for English 101. Reading 101 is especially helpful in courses that require a considerable amount of college-level reading. See the catalog descriptions in reading for full course content.

(DR) 090 Basic Reading Skills (3)
Development of comprehension and vocabulary skills, based on individual needs, is the focus of this course. Basic study skills are introduced. A score of 12 to 19 on the Descriptive Test of Language Skills Reading Comprehension Test would indicate that a student has the reading skills needed for this course. (3 Lec.)

(DR) 091 Preparation For College Reading (3)
This course emphasizes development of comprehension and vocabulary skills, according to individual needs. Also included are critical reading, rate flexibility, and basic study skills. A score of 20 to 27 on the Descriptive Test of Language Skills Reading Comprehension Test would indicate that a student has the reading skills needed for this course. (3 Lec.)

DEVELOPMENTAL WRITING

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.)

(DFT) 150 Manufacturing Fundamentals (2)
This course focuses on manufacturing fundamentals and production methods. Modern fabrication techniques and equipment used in industry are presented. The functions and role of drafting are discussed. (2 Lec.)

(DFT) 182 Technician Drafting (2)
This course focuses on the reading and interpretation of engineering drawings. Topics include orthographic, pictorial drawings, dimensioning, measurement, and printed circuit boards. Laboratory fee. (1 Lec., 3 Lab.)

(DFT) 183 Basic Drafting (4)
This course is for students who have had little or no previous experience in drafting. Skill in orthographic, axonometric, and oblique sketching and drawing is developed. Topics include lettering, applied geometry, fasteners, sectioning, tolerancing, and auxiliaries. Experience is provided in using handbooks and other resource materials and in developing design skills. U.S.A.S.I., government, and industrial standards are used. Emphasis is on both mechanical skills and graphic theory. The use of the computer to produce drawings is introduced. Laboratory fee. (2 Lec., 6 Lab.)

(DFT) 184 Advanced Mechanical Drafting (3)
Prerequisite: 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. The use of the computer to produce drawings is encouraged. Laboratory fee. (2 Lec., 6 Lab.)

(DFT) 185 Architectural Drafting (4)
This course begins with architectural lettering and drafting of construction details. Emphasis is on technique and use of appropriate material symbols and conventions. Working drawings are prepared, including plans, elevations, sections, and details. Drawings for buildings using steel, concrete, and timber structural components are covered. Reference materials are used to provide skills in locating data and in using handbooks. The use of the computer to produce drawings is encouraged. 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. The use of the computer to produce drawings is encouraged. 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. The use of the computer to produce drawings is encouraged. 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 diagrammatic 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. The use of the computer to produce drawings is encouraged. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 234 Advanced Technical Illustration (4)
Prerequisite: Drafting 232. An area of specialization is chosen and pursued in depth. Examples are pictorials for color separation printing, air brush renderings, letter forms for logos and hand lettering, complex exploded views in isometric, perspective renderings, design of commercial displays, and art for slide presentations. The use of the computer to produce drawings is encouraged. Laboratory fee. (2 Lec., 6 Lab.)

(DFT) 235 Building Equipment (Mechanical And Electrical) (3)
Prerequisite: Drafting 183 or Drafting 185. Plans and details for mechanical equipment are drawn. Equipment includes air conditioning, plumbing, and electrical systems. Emphasis is on the use of appropriate symbols and conventions. Mechanical and electrical features are coordinated with structural and architectural components. The use of the computer to produce drawings is encouraged. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 236 Pipe Drafting (3)
Prerequisites: Drafting 183 and Mathematics 195 or the equivalent. This course presents the methods of piping of fluids for refineries, petrochemical plants, and industrial facilities. ASME codes are applied to the design of pressure vessels, pipe fitting, welded and seamless piping, pumps, and heat exchanges. Drawing techniques are emphasized in orthographic isometric projections. The use of the computer to produce drawings is encouraged. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 240 Printed Circuit Design (3)
Prerequisite: Drafting 231, concurrent enrollment in Drafting 231 or the equivalent. This course develops skills in the design of double-sided and multilayer printed circuit boards. Students design boards from schematics, parts lists, and manufacturing specifications. Some boards are designed for manual parts insertion and taped artworks. Others are designed for automatic parts insertion and taped artworks. Others are designed for automatic parts insertion and digitized inputs for artworks. The use of the computer to produce drawings is encouraged. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 241 Integrated Circuit Design (3)
Prerequisites: Drafting 240, Electronics Technology 190 or the equivalent. Must be taken concurrently with Electronics Technology 250. This course develops skills in the design of integrated circuits. Electronic theory and laboratory exercises in active devices are combined with drafting lectures and laboratory drafting to enable students to design simple integrated circuits from schematic diagrams and given design rules. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 242 Advanced Integrated Circuit Design (3)
Prerequisite: Drafting 241. This course develops skills in the design of complex integrated circuits. Students work from schematic diagrams and two sets of given rules. Work is done to meet industrial standards of current technologies. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 243 Advanced Printed Circuit Design (3)
Prerequisite: Drafting 240. This course includes the design of double-sided, multi-layer, surface-mounted, and flexible printed circuit boards. Students select various types of integrated circuit chips while applying pen swapping and gate combination techniques. Industry standards are followed in design development. The use of computers to produce drawings is encouraged. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 245 Computer Aided Design (3)
Prerequisite: Drafting 183 or the equivalent. Capabilities and limitations of the electronic computer as an aid to the designer are studied. Drafting procedures using an interactive system with computer graphics are practiced. Forms and uses of computer aided products are viewed in perspective with the overall design process. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 246 Advanced CAD-Electronic (3)
Prerequisites: Drafting 231 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 printed circuit board or integrated circuit design. Menus and library construction will be practiced while using the interactive graphic system. Laboratory fee. (2 Lec., 4 Lab.)
(DFT) 247 Applied Printed Circuit Design (3)
Prerequisite: Drafting 240. Special applications of printed circuit design techniques and principles in particular systems of design are studied. Specialization may be focused by classification of the electronic circuits, of resources for design, and of processes for manufacture of the printed circuits. Laboratory fee. (2 Lec., 4 Lab.)

(DFT) 248 Advanced CAD-Mechanical (3)
Prerequisites: 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) 249 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) 250 Sheet Metal Design (3)
Prerequisite: Drafting 183. This course includes the preparation of drawings for sheet metal developments. Topics include bend allowance, relief, standard bends for specific applications, cost factors to consider in manufacturing, metal specifications, finishing, coating, fasteners, and weldments. The use of computers to produce drawings is encouraged. 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) 255 Selected Topics In Drafting (3)
Prerequisite: Demonstrated competence approved by the instructor. Special topics in advanced drafting are covered. Topics will be those with current industry applications and may be individualized for each student. 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 the world of education, work and retirement; setting goals; writing a resume; and how to look for a job. (1 Lec., 20 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 transitions in life, communication skills, performance appraisals, and effective use of power. (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 ap-
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.)

ECOLOGY

(ECY) 291 People And Their Environment II (3)
Environmental awareness and knowledge are emphasized. Topics include pollution, erosion, land use, energy resource depletion, overpopulation, and the effects of unguided technological development. Proper planning of societal and individual action in order to protect the natural environment is stressed. (3 Lec.)

ECONOMICS

(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) 192 Digital Computer Principles (3)
Prerequisite: Electronics Technology 190. This course is a study of number systems and arithmetic in various bases. Included are truth tables, relay and diode logic analysis, logic symbols, and basic functions including NOT, AND, NAND, OR, NOR, and EX OR. Logic manipulations include basic laws, minterm, maxterm, sum of products, and product of sums expression forms. Venn diagrams, Veitch and Karnaugh reduction techniques, and circuit synthesis are also covered using design examples. Laboratory fee. (2 Lec., 2 Lab.)

(ET) 193 Active Devices (4)
Prerequisites: Electronics Technology 190 and credit or concurrent enrollment in Electronics Technology 191. Semiconductors (active devices) are the focus of this course. Topics include composition, parameters, linear and non-linear characteristics, in-circuit action, amplifiers, rectifiers, and switching. Laboratory fee. (3 Lec., 3 Lab.)
(ET) 194 Instrumentation (3)
Prerequisites: Electronics Technology 190 and credit or concurrent enrollment in Electronics Technology 191 and 193. Electrical devices for measurement and instrumentation are studied and applied to work situations. Included are basic AC and DC measurement meters, impedance bridges, oscilloscopes, signal generators, signal-tracers, and tube and transistor testers. The course concludes with a study of audio frequency test methods and equipment. Laboratory fee. (3 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 Electronic Logic And Switching Circuits (4)
Prerequisites: Electronics Technology 193 and 194. The course presents circuitry common to electronic control systems and automatic measuring systems. Typical circuit systems functions covered include clamping, gating, switching, and counting. Circuits include voltage discriminators, multi-vibrators, dividers, counters, and gating circuits. Boolean algebra and binary numbers are reviewed. Emphasis is on semiconductor devices. Fluidic switching devices are introduced. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 234 Electronic Circuits And Systems (3)
Prerequisites: Completion of all electronics technology courses up to and including Electronics Technology 231; and may take Electronics Technology 232 and Electronics Technology 231 concurrently with Electronics Technology 234. The design, layout construction, and calibration of an electronic project are covered. Students develop independent project and prepare term papers on functions of components, operating specifications and schematics. Laboratory fee. (6 Lab.)

(ET) 235 Fundamentals Of Electricity (4)
This course is an introduction to electricity for students in related programs. Topics include basic AC and DC theory, voltage, current, and resistance, and electrical wiring principles and schematics. Transformers, relays, timers, electrical measuring devices, and basic electrical calculations are also included. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 237 Modular Memories And Microprocessors (4)
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 busses, addressing, coding, and programming of typical microprocessor units are included. Micro processor system is tested, coded, and programmed. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 238 Linear Integrated Circuits (4)
Prerequisites: Electronics Technology 190, 191, and 193. Differential amplifiers, operational amplifiers, and integrated circuit timers are investigated. Topics include comparators, detectors, inverting and non-inverting amplifiers, OP AMP adders, differentiating and integrating amplifiers, and instrumentation amplifiers. Digital to analog converters, analog to digital converters, special OP AMP applications, and integrated circuits timers are also included. Limitations and specifications of integrated circuits are covered. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 239 Microwave Technology (3)
Prerequisites: Electronics Technology 194 and Electronics Technology 231. Microwave concepts such as propagation, transmission lines including waveguides, standing waves, impedance matching, basic antennas and various basic microwave measurements are covered. Microwave measurement techniques such as power and frequency meter measurements and calibration, VSWR determinations, klystron characteristics, and waveguide tuning will be demonstrated. A basic radar system is discussed as time permits. (3 Lec.)

(ET) 240 Electronic Theory And Application Of Digital Computers (4)
Prerequisites: Mathematics 196 and Electronics Technology 193. The course presents the electronic switching circuits for digital computer systems. Logic symbology, gates, and related Boolean algebra are covered. Computer terminology and number systems are included. An introduction to BASIC language programming for electronic circuit analysis is also included. Laboratory experiments in
addition to computer programming include basic logic gate analysis and test procedures. Laboratory fee. (3 Lec., 3 Lab.)

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

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

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

(ET) 263 Digital Computer Theory (4)
Prerequisite: Electronics Technology 191, 192, and 193. This course focuses on basic computer circuits. Included are flip-flops, shift registers, counters (sequential and nonsequential), operational amplifiers, and A to D converters. Analysis of specific current integrated circuits is also included. Laboratory fee. (3 Lec., 3 Lab.)

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

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

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

(ET) 267 Microprocessors (4)
Prerequisites: Electronics Technology 192 and 266. This course is a study of microcomputers. Topics include architecture, software, interfacing, microprocessors, and microcomputer systems. Emphasis is on practical applications using in-house microcomputers. Laboratory fee. (3 Lec., 3 Lab.)

(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.)

ELECTRONIC TELECOMMUNICATIONS

(ET) 102 Introduction To Telecommunications (3)
This course is an introduction to the fundamentals of telecommunications with an emphasis on analog and digital voice transmission techniques and technology. Telecommunications majors are required to take the laboratory course Electronics Technology 103. (3 Lec.)

(ET) 103 Introduction To Telecommunications Laboratory (1)
Prerequisites: Electronics Technology 190, 191 and concurrent enrollment in Electronics Technology 102. This course is designed to support the theories taught in Electronics Technology 102 with laboratory experiments. Laboratory fee. (3 Lab.)

(ET) 290 Advanced Electronic Devices (4)
Prerequisites: Electronics Technology 102, 103 and 193. This course continues the study of solid state devices and circuit theory. Emphasis will be on application of these devices in circuitry relevant to the telecommunications systems: power supplies, regulators, amplifiers and oscillators. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 291 Linear Integrated Circuit Applications (4)
Prerequisite: Electronics Technology 290 or concurrent enrollment in Electronics Technology 290. A study of operational amplifiers and their use as basic building blocks of linear integrated circuitry. Topics will include voltage level detectors, comparators, signal generating circuits, signal processing circuits, inverting and non-inverting amplifiers, differential, instrumentation and bridge amplifiers, active filters, I.C. timers, and selected linear integrated circuits. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 292 Telephony Switching Systems (4)
Prerequisite: Electronics Technology 290 or concurrent enrollment in Electronics Technology 290. This course will familiarize the student with the following topics: telephone set, public switched networks, local exchanges, networks, two and four wire systems, tip and ringing requirements, and an introduction to digital transmission techniques. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 293 Basic Radio Circuitry (4)
Prerequisite: Electronics Technology 290 or concurrent enrollment in Electronics Technology 290. This course covers the theory and practices of modern communications systems. Topics include amplitude modulation, frequency modulation, single sideband techniques and digital radio characteristics. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 294 High Frequency Transmission Systems (4)
Prerequisite: Electronics Technology 291, 292, and 293. The theory and application of long-haul transmission techniques utilized in the telecommunication industry will be covered. Microwave transmission, fiber optics principles, and satellite communication are major areas of emphasis. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 295 Telecommunication Signaling (4)
Prerequisite: Electronics Technology 294 or concurrent enrollment in Electronics Technology 294. This course covers circuit and system application necessary to implement signaling protocols, conversion systems, formats, and loop starts. Specific signaling topics are SF (single frequency) E & M, DX (duplex), and looping systems. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 297 System Installation And Testing (4)
Prerequisite: Electronics Technology 295 or concurrent enrollment in Electronics Technology 294 or Electronics Technology 295. This course is designed to make the student familiar with the installation of telecommunications switching equipment. The student will become familiar with the theory, operation, and maintenance of switching equipment along with troubleshooting techniques. Laboratory fee. (3 Lec., 3 Lab.)

(ET) 704 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Electronic Telecommunications or Digital Electronics Technology programs or instructor approval. This introductory course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learn-
writing the learning plan and college degree plan. (1 Lec., 20 Lab.)

ET 714 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Electronic Telecommunications or Digital Electronics Technology programs or instructor approval. This advanced course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of self-inventory, work values, selling yourself and hints to keep a job. (1 Lec., 20 Lab)

ENGINEERING

EGR 101 Engineering Analysis (2)
Prerequisite: Two years of high school algebra or Developmental Mathematics 093 or demonstrated competence approved by the instructor. A mathematical scheme of analysis appropriate in engineering design is presented. Topics include natural quantities, vectors, Newton's laws, work, energy, first law of thermodynamics, information, dimensional analysis, physical modeling, compatibility, continuity, and interpretation of analytic results. Computer programming is taught and used in processing information for analysis. (2 Lec.)

EGR 105 Engineering Design Graphics (3)
Prerequisite: Engineering 101 or Mathematics 102 or 196 or demonstrated competence approved by the instructor. Graphic fundamentals are presented for engineering communications and engineering design. A rational engineering design procedure is taught and computer aided design is introduced. Graphical topics include geometric construction, geometric modeling, orthographic drawing system, auxiliaries, sections, dimensions and tolerances, graphical analysis, pictorial and working drawings. Laboratory Fee. (2 Lec., 4 Lab.)

EGR 106 Descriptive Geometry (3)
Prerequisite: Drafting 183 or Engineering 105. This course provides training in the visualization of three dimensional structures and computer transformations of geometric models. 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 201 Engineering Mechanics II (3)
Prerequisite: Engineering 107 and credit or concurrent enrollment in Mathematics 225. This is a study of dynamics. Particles and rigid bodies are examined as they interact with applied forces. Both constrained and general motions are included. Space, time, mass, velocity, acceleration, work and energy, impulse, and momentum are covered. (3 Lec.)

EGR 202 Engineering Mechanics Of Materials (3)
Prerequisite: Engineering 107 and credit or concurrent enrollment in Mathematics 225. Simple structural elements are studied. Emphasis is on forces, deformation, and material properties. The concepts of stress, strain, and elastic properties are presented. Analysis of thin walled vessels, members loaded in tension, torsion, bending and shear, combined loadings, and stability conditions are included. Behavioral phenomena such as fracture, fatigue, and creep are introduced. (3 Lec.)

EGR 204 Electrical Systems Analysis (3)
Prerequisite: Credit or concurrent enrollment in Mathematics 225. Electrical science is introduced. Included are fundamental electrical systems and signals. Basic concepts of electricity and magnetism with mathematical representation and computation are also covered. (3 Lec.)

EGR 205 Plane Surveying (3)
Prerequisites: Mathematics 102 or 196 and Engineering 105 or Drafting 183. This course focuses on plane surveying. Topics include surveying instruments, basic measuring procedures, vertical and horizontal control, error analysis, and computations. Traverse, triangulation, route alignments, centerlines, profiles, mapping, route surveying, and land surveying are also included. Laboratory fee. (2 Lec., 4 Lab.)

EGR 206 Electrical Engineering Laboratory (1)
Prerequisite: Credit or concurrent enrollment in Engineering 204. Various instruments are studied and used. These include the cathode ray oscilloscope, ammeters, voltmeters, ohmmeters, power supplies, signal generators, and bridges. Basic network laws, steady state and transient responses, and diode characteristics and applications are demonstrated. Computer simulation is introduced. Laboratory fee. (3 Lab.)

EGR 207 Computer Methods In Engineering (3)
Prerequisite: Credit or concurrent enrollment in Mathe-
matics 124 and demonstrated ability to program in a computer language approved by the instructor. Fundamental methods of numerical analysis with applications by computer programming are presented. Topics include computer programming, recursion formulas, successive approximations, error analysis, non-linear equations, and systems of linear equations and matrix methods. Probabilistic models, interpolations, determination of parameters, numerical integration, and solution of ordinary differential equations are also covered. (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.)

(ENG) 216 Studies In Literature (3)
Prerequisite: English 102. This course includes selections in literature organized by theme, interdisciplinary content or major author. Course titles and descriptions are available each semester prior to registration. This course may be repeated for credit. (3 Lec.)

ENGLISH AS A SECOND LANGUAGE
The English-as-a-Second Language (ESL) credit curriculum is designed to develop students’ language proficiency in the areas of listening, speaking, reading, and writing. The plan of study consists of thirteen courses divided into three skill areas and four levels (Listening-Conversation, Reading, and Writing). The student enters the program by taking the Michigan Test of English Language Proficiency (MTELP). (The Michigan Test of Aural Comprehension, the MTAC, is used optionally on each campus.) The credit ESL curriculum is designed to interface both with Continuing Education ESL programs and with developmental studies or college level programs on each campus.

(ESL) 031-034 (Listening-Conversation)
These courses prepare students to communicate orally in English. They can (but do not necessarily) precede the Reading (ESL 041-044) and Writing (ESL 051-054, ESL 063) courses.

(ESL) 041-044 (Reading)
These courses prepare a student for reading English in daily life and for reading college textbooks. ESL students needing additional academic preparation should enroll for regular Developmental Reading courses upon completion of the ESL-Reading program.

(ESL) 051-054 (Writing)
These courses are designed to help students increase fluency and build confidence in writing. The courses focus on writing as a process. Through inventing, drafting, and revising, students write for specific audiences and purposes.

(ESL) 061-064 (Grammar)
These courses are designed to complement the ESL 051-054 writing series. They provide instruction and practice with discrete grammar points necessary for effective writing.

(ESL) 031-034 (Escuchar y Conversar)
Estos cursos preparan al estudiante a comunicarse oralmente en inglés. Estos 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 educacion superior. Por lo tanto los estudiantes que necesiten preparacion academica 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, (ESL) 052, (ESL) 053, (ESL) 054
Estos cursos estan diseñados con el objeto de ayudar a los alumnos a obtener fluidez y confianza en escritura. Los cursos se enfocan en el proceso de escritura. A través de crear, planear y revisar, los estudiantes produciran escritos para diferentes audiencias y con diversos propósitos.

(ESL) 061, (ESL) 062, (ESL) 063, (ESL) 064
Estos cursos estan diseñados para complementar la serie de Escritura 051-054. Dichos cursos proveen instruccio y ejercicios practicos, asi como puntos esenciales de gramatica necesarios para la efectiva comunicacion escrita.

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.)
This course strengthens competencies initiated in ESL031. Special emphasis is placed on academic listening and speaking skills. (3 Lec.)

This course is designed to improve formal and informal conversation skills including listening comprehension, note-taking, oral reporting, and class discussion techniques. (3 Lec.)

This course develops academic, professional, and social aural/oral skills. Emphasis is placed on analysis and critical thinking in English. (3 Lec.)

This course focuses on language development through reading activities. It includes reading comprehension, vocabulary, and word recognition. (3 Lec.)

This course is designed for students needing more practice in the skills and information introduced in ESL041. Topics include reading comprehension, vocabulary development, word recognition, language and culture. (3 Lec.)

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.)

This course is designed for students needing more practice in the skills and information introduced in ESL043. Topics include pre-reading strategies, specific reading comprehension skills, critical reading skills, vocabulary development, idioms, and use of the dictionary and library. (3 Lec.)

This course stresses the creation of sentences and groups of sentences. It also introduces basic spelling rules and vocabulary development. (3 Lec.)

This course introduces the development of controlled and guided paragraphs using a variety of organizational structures and stresses logic patterns of English. (3 Lec.)

This course stresses the process of paragraph writing and the characteristics of effective paragraph structure. It also introduces modes of discourse such as description, cause-effect, and comparison-contrast. (3 Lec.)

This course emphasizes modes of discourse in expository writing for academic purposes. Particular attention is given to improving unity, coherence, transition, and style as students progress to multi-paragraph compositions. Paraphrasing and summarizing are also introduced. (3 Lec.)

This course introduces the basic aspects of English grammar needed to write simple and compound sentences. It includes the study of basic verb tenses, parts of speech, subject-verb agreement, and question formation. (3 Lec.)

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FRENCH

(FR) 101 Beginning French (4)
The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee. (3 Lec., 2 Lab.)

(FR) 102 Beginning French (4)
Prerequisite: French 101 or the equivalent. This course is a continuation of French 101. Emphasis is on idiomatic language and complicated syntax. Laboratory fee. (3 Lec., 2 Lab.)

(FR) 201 Intermediate French (3)
Prerequisite: French 102 or the equivalent. Reading, composition, and intense oral practice are covered in this course. Grammar is reviewed. (3 Lec.)

(GEO) 101 Physical 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) 102 Historical Geology (4)
This course is for science and non-science majors. It is a study of earth materials and processes within a developmental time perspective. Fossils, geologic maps, and field studies are used to interpret geologic history. Laboratory fee. (3 Lec., 3 Lab.)

(GEO) 103 Introduction To Oceanography (3)
The physical and chemical characteristics of ocean water, its circulation, relationship with the atmosphere, and the effect on the adjacent land are investigated. The geological development of the ocean basins and the sediment in them is also considered. Laboratory fee. (2 Lec., 2 Lab.)

(GEO) 201 Introduction To Rocks And Mineral Identification (4)
Prerequisites: Geology 101 and 102. This course introduces crystallography, geochemistry, descriptive mineralogy, petrology, and phase equilibria. Crystal models and hand specimens are studied as an aid to rock and mineral identification. Laboratory fee. (3 Lec., 3 Lab.)

(GEO) 207 Geologic Field Methods (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) 209 Mineralogy (4)
Prerequisites: Geology 101 and 102 and Chemistry 102. This course covers basic geochemistry; crystal chemistry; crystallography, including symmetry elements, stereographic and gnomonic projections, Miller indices, crystal systems, and forms; x-ray diffraction; optical properties of minerals; descriptive mineralogy including identification of hand specimens; and phase equilibria. Laboratory fee. (3 Lec., 3 Lab.)

GEOGRAPHY

(GPV) 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.)

(GPV) 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.)

(GPV) 103 Cultural Geography (3)
This course focuses on the development of regional variations of culture. Topics include the distribution of races, religions, and languages. Aspects of material culture are also included. Emphasis is on origins and diffusion. (3 Lec.)

(GEO) 101 Physical Geography (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.)

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GERMAN

(GER) 101 Beginning German (4)
The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee. (3 Lec., 2 Lab.)

(GER) 102 Beginning German (4)
Prerequisite: German 101 or the equivalent. This course is a continuation of German 101. Emphasis is on idiomatic language and complicated syntax. Laboratory fee. (3 Lec., 2 Lab.)

(GER) 201 Intermediate German (3)
Prerequisite: German 102 or the equivalent or demonstrated competence approved by the instructor. Reading, composition, and intense oral practice are covered. Grammar is reviewed. (3 Lec.)

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

GOVERNMENT

(GVT) 201 American Government (3)
Prerequisite: Sophomore standing recommended. This course is an introduction to the study of political science. Topics include the origin and development of constitutional democracy (United States and Texas), federalism and intergovernmental relations, local governmental relations, local government, parties, politics, and political behavior. (This course is offered on campus and may be offered via television.) (3 Lec.)

(GVT) 202 American Government (3)
Prerequisite: Sophomore standing recommended. The three branches of the United States and Texas government are studied. Topics include the legislative process, the executive and bureaucratic structure, the judicial process, civil rights and liberties, and domestic policies. Other topics include foreign relations and national defense. (This course is offered on campus and may be offered via television.) (3 Lec.)

(GVT) 211 Introduction To Comparative Politics (3)
A comparative examination of governments, politics, problems and policies with illustrative cases drawn from a variety of political systems. (3 Lec.)

GRAPHIC ARTS

(GA) 120 Printing Fundamentals (3)
This course is a study of basic mathematics used in the printing industry. It includes proportional copy, enlargement and reduction, percentages, copy fitting, and conversion of inches into points and picas. Paper calculations for cutting and buying procedures are discussed. Laboratory fee. (2 Lec., 4 Lab.)

(GA) 134 Basic Camera Operations (3)
Prerequisite: Graphic Arts 120. This course introduces the student to the Graphic Arts darkroom and photolithographic process camera. Operation of horizontal and vertical cameras are taught. Lab assignments include PMT’s line and halftone photography, contacting and an introduction to process color. Stripping and platemaking procedures are also included. Laboratory fee. (2 Lec., 4 Lab.)

(GA) 136 Beginning Copy Preparation (3)
Prerequisite: Graphic Arts 120. This course teaches the basic fundamentals of paste-up procedures. The student is introduced to design principles and balance. Lab assignments include proportions and paste-up of stationery, reply cards, and advertising posters. Laboratory fee. (2 Lec., 4 Lab.)

(GA) 140 Beginning Offset Printing (3)
Prerequisite: Graphic Arts 120. This course covers principles, problems, and techniques of the operation of an offset press. Students learn how to use different plate materials to print simple line work. Laboratory fee. (2 Lec., 4 Lab.)

(GA) 142 Basic Typesetting (3)
Prerequisite: Office Careers 172 or demonstrated competence approved by the instructor. This course is an introduction to photo-composition. It is a study of text, headline, and display type. Students will learn fundamentals of typesetting by setting cards, brochures, invitations, body copy, and simple charts. Laboratory fee. (2 Lec., 4 Lab.)

(GA) 204 Electronic Publishing (4)
This course is designed to teach the student how to select, use, construct, implement, and integrate text, business graphics, data, line art and photographs to produce quality business publications electronically. Topics will include corporate publications, PC hardware and software requirements, text editing, graphics design, page layout, font selection, type measurement, copy fitting and laser printers. (2 Lec., 6 Lab.)
(GA) 206 Graphic Projects (3)
Prerequisite: Concurrent enrollment or 16 hours of credit in Graphic Arts. This course provides problem analysis and project development. It gives the student the opportunity of producing a complete printed product. Laboratory fee. (2 Lec., 4 Lab.)

(GA) 225 Special Topics (3)
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 Graphic Arts course with the demonstrated competence approved by the instructor. This course is repeatable for credit as topics vary. Laboratory fee. (2 Lec., 4 Lab.)

(GA) 234 Intermediate Camera Operations (3)
Prerequisite: Graphic Arts 134. Students gain expertise in working with problem line and halftone copy. Contacting and the use of filters are more fully discussed. Laboratory assignments include duotones, color keys, proofs, advanced stripping and platemaking techniques. Laboratory fee. (2 Lec., 4 Lab.)

(GA) 236 Advanced Copy Preparation (3)
Prerequisite: Graphic Arts 136. This course builds upon the skills developed in beginning copy preparation. Emphasis is on precision ruling, masking, scribing, design, and proportions. Principles of advertising and marketing are discussed. Laboratory fee. (2 Lec., 4 Lab.)

(GA) 240 Advanced Offset Printing (3)
Prerequisite: Graphic Arts 140. This course covers halftones, two-color and advanced line work for quality printing. Minor press maintenance and care, with discussions of paper, pricing and estimating procedures, are covered. Troubleshooting for the small offset press is included. Laboratory fee. (2 Lec., 4 Lab.)

(GA) 242 Intermediate Typesetting (3)
Prerequisite: Graphic Arts 142. Advanced typesetting skills are acquired through business forms, graphs, newsletters, advertisements, etc. Proofreading and markup of copy for designated layouts will increase typesetting skills. Formatting and advanced codes will be included. Laboratory fee. (2 Lec., 4 Lab.)

(GA) 704 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Graphic Arts program or instructor approval. This introductory course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar will consist of an introduction to co-op, an orientation to on-the-job learning, writing the learning plan and college degree plan. (1 Lec., 20 Lab.)

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 archeaic cultures, the Maya, the Toltec, and the Aztec empires. The second part of the course deals with Mexican history and modern relations between the United States and Mexico. The student may register for either History 110 or Anthropology 110, but may receive credit for only one of the two. (3 Lec.)

(HST) 112 Latin American History (3)
This course presents developments and personalities which have influenced Latin American history. Topics include Indian cultures, the Conquistadors, Spanish administration, the wars of independence, and relations with the United States. A brief survey of contemporary problems concludes the course. (3 Lec.)

(HST) 120 Afro-American History (3)
The role of the Black in American history is studied. The slave trade and slavery in the United States are reviewed. Contributions of black Americans in the U.S. are described. Emphasis is on the political, economic, and sociological factors of the 20th century. (3 Lec.)

(HST) 204 American Minorities (3)
Prerequisite: Sociology 101 or six hours of U.S. history recommended. Students may register for either History 204 or Sociology 204 but may receive credit for only one of the two. The principal minority groups in American society are the focus of this course. The sociological significance and historic contributions of the groups are presented. Emphasis is on current problems of intergroup relations, social movements, and related social changes. (3 Lec.)

(HST) 205 Advanced Historical Studies (3)
Prerequisite: Six hours of history. An in-depth study of minority, local, regional, national, or international topics is presented. (3 Lec.)

HUMAN DEVELOPMENT

(HD) 100 Educational Alternatives (1)
The learning environment is introduced. Career, personal study skills, educational planning, and skills for living are all included. Emphasis is on exploring career and educational alternatives and learning a systematic approach to decision-making. A wide range of learning alternatives is covered, and opportunity is provided to participate in personal skills seminars. This course may be repeated for credit. (1 Lec.)

(HD) 104 Educational And Career Planning (3)
This course is designed to teach students the ongoing process of decision-making as it relates to career/life and educational planning. Students identify the unique aspects of themselves (interests, skills, values). They investigate possible work environments and develop a plan for personal satisfaction. Job search and survival skills are also considered. (3 Lec.)

(HD) 105 Basic Processes Of Interpersonal Relationships (3)
This course is designed to help the student develop a self-awareness that will enable him/her to relate more effectively to others. Students are made aware of their feelings, values, attitudes, verbal and non-verbal behaviors. The course content, which utilizes an experiential model, also focuses on developing communication and problem-solving skills. (3 Lec.)

(HD) 106 Personal And Social Growth (3)
This course focuses on the interactions between the individual and the social structures in which he lives. Roles, social influences and personal adjustments to the world around us are explored in readings and classroom discussion. Human behavior, the diversity of lifestyles and the components of a healthy personality are studied in an effort to develop a pattern for growth that demonstrates a responsibility to self and society. (3 Lec.)
(HD) 107 Developing Leadership Behavior (3)
The basic purpose of this course is to help the student
develop leadership and human relation skills. Topics in-
clude 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 leader-
ship 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-Occupation-
al 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 ex-
periences. 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 com-
petence 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 mean-
ing. 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.)

INTERPRETER TRAINING PROGRAM

(ITP) 140 Introduction To Deafness (3)
The psychology and history of educating the deaf are
introduced. Emphasis is on the psychological, social,
emotional, and occupational aspects of deafness. (3 Lec.,
1 Lab.)

(ITP) 141 American Sign Language I (4)
Basic linguistic components (sentence patterns) of
American Sign Language are introduced and practiced
expressively and receptively. Students learn to describe
signs in terms of hand configuration and palm direction.
Fingerspelling is also introduced and practiced receptively
and expressively. Laboratory fee. (3 Lec., 2 Lab.)

(ITP) 143 American Sign Language II (4)
Prerequisite: Interpreter Training 141. The linguistic com-
ponents of American Sign Language will continue to be
explored and practiced, both expressively and receptively.
Receptive and expressive fingerspelling skills are in-
creased. Basic vocabulary is expanded, and idioms are
introduced. Emphasis is on mastering receptive skills.
Laboratory fee. (3 Lec., 2 Lab.)

(ITP) 144 Psychosocial Aspects Of Deafness (3)
This course focuses on exploration of the psychosocial
aspects of deafness. Vocational problems are also ex-
plored and studied. (3 Lec.)

(ITP) 147 Language Development Of The Deaf (3)
The language development of deaf persons is studied. The
period from infancy to adulthood is included. The impor-
tance of family, community, and school relationships is
stressed. Various methods and materials used in develop-
ing language are presented. An overview of learning theory
and normal language acquisition is also included. (3 Lec.)
(ITP) 148 Receptive Fingerspelling (1)
Prerequisite: Interpreter Training 141 or concurrent enrollment in Interpreter Training 141. This course increases the student’s ability to read fingerspelling. Video tapes are used to demonstrate finger spelling—starting with two-letter words and progressing to words of several syllables. These words are presented individually as well as in sentences. (2 Lab.)

(ITP) 150 Management Techniques For The Interpreter/Aide (4)
This course will emphasize management of the classroom through techniques of behavior modification and training in interpersonal relationships. It will include defining the role of the teacher aide and the teacher aide/interpreter in the classroom. An overview of all types of media will be presented with emphasis on specialized classroom use of media for the deaf. The course will also cover the uses of auditory equipment with the deaf and training in techniques of using hearing aids and materials to enable the deaf to respond meaningfully to their environments. (3 Lec., 3 Lab.)

(ITP) 231 Interpreting: Ethics And Specifics (3)
Prerequisite: Interpreter Training 143 or demonstrated competence approved by the instructor. This class focuses on interpreter protocol, i.e., manner of dress, code of ethics, and language level. The student will learn about the preparation and training to become an interpreter for the deaf in different settings. Examples of these settings are legal, religious, vocational, medical, educational, counseling and rehabilitation. (3 Lec.)

(ITP) 240 American Sign Language III (4)
Prerequisite: Interpreter Training 143. Students will study linguistic aspects of American Sign Language and will apply this knowledge by translating written English selections into ASL. Students’ vocabularies will be increased by their study of multiple English synonyms per ASL sign and “idiomatic” sign language expressions. Students will receive practice in the expressive and receptive modes of both sign language and fingerspelling. Emphasis will be on mastery of ASL. Laboratory fee. (3 Lec., 2 Lab.)

(ITP) 247 Special Problems In Deafness (3)
Prerequisite: Demonstrated competence approved by the instructor. Various topics are studied as demand warrants. Examples include residential care, introduction to rehabilitation, and the deaf/blind. This course may be repeated for credit when topics vary. (3 Lec.)

(ITP) 248 Rehabilitation Of The Multiply Handicapped Deaf (3)
Other handicapping conditions accompanying deafness are studied. The emphasis is on problems of development and education and on severity of vocational problems when deafness is one of the handicaps. Techniques of management and instruction are included. Instructional personnel will include guest professionals from areas of all handicaps. (3 Lec., 1 Lab.)

(ITP) 250 Interpreting: Sign To Voice (3)
Prerequisite: Interpreter Training 240 or concurrent enrollment. This course is designed for the advanced sign language students. Sign to voice skills are developed and practiced through the use of video tapes, audio tapes and one-on-one practice demonstrations. (3 Lec.)

(ITP) 251 Educational/Specialized Signs (4)
Prerequisite: Interpreter Training 143. This course provides students with knowledge of sign terminology in the following areas: signs for educational purposes, medical, legal, drug use/abuse, and religious. Additional content areas are explored as needed. Laboratory fee. (3 Lec., 2 Lab.)

(ITP) 253 Interpreting: Voice To Sign (3)
Prerequisite: Interpreter Training 240 or concurrent enrollment. Students will acquire theoretical information pertaining to the expressive aspect of interpreting. Students will interpret in class by using audio and video tapes. Each student’s vocabulary/sign choice and performance will be analyzed and recommendations made for improvement of delivery. Laboratory fee. (3 Lec.)

(ITP) 260 Practicum (3)
Prerequisites: Fifteen hours of Interpreter Training courses and demonstrated competence approved by the instructor. An extended practicum involves carefully selected areas of service to the deaf upon student demonstration of interest and aptitude. Course content is primarily applied practicum experiences in specific areas of interest. (10 Lab.)

(ITP) 702 Cooperative Work Experience (2)
Prerequisites: Completion of two courses in the Interpreter Training Program or Instructor approval. This Introductory course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of writing the learning plan, goal clarification and educational objectives, self-inventories, and attendance at specific conferences/workshops. (1 Lec., 10 Lab.)

JOURNALISM

(JN) 101 Introduction To Mass Communications (3)
This course surveys the field of mass communications. Emphasis is on the role of mass media in modern society. (3 Lec.)
(JN) 102 News Gathering And Writing (3)
Prerequisite: Typing ability. This course focuses upon recognizing newsworthy events, gathering information and writing the straight news story. It provides a basis for future study in newspaper and magazine writing, advertising, broadcast journalism and public relations. Students are required to write for the campus newspaper. (2 Lec., 3 Lab.)

(JN) 103 News Gathering And Writing (3)
Prerequisite: Journalism 102 or professional experience approved by the instructor. This course is a continuation of Journalism 102. Students study and practice writing more complex stories, such as features, profiles, follow-up stories, and sidebars. Students are required to write for the campus newspaper. (2 Lec., 3 Lab.)

(JN) 104 Student Publications (1)
Prerequisite: Demonstrated competence approved by the instructor. This course may not be taken for credit concurrently with Journalism 102 or 103. Individual staff assignments are made for the student newspaper. Assignments may be made in writing, advertising, photography, cartooning, or editing. Students are required to work at prescribed periods under supervision and must attend staff meetings. (3 Lab.)

(JN) 105 Student Publications (1)
Prerequisite: Demonstrated competence approved by the instructor. This course may not be taken for credit concurrently with Journalism 102 or 103. This course is a continuation of Journalism 104. (3 Lab.)

LATIN

(LAT) 101 Beginning Latin (4)
Grammar, vocabulary, and readings are introduced. Declensions of nouns, adjectives, pronouns, and conjugations of verbs are studied. Oral reading of simple sentences and written translations are introduced. Emphasis is placed on the value of Latin as background for the study of English and modern Romance languages. (3 Lec., 2 Lab.)

(LAT) 102 Beginning Latin (4)
Prerequisite: Beginning Latin 101 or the equivalent. This course is a continuation of Latin 101. Introduction to elementary grammatical structures is completed. Vocabulary study is continued. Reading from elementary classics is introduced. Emphasis is placed on the value of Latin as background for the study of English and modern Romance languages. Laboratory fee. (3 Lec., 2 Lab.)

(LAT) 201 Intermediate Latin (3)
Prerequisite: Latin 102 or the equivalent. The study of grammar is continued in this class. Emphasis is on readings of Latin prose. Emphasis is also placed on the value of Latin as background for the study of English and modern Romance languages. (3 Lec.)

(LAT) 202 Intermediate Latin (3)
Prerequisite: Latin 201 or the equivalent. This course is a continuation of Latin 201. Latin rhetoric, reading of lyrical and epic poetry, and a Latin comedy are included. Emphasis is placed on the value of Latin as background for the study of English and modern Romance languages. (3 Lec.)

LIBRARY SKILLS

(LS) 102 College Library Research Methods and Materials (3)
This course is a survey of college research methodologies and materials with emphasis on search strategies appropriate for college-level research in the undergraduate disciplines, the structure and assessment of information sources within society, and the organization of academic libraries. Attention will also be given to the formal presentation of research results, including models of academic writing, bibliographic preparation and documentation standards. (3 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) 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.)

(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.)

(MTH) 101 College Algebra (3)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Math-
This course is a study of relations and functions including polynomial, rational, exponential, logarithmic, and special functions. Other topics include variation, complex numbers, systems of equations and inequalities, theory of equations, progressions, the binomial theorem, proofs, and applications. (3 Lec.)

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

(MTH) 109 Precalculus Mathematics (4)
Prerequisites: Two years of high school algebra and trigonometry and an appropriate assessment test score. This course consists of the application of algebra and trigonometry to the study of polynomial, rational, exponential, logarithmic and trigonometric functions and their graphs. Conic sections, polar coordinates, and other topics of analytic geometry will be included. (4 Lec.)

(MTH) 111 Mathematics For Business And Economics I (3)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 093. This course includes equations, inequalities, matrices, linear programming; linear, quadratic, polynomial, rational, exponential, and logarithmic functions; and probability. Applications to business and economics problems are emphasized. (3 Lec.)

(MTH) 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) 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) 116 College Mathematics II (3)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 093. Designed for liberal arts students, this course includes the study of algebra, linear programming, permutations, combinations, probability, and geometry. Recreational and historical aspects of selected topics are also included. (3 Lec.)

(MTH) 117 Fundamental Concepts Of Mathematics For Elementary Teachers (3)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 093. This course includes the structure of the real number system and geometry. Emphasis is on the development of mathematical reasoning needed for elementary teachers. (3 Lec.)

(MTH) 121 Analytic Geometry (3)
Prerequisite: Mathematics 102 or equivalent. This course is a study of the real numbers, distance, the straight line, conics, transformation of coordinates, polar coordinates, parametric equations, and three-dimensional space. (3 Lec.)

(MTH) 124 Calculus I (5)
Prerequisite: Mathematics 109 or 121 or equivalent. This course is a study of limits, continuity, derivatives, and integrals of algebraic and transcendental functions, with applications. (5 Lec.)

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

(MTH) 139 Applied Mathematics (3)
The course is a study of commercial, technical, and other applied uses of mathematics. Topics vary to fit the needs of the students enrolled in a particular technical/occupational program. The prerequisite will vary accordingly and be determined by the needed skills. (3 Lec.)
(MTH) 195 Technical Mathematics I (3)
Prerequisites: One year of high school algebra and an appropriate assessment test score or Developmental Mathematics 091 or the equivalent. This course is designed for technical students. It covers the basic concepts and fundamental facts of plane and solid geometry, computational techniques and devices, units and dimensions, the terminology and concepts of elementary algebra, functions, coordinate systems, simultaneous equations, and stated problems. (3 Lec.)

(MTH) 196 Technical Mathematics II (3)
Prerequisite: Mathematics 195. This course is designed for technical students. It includes a study of topics in algebra, an introduction to logarithms, and an introduction to trigonometry, trigonometric functions, and the solution of triangles. (3 Lec.)

(MTH) 202 Introductory Statistics (3)
Prerequisite: Two years of high school algebra or demonstrated competence approved by the instructor. This course is a study of collection and tabulation of data, bar charts, graphs, sampling, measures of central tendency and variability, correlation, index numbers, statistical distributions, probability, and application to various fields. (3 Lec.)

(MTH) 221 Linear Algebra (3)
Prerequisite: Mathematics 124 or equivalent. This course is a study of matrices, linear equations, dot products, cross products, geometrical vectors, determinants, n-dimensional space, and linear transformations. (3 Lec.)

(MTH) 225 Calculus II (4)
Prerequisite: Mathematics 124 or the equivalent. This course is a study of techniques of integration, polar coordinates, parametric equations, topics in vector calculus, sequences, series, indeterminate forms, and partial differentiation with applications. (4 Lec.)

(MTH) 226 Calculus III (3)
Prerequisite: Mathematics 225 or the equivalent. This course is a study of topics in vector calculus, functions of several variables, and multiple integrals, with applications. (3 Lec.)

(MTH) 230 Differential Equations (3)
Prerequisite: Mathematics 225 or demonstrated competence approved by the instructor. This course is a study of ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, boundary value problems, and applications. (3 Lec.)

(MTH) 297 Technical Mathematics III (3)
Prerequisite: Mathematics 196. This course will introduce the concepts and applications of calculus used in the field of Engineering Technology. Included are basic concepts from analytic geometry, differential calculus, and integral calculus. Practical application of the derivative and integration in technology will be emphasized. (3 Lec.)

MUSIC

(MUS) 103 Guitar Ensemble (1)
Music composed and arranged for a guitar ensemble is performed. Works for a guitar and a different instrument or for guitar and a voice are also included. This course may be repeated for credit. (3 Lab.)

(MUS) 104 Music Appreciation (3)
The basic elements of music are surveyed and examined in the music literature of western civilization, particularly from the Baroque Period to the present. Cultural influences on the music of each era are observed. (3 Lec.)

(MUS) 105 Italian Diction (1)
The phonetic sounds of the Italian language are studied. Included is selected vocabulary. This course is primarily for voice majors. (2 Lab.)
(MUS) 106 French Diction (1)  
The phonetic sounds of the French language are studied. Included is selected vocabulary. This course is primarily for voice majors. (2 Lab.)

(MUS) 107 German Diction (1)  
The phonetic sounds of the German language are studied. Included is selected vocabulary. This course is primarily for voice majors. (2 Lab.)

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

(MUS) 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)  
This course is a continuation of Music 110. The compositional procedures and forms used by composers are studied. Emphasis is on the Classical, Romantic, and Modern periods. (3 Lec.)

(MUS) 112 Guitar Literature And Materials (3)  
The body of music for the guitar is surveyed. Emphasis is on the repertoire of instruments in the guitar family, such as the lute. Transcription and arranging are studied as well as the selection of a program for public performance. (3 Lec.)

(MUS) 113 Foundations Of Music I (3)  
This course is the initial course to prepare students with limited music training for Music 145. It focuses on notation (music reading), musical terminology, analysis, listening to and creating rhythmic and melodic responses. (3 Lec.)

(MUS) 114 Foundations Of Music II (3)  
Prerequisite: Music 113 or demonstrated competence approved by the instructor. This course prepares students with limited music training for Music 145 and increases their general music understanding. Emphasis is on rhythmical and melodic training, chord functions, melody, textures, and basic analysis of music. (3 Lec.)

(MUS) 115 Jazz Improvisation (2)  
The art of improvisation is introduced. Basic materials, aural training, analysis, and common styles are presented. This course may be repeated for credit. (1 Lec., 2 Lab.)

(MUS) 117 Piano Class I (1)  
This course is primarily for students with no piano background. It develops basic musicianship and piano skills. This course may be repeated for credit. (2 Lab.)

(MUS) 118 Piano Class II (1)  
Prerequisite: Music 117 or demonstrated competence approved by the instructor. The study of piano is continued. Included are technique, 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 demonstrated competence approved by the instructor. 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)  
Prerequisite: Music 113 and 114 or demonstrated competence approved by the instructor. This course is designed for music majors and minors. Emphasis is on notation, cadences, classification of diatonic triads, scales, and modes. It is recommended that students enrolled in Music 161 enroll in this course. (3 Lec.)

(MUS) 146 Music Theory II (3)  
Prerequisite: Music 145 or demonstrated competence approved by the instructor. 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 contemporary periods. It is recommended that students enrolled in Music 162 enroll in this course. (3 Lec.)

(MUS) 147 Synthesizer Class I (1)  
Prerequisite: Music 117 or prior keyboard experience. This course is an entry-level performance course designed to teach students the basic theoretical concepts and performance skills necessary to perform on synthesizers. (3 Lab.)

(MUS) 148 Synthesizer Class II (1)  
Prerequisite: Music 147 or prior music synthesizer experience. This course is a continuation of Music 147. This course emphasizes the rehearsal and performance of commercial music styles. FM synthesis is introduced and a variety of programmable equipment is surveyed including
drum machines, sequencers, digital samplers and computer software. (3 Lab.)

(MUS) 150 Chorus (1)
Prerequisite: Demonstrated competence approved by the instructor. A wide variety of music representing the literature of the great eras of music history is studied and performed. This course may be repeated for credit. (3 Lab.)

(MUS) 151 Voice Class I (1)
This course is for non-voice majors. It presents the principles of breathing, voice production, tone control, enunciation, and phrasing in two group lessons a week. This course may be repeated for credit. (2 Lab.)

(MUS) 152 Voice Class II (1)
This course is a continuation of Music 151. It is open to all non-voice majors. Emphasis is on solo singing, appearance in studio recital, stage deportment, and personality development. Two group lessons are given a week. This course may be repeated for credit. (2 Lab.)

(MUS) 155 Vocal Ensemble (1)
Prerequisite: Demonstrated competence approved by the instructor. Activities include study and performance of specialized choral literature suitable for more advanced students. (3 Lab.)

(MUS) 160 Band (1)
Prerequisite: Demonstrated competence approved by the instructor. 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)
Prerequisite: Music 113 and 114 or demonstrated competence approved by the instructor. Keyboard skills and aural skills (including sight-singing and ear training) are developed. It is recommended that students enrolled in Music 145 enroll in this course. (3 Lab.)

(MUS) 162 Musicianship II (1)
Prerequisite: Music 161. This course is a continuation of Music 161. It is recommended that students enrolled in Music 146 enroll in this course. (3 Lab.)

(MUS) 170 Orchestra (1)
Prerequisite: Demonstrated competence approved by the instructor. Experience is provided in performing and reading orchestral literature and in participating in the college orchestra. This course may be repeated for credit. (3 Lab.)

(MUS) 171 Woodwind Ensemble (1)
Prerequisite: Demonstrated competence approved by the instructor. A group of woodwind instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)

(MUS) 172 Brass Ensemble (1)
Prerequisite: Demonstrated competence approved by the instructor. A group of brass instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)

(MUS) 173 Percussion Ensemble (1)
Prerequisite: Demonstrated competence approved by the instructor. A group of percussion instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)

(MUS) 174 Keyboard Ensemble (1)
Prerequisite: Demonstrated competence approved by the instructor. A group of keyboard instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)

(MUS) 175 String Ensemble (1)
Prerequisite: Demonstrated competence approved by the instructor. A group of string instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)

(MUS) 176 Symphonic Wind Ensemble (1)
Prerequisite: Demonstrated competence approved by the instructor. In the symphonic wind ensemble, students study and perform stylistic literature of all periods. This course may be repeated for credit. (3 Lab.)

(MUS) 177 Chamber Ensemble (1)
Prerequisite: Demonstrated competence approved by the instructor. A group of chamber instrumentalists or vocalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)
(MUS) 185 Stage Band (1)
Prerequisite: Demonstrated competence approved by the instructor. Students study and perform a wide variety of music. Emphasis is on the jazz-oriented, big-band styles. This course may be repeated for credit. (3 Lab.)

(MUS) 199 Recital (1)
This is an on-campus concert/seminar series designed to provide a laboratory and listening experience as an extension of classroom music studies. Concerts, seminars and workshops are presented by guest artists and lecturers, faculty members and students. This is a one-hour credit course and may be repeated for credit. (2 Lab.)

(MUS) 203 Composition (3)
Prerequisites: Music 145 and 146 or demonstrated competence approved by the instructor. This course covers composing in small forms for simple media in a variety of styles. This course may be repeated for credit. (3 Lec.)

(MUS) 205 Guitar Pedagogy (1)
Guitar method books are surveyed. Emphasis is on the strengths and weaknesses of each method. Structuring lessons and optimizing each individual teacher-student relationship are also discussed. (2 Lec.)

(MUS) 221-243 Applied Music-Concentration (2)
This course is open to students enrolled in music theory, ensembles, or other music major and minor courses. It provides private instruction in the area of the student's concentration and consists of one hour of instruction per week. Laboratory fee required. (1 Lec.)

(MUS) 245 Music Theory III (3)
Prerequisite: Music 145 and 146 or demonstrated competence approved by the instructor. This course is a continuation of the study of music theory. It includes the materials of modulation, larger forms, and thematic development, and more advanced analysis. It is recommended that students enrolled in Music 271 enroll in this course. (3 Lec.)

(MUS) 246 Music Theory IV (3)
Prerequisite: Music 245 or demonstrated competence approved by the instructor. 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. It is recommended that students enrolled in Music 272 enroll in this course. (3 Lec.)

(MUS) 251-270 Applied Music-Major (3)
This course is primarily for music performance majors and is open to students enrolled in music theory, ensembles, other music major and minor courses. It provides private instruction in the area of the student's major instrument and consists of one hour of instruction per week. Laboratory fee. (1 Lec.)

(MUS) 271 Musicianship III (1)
Prerequisite: Music 161 and 162 or demonstrated competence approved by the instructor. Keyboard and aural skills (including sight-singing and ear training) are developed. It is recommended that students enrolled in Music 245 enroll in this course. (3 Lab.)

(MUS) 272 Musicianship IV (1)
Prerequisite: Music 271 or demonstrated competence approved by the instructor. This course is a continuation of Music 271. It is recommended that students enrolled in Music 246 enroll in this course. (3 Lab.)

OFFICE TECHNOLOGY

(OFC) 103 Speedwriting Theory (4)
Prerequisites: Credit or concurrent enrollment in Office Technology 172 or demonstrated competence approved by the instructor. The principles of speedwriting are introduced. Included is the development of the ability to read, write, and transcribe speedwriting notes. Basic spelling, grammar, and punctuation rules are reviewed. Laboratory fee. (3 Lec., 2 Lab.)

(OFC) 106 Speedwriting Dictation And Transcription (4)
Prerequisites: Office Technology 103. Principles of speedwriting are applied to build dictation speed and transcription rate. Special attention is given to the review of grammar, spelling, and punctuation rules. Laboratory fee. (3 Lec., 2 Lab.)

(OFC) 143 Contemporary Topics In Office Technology (1)
Prerequisites: Demonstrated competence approved by the instructor. This course emphasizes current topics of interest in office technology 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) 159 Beginning Shorthand (4)
Prerequisite: Credit or concurrent enrollment in Office Technology 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. Laboratory fee. (3 Lec.)
(OFC) 162 Office Procedures (3)  
Prerequisites: Office Technology 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 Technology 159 and Office Technology 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 Technology 187, 188, and 189. Laboratory fee. (3 Lec., 2 Lab.)

(OFC) 167 Legal Terminology And Transcription (3)  
Prerequisites: Office Technology 173 and Office Technology 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 Technology 172 is equivalent to Office Technology 176, 177, and 178. Laboratory fee. (2 Lec., 3 Lab.)

(OFC) 173 Intermediate Typing (3)  
Prerequisites: Office Technology 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) 175 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. Basic information/word processing principles, concepts, terminology and advantages of word processing environment system are introduced. This course does not include the operation of a dedicated wordprocessor or microcomputer. (2 Lec.)

(OFC) 182 Introduction To Word Processing (1)  
Prerequisites: Office Technology 173 and Office Technology 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 Technology 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) 190 Principles Of Word Processing (4)  
Prerequisites: Office Technology 173 or concurrent enrollment. This course introduces word processing and describes its effect on traditional office operations. An understanding of basic word processing principles and fundamental techniques required in the operation of word processing and transcription equipment are introduced. Emphasis is placed on grammar, punctuation, and spelling skills required in word processing operations. Office Technology 190 is equivalent to Office Technology 179, 182, and 185. Laboratory fee. (3 Lec., 3 Lab.)

(OFC) 231 Business Communications (3)  
Prerequisites: Office Technology 172 or demonstrated competence approved by the instructor and English 101. This practical course includes a study of letter forms, the mechanics of writing and the composition of various types of communications. A critical analysis of the appearance and content of representative business correspondence, proposals, and reports is made. (3 Lec.)

(OFC) 266 Advanced Shorthand (4)  
Prerequisites: Office Technology 166 and Office Technology 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)
Prerequisites: Office Technology 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 Technology 190 or 182 and completion of or concurrent enrollment in Office Technology 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 I (1)
Prerequisites: Office Technology 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 may include graphics, math functions, spreadsheets, desktop publishing, and the use of other software packages. 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 Technology 173 or 190 and Office Technology 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 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. Students must complete three objectives and work a minimum of 15 hours per week for a total of three credit hours. This seminar consists of orientation, setting/writing job objectives, interpersonal skills, career interest/aptitude test and evaluation, time management, career planning, and exit seminar. (1 Lec., 15 Lab.)

(OFC) 704 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Office 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 complete four objectives and work a minimum of 20 hours per week for a total of four credit hours. This seminar
PHILOSOPHY

(PHI) 101 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.)

(OFI) 103 Critical Thinking (3)
This course is designed to improve students’ critical thinking ability. Students will both analyze and construct arguments. Elementary deductive forms, common fallacies, and inductive reasoning are considered. (3 Lec.)

(OFI) 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.)

PHOTOGRAPHY

(PHO) 110 Introduction To Photography And Photojournalism (3)
Photography and photojournalism 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.)
Advanced Photography And Photojournalism (3)

Techniques learned in Photography 110 are refined. Emphasis is on photographic communication. Laboratory fee. (2 Lec., 4 Lab.)

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

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. Laboratory fee. (3 Lab.)

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.)

Beginning Soccer (1)

Course content emphasizes the basic playing skills of both indoor and outdoor soccer at the beginner level, as well as rules, strategies, safety, offensive and defensive patterns of play, and competitive activities. Laboratory fee. (3 Lab.)

Outdoor Recreation (3)

Outdoor recreation and organized camping are studied. Both the development of these activities and present trends are covered. (3 Lec.)

Beginning Softball (1)

Course content includes the basic playing skills of softball at the beginner level, as well as rules, strategies, safety, offensive and defensive elements, and competitive activities. These common elements will be applied to fast pitch, slow pitch, and coed softball. Laboratory fee. (3 Lab.)

Beginning Racquetball (1)

Basic racquetball skills, rules and strategies are taught and class tournaments are conducted. Laboratory fee. (3 Lab.)

Beginning Badminton (1)

Course content emphasizes the basic playing skills of badminton at the beginner level, as well as rules, strategies, safety, offensive and defensive elements, and competitive activities. Each of the above elements will be applied to the singles, doubles, and mixed-double games. Laboratory fee. (3 Lab.)

Physical Fitness (1)

Students are introduced to health related concepts and activities for the purpose of gaining 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, muscular development flexibility, agility exercises, weight training and body composition. Laboratory fee. (3 Lab.)

Intramural Athletics (1)

Intramural competition in a variety of activities is offered for men and women. Individual and team competition are offered. Laboratory fee. (3 Lab.)

Beginning Archery (1)

The beginning level skills of target and field shooting and bow hunting are emphasized. History, rules of competition, preparation and care of equipment and safety are included. Equipment is furnished. Laboratory fee. (3 Lab.)

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.)

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. Equipment is furnished. Laboratory fee. (3 Lab.)

Beginning Bowling (1)

Basic bowling skills at the beginner level as well as rules, strategies, safety, scoring and competitive activities are emphasized. All classes are conducted at an off-campus bowling lane. Lane fee. Laboratory fee. (3 Lab.)

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 to become a safe and efficient deep water swimmer. After the development of sufficient skills to perform a modified crawl stroke, the elementary back stroke, survival floating, 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. Cardiovascular endurance, muscular strength, endurance and flexibility are improved through a variety of conditioning activities. Laboratory fee. (3 Lab.)

(PEH) 127 Beginning Basketball And Volleyball (1)
Basic basketball and volleyball skills are taught. Rules, game strategies and competitive activities are included. Laboratory fee. (3 Lab.)

(PEH) 131 Weight Training And Conditioning (1)
Instruction in weight training and conditioning techniques are stressed. Emphasis is placed on muscular strength and endurance. 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. Uniform required. Laboratory fee. (3 Lab.)

(PEH) 133 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) 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) 135 Walking For Fitness (1)
This course is designed for the student who desires cardiovascular fitness by means of a low impact method. Maximum physical fitness is achieved by vigorous walking. The heart rate is elevated to the appropriate target zone for peak conditioning. An extensive warm-up and cool down increases joint and muscle flexibility. (3 Lab.)

(PEH) 137 Aerobics (1)
This course emphasizes the development of cardiovascular endurance by utilizing choreographed routines which may combine basic dance patterns with walking, jogging, jumping, etc. Individual fitness levels are accommodated by the intensity of the workout. Laboratory fee. (3 Lab.)

(PEH) 142 Divermaster (2)
Prerequisite: Physical Education 228 or demonstrated competence approved by the instructor and current CPR and First Aid certification. This course is designed for the advanced diver who seeks additional training as an instructional assistant responsible for the organization, teaching and safety of scuba divers. Students who successfully complete this course will receive divemaster certification. Laboratory fee. (1 Lec., 2 Lab.)

(PEH) 143 Aquatic Fitness (1)
This course is designed to promote fitness through the use of water-related activities compatible with a pool environment. Emphasis is placed on water resistant exercises, lap swimming utilizing various kicks and strokes, relays, and a variety of aquatic games. 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) 145 Cycling (1)
Development of cycling skills and improvement of physical fitness through cycling are emphasized. Fitness concepts, riding technique, safety, routine maintenance and repair of the cycle are fundamental topics of this course. Laboratory fee. (3 Lab.)

(PEH) 146 Triathlon Fitness (1)
This course includes an individualized program of walking, running, cycling, swimming, and weight training. From these activities, the student and instructor will design a fitness program to improve total body fitness, strength, endurance and self-image. Laboratory fee. (3 Lab.)

(PEH) 147 Sports Officiating I (3)
This course is for students who choose officiating for an avocation and who want to increase their knowledge and appreciation of sports. Sports covered in this course are football, basketball, and other sports as appropriate. Students are expected to officiate intramural games. (2 Lec., 2 Lab.)

(PEH) 148 Sports Officiating II (3)
This course is for students who choose officiating for an avocation and who want to increase their knowledge and appreciation of sports. Sports covered in this course are softball, track and field, baseball, and other sports as appropriate. Students are expected to officiate intramural games. (2 Lec., 2 Lab.)

(PEH) 149 Canoeing/Kayaking (1)
This course is designed to teach the students knowledge and appreciation of basic white water canoeing/kayaking skills so they can actively engage in these activities throughout their lives. A weekend river trip is included in this course. Laboratory fee. (3 Lab.)

(PEH) 150 Backpacking/Rock Climbing (1)
This course is designed to teach the students basic skills, knowledge and appreciation of backpacking and rock climbing to the extent that they can actively engage in these activities throughout their lives. A weekend backpacking trip is included in the course. Laboratory fee. (3 Lab.)

(PEH) 200 Lifetime Sports Activities II (1)
Intermediate and intermediate/advanced skills in a variety of lifetime sports are presented. Students participate in a selected sport. Physical Education 200 may be repeated for credit when students select different activities. Laboratory fee. (3 Lab.)

(PEH) 204 Intermediate Soccer (1)
Prerequisite: Demonstrated competence approved by the instructor. Basic skills and techniques are refined beyond the beginner level. Analysis and practice of strategies, safety, offensive and defensive patterns of play and competitive activities are covered. Course emphasis is placed on the development and preparation for participation on an intercollegiate team. Equipment is furnished. (3 Lab.)

(PEH) 212 Intermediate Softball (1)
Prerequisite: Demonstrated competence approved by the instructor. Emphasis is placed on game strategy, base coaching, preparing a lineup, conducting drills, and performance on hitting, catching, and throwing. Laboratory fee. (3 Lab.)

(PEH) 213 Intermediate Racquetball (1)
Prerequisite: Demonstrated competence approved by the instructor. This activity course is designed for students seeking to advance their racquetball skill level. The course content covers advanced shot execution, strategy, and the doubles game. Emphasis is placed on improved skill and strategy. Laboratory fee. (3 Lab.)

(PEH) 215 Intermediate Physical Fitness (1)
Prerequisite: Demonstrated competence approved by the instructor. Basic skills and techniques of fitness-related activities are developed beyond the beginner level. Laboratory fee. (3 Lab.)

(PEH) 217 Intermediate Archery (1)
Prerequisite: Demonstrated competence approved by the instructor. Course content includes refinement for basic archery skills and competitive target shooting and field archery. Equipment is furnished. Laboratory fee. (3 Lab.)

(PEH) 218 Intermediate Golf (1)
Prerequisite: Demonstrated competence approved by the instructor. Basic skills and techniques are refined beyond the beginner level. Analysis and practice of the golf swing, swing theory and methods, strategy, and actual golf course playing are emphasized. Equipment is furnished. Green fees. Laboratory fee. (3 Lab.)

(PEH) 219 Intermediate Tennis (1)
Prerequisite: Demonstrated competence approved by the instructor. Emphasis is placed on refinement of basic skills and specialty shots. Competitive activities in singles, doubles and mixed doubles will be included. Equipment is furnished. Laboratory fee. (3 Lab.)

(PEH) 220 Intermediate Bowling (1)
This course is designed for students seeking improvement in the lifetime sport of bowling. The course covers a review of history, etiquette, care and selection of equipment, rules and scoring. Additional information will be provided on handicapping, league play, variation of grips, spot bowling and alley textures. Laboratory fee. (3 Lab.)
(PEH) 222 Intermediate Gymnastics (1)
Prerequisite: Demonstrated competence approved by the instructor. Basic tumbling and the all-around events for men and women 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: Demonstrated competence approved by the instructor. The correct performance of the crawl, elementary back stroke, side and breast strokes will be emphasized. Some speed and endurance swimming will be required. Laboratory fee. (3 Lab.)

(PEH) 225 Scuba Diving (2)
Prerequisite: Demonstrated competence approved by the instructor. This course includes instruction in the proper use of equipment, safety, physiology and open water diving. Students completing course requirements receive certification through one of several major accredited associations. Equipment rental fee. Laboratory fee. (1 Lec., 2 Lab.)

(PEH) 226 Advanced Life Saving (1)
Prerequisite: Demonstrated competence approved by the instructor. 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 or 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 a qualified certifying agency. Laboratory fee. (1 Lec., 2 Lab.)

(PEH) 231 Intermediate Weight Training (1)
Prerequisite: Demonstrated competence approved by the instructor. Skills and instruction in weight training techniques are developed beyond the beginner level. Laboratory fee. (3 Lab.)

(PEH) 232 Intermediate Self-Defense (1)
Prerequisite: 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. Uniform required. Laboratory fee. (3 Lab.)

(PEH) 233 Intermediate Jogging (1)
Prerequisite: Demonstrated competence approved by the instructor. Improvement of physical fitness through jogging is developed beyond the beginner stage. A higher level of fitness is expected. 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) 235 Walking For Physical Fitness (1)
Prerequisite: Demonstrated competence approved by the instructor. Students participate in a low impact exercise walking program beyond the beginning level. Laboratory fee. (3 Lab.)

(PEH) 236 The Coaching Of Football And Basketball (3)
The skills and techniques of coaching football and basketball are presented. Included are the history, theories, philosophies, rules, terminology, and finer points of the sports. Emphasis is on coaching techniques. (2 Lec., 2 Lab.)
(PEH) 241 Intermediate Baseball (1)
Prerequisite: Demonstrated competence approved by the instructor. Basic skills and techniques are refined beyond the beginner level. Analysis and practice of hitting, fielding, pitching, team play, and competitive play are emphasized. Baseball history and interpretation of the rules are also covered. Course emphasis is placed on the development and preparation for participation on an intercollegiate team. Equipment is furnished. Laboratory fee. (3 Lab.)

(PEH) 257 Advanced First Aid And Emergency Care (3)
The Advanced First Aid and Emergency Care course of the American Red Cross is taught, presenting both theory and practice. Various aspects of safety education also are included. (3 Lec.)

PHYSICAL SCIENCE

(PSC) 118 Physical Science (4)
This course is primarily for non-science majors. It is a study of the basic principles and concepts of physics, chemistry, and nuclear science. The three basic sciences are related to the physical world at an introductory level. Laboratory fee. (3 Lec., 3 Lab.)

(PSC) 119 Physical Science (4)
This course is for non-science majors. It focuses on the interaction of the earth sciences and the physical world. Geology, astronomy, meteorology, and space science are emphasized. Selected principles and concepts are explored. Laboratory fee. (3 Lec., 3 Lab.)

PHYSICS

(PHY) 111 Introductory General Physics (4)
Prerequisite: Two years of high school algebra, including trigonometry, or the equivalent. This course is for pre-dental, biology, pre-medical, pre-pharmacy, and pre-architecture majors and other students who need a two-semester technical course in physics. Mechanics and heat are studied. Laboratory fee. (3 Lec., 3 Lab.)

(PHY) 112 Introductory General Physics (4)
Prerequisite: Physics 111. This course is a continuation of Physics 111. Electricity, magnetism, light, and sound are studied. Laboratory fee. (3 Lec., 3 Lab.)

(PHY) 117 Concepts In Physics (4)
This course is for non-science majors. It introduces principles of physics and does not require a mathematical background. Emphasis is on classical mechanics and thermodynamics. Historical developments and their impact on daily life are included. The principle of energy conservation is stressed, and current problems of worldwide energy production are examined. Laboratory fee. (3 Lec., 3 Lab.)

(PHY) 118 Concepts In Physics (4)
This is for non-science majors. It introduces principles of physics and does not require a mathematical background. Emphasis is on modern developments in physics. Topics include acoustics, electricity and magnetism, light and the electromagnetic spectrum, atomic physics, and relativity. Laboratory fee. (3 Lec., 3 Lab.)

(PHY) 131 Applied Physics (4)
Prerequisite: Mathematics 195 or concurrent enrollment in Mathematics 195. This course is primarily for students in technical programs. The properties of matter, mechanics, and heat are introduced. Emphasis is on uses and problem-solving. Laboratory fee. (3 Lec., 3 Lab.)

(PHY) 132 Applied Physics (4)
Prerequisite: Physics 131. This course is a continuation of Physics 131. Concepts of sound, light, electricity, magnetism, and atomic theory are explained. Laboratory fee. (3 Lec., 3 Lab.)

(PHY) 201 General Physics (4)
Prerequisite: Credit or concurrent enrollment in Mathematics 124. This course is designed primarily for physics, chemistry, mathematics, and engineering majors. The principles and applications of mechanics, wave motion, and sound are studied. Emphasis is on fundamental concepts, problem-solving, notation, and units. The laboratory includes a one-hour problem session. Laboratory fee. (3 Lec., 3 Lab.)

(PHY) 202 General Physics (4)
Prerequisites: Physics 201 and credit or concurrent enrollment in Mathematics 225. This course presents the principles and applications of heat, electricity, magnetism, and optics. Emphasis is on fundamental concepts, problem-solving, notation and units. The laboratory includes a one-hour problem session. Laboratory fee. (3 Lec., 3 Lab.)

PSYCHOLOGY

(PSY) 101 Introduction To Psychology (3)
Introduction to Psychology surveys major topics in the study of behavior. Factors which determine and affect behavior are examined. Psychological principles are applied to the human experience. (This course is offered on campus and may be offered via television.) (3 Lec.)

(PSY) 103 Human Sexuality (3)
Students may register for either Psychology 103 or Sociology 103 but receive credit for only one of the two. Topics include physiological, psychological, and sociological aspects of human sexuality. (3 Lec.)

(PSY) 131 Applied Psychology And Human Relations (3)
Psychological principles are applied to human relations problems in business and industry. Topics include group
dynamics and adjustment factors for employment and advancement. (3 Lec.)

(PSY) 201 Developmental Psychology (3)  
Prerequisite: Psychology 101. This course is a study of human growth, development, and behavior. Emphasis is on psychological changes during life. Processes of life from prenatal beginnings through adulthood and aging are included. (This course is offered on campus and may be offered via television). (3 Lec.)

(PSY) 202 Applied Psychology (3)  
Prerequisite: Psychology 101. Psychological facts and principles are applied to problems and activities of life. Emphasis is on observing, recording, and modifying human behavior. Some off-campus work may be required. (3 Lec.)

(PSY) 205 Psychology Of Personality (3)  
Prerequisite: Psychology 101. This course is an introduction to the study of personality. Topics of personality and adjustment will be studied in the context of various personality theories. Emphasis will be on the application of those topics. (3 Lec.)

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

RADIO/TELEVISION

(RTV) 210 Television Production I (3)  
Prerequisite: Journalism 101 or demonstrated competence approved by the instructor. This course introduces the student to station organization, studio operation, and the use of studio equipment. Topics include continuity, camera operation, sound, lighting, and videotape recording. (2 Lec., 3 Lab.)

(RTV) 211 Television Production II (3)  
Prerequisite: Radio/TV 210. This course is a continuation of Radio/TV 210. Emphasis is on the concept and technique of production of television broadcasts in practical situations. (2 Lec., 3 Lab.)

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.)

RELIGION

(REL) 101 Religion In American Culture (3)  
This course examines the nature of religion in America. It covers important influences from the past and characteristics of current religious groups and movements. Emphasis is on understanding the role of religion in American life. (3 Lec.)

(REL) 102 Contemporary Religious Problems (3)  
Both classic and recent issues are explored. Such topics as the nature of religion, the existence of God, world religions, mysticism, sexuality and religion, and the interpretation of death are included. This course may be offered with emphasis on a specific topic, such as death and dying. (3 Lec.)

(REL) 105 The History And Literature Of The Bible (3)  
This course presents a history and literature of both the Hebrew people during the Old Testament period and the Christian movement during the New Testament period with emphasis upon the origins and development of the religious ideas and institutions of the biblical people. (3 Lec.)

(REL) 201 Major World Religions (3)  
This course surveys the major world religions. Hinduism, Buddhism, Judaism, Islam, and Christianity are included. The history of religions is covered, but the major emphasis is on current beliefs. Other topics may also be included, such as the nature of religion, tribal religion, and alternatives to religion. (3 Lec.)

SOCIAL WORK

(SW) 101 Orientation To Social Services (3)  
The historical development of social services in our society is surveyed. Emphasis is on current needs, practices, and projected changes. Contact with community agencies gives students the opportunity to assess their interest in a helping profession. (3 Lec.)

(SW) 103 Social Work Methods (3)  
Basic social work practices are introduced. Terminology and techniques are studied. Primary functions performed by social service workers are identified. (3 Lec.)
(SW) 105 Basic Interviewing And Counseling Skills (3)
Social work methods such as intake interviewing, relationship building, and problem identification and resolution are studied. Techniques of listening, observing, and recording are practiced. Various therapeutic models are reviewed. (3 Lec.)

(SW) 107 Abnormal Behavior (3)
Factors associated with defining and identifying abnormal behavior are explored. Psychological meaning of mental illness and the consequences of seeking help for the mentally ill are presented. (3 Lec.)

(SW) 109 Physiology Of Addiction (3)
Basic information needed to define problems of alcohol and drug dependency is analyzed. Various physical and psychological effects of chemical abuse will be studied. (3 Lec.)

(SW) 111 Aging In America (3)
Current demographics reflecting the aging of America will be studied. Course objectives focus on understanding people and the aging process. Improving the quality of life for the aging and the effects of discrimination will be emphasized. (3 Lec.)

(SW) 113 Alcoholism Counseling (3)
Prerequisite: Social Work 109. Specific counseling approaches used in treating persons labeled as alcoholics will be presented, including simulated individual and group counseling sessions. Students will be exposed to a variety of counseling styles and community and residential treatment programs. (3 Lec.)

(SW) 201 Introduction To Social Work (3)
Organizational structure, functions, and administration of social work services are discussed. The history, philosophy, and ethics of social work are also presented. (3 Lec.)

(SW) 203 Alcoholism Treatment Models (3)
Prerequisite: Social Work 109 and Social Work 113. Prevalent approaches to treating alcoholism are studied. Various treatment models (detoxification, halfway houses, aftercare, and other self-help models) are examined. (3 Lec.)

(SW) 205 Social Policies And Programs For The Aging (3)
The legislative origins of social policies affecting the aging are analyzed. Policies and programs studied will include protection of rights and available services for the aging. (3 Lec.)

(SW) 207 Prevention Of Chemical Abuse/Dependency (3)
A developmental approach to the study of alcohol (and other substance) abuse and dependency is presented. Exposure to literature and current trends in understanding and preventing substance addiction will be the focus of the course. (3 Lec.)

(SW) 209 Community Services For The Aging (3)
Resources and services for the aging are surveyed. Emphasis is placed on fostering independent living. Concepts of alternate housing, health care, community services, and leisure time activities are presented. (3 Lec.)

(SW) 211 Family Intervention In Chemical Abuse (3)
Prerequisites: Social Work 105 and 109. Advanced counseling techniques which emphasize family intervention in treating chemical dependency are provided. The family systems approach is studied; actual counseling and role playing techniques are used. (3 Lec.)

(SW) 213 Chronic Illness And The Aging (3)
Chronic illnesses and disabling accidents affecting the aging are studied. The effects of medication and treatment are analyzed. Emotional and social implications of chronic illness and disabling accidents for the aging and their families are discussed. (3 Lec.)

(SW) 215 Issues In Chemical Abuse And Addiction (3)
The American value system and resulting legal implications of addiction are analyzed. Other areas of study include prevention, rehabilitation, and the abuser's problematic relationships. (3 Lec.)

(SW) 226 Nursing Home Activity Director Training (4)
The role of the nursing home activity director is the focus of this course. Both the roles of the nursing home and of
the activities program are covered. Topics include the nursing home's historical development and relationship to the community, need and resource assessment, specialized knowledge about the aged resident, and interviewing skills. Program planning, working in groups, programming activities, developing an activities department, and therapeutic techniques in the nursing home are also included. (3 Lec., 3 Lab.)

(SW) 228 Special Topics In Social Services (3)
Special topics in social services are studied. Topics will vary depending on current issues of concern and interest. It may be repeated for credit. (3 Lec.)

(SW) 232 Human Behavior And Social Environment (3)
Human behavior caused by changes in the social environment is the focus of this course. This includes an exploration of interdependence, cultural norms, and group affiliation. (3 Lec.)

(SW) 703 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Social Work 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 orientation to cooperative education, writing learning objectives, role of the on-site supervisor, appropriate on-the-job procedures and time management techniques. The seminar also consists of a review of the cooperative work experience and its effects and advantages to the student. (1 Lec., 15 Lab.)

(SW) 704 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Social Work 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 orientation to cooperative education, writing learning objectives, role of the on-site supervisor, appropriate on-the-job procedures and time management techniques. The seminar also consists of a review of the cooperative work experience and its effects and advantages to the student. (1 Lec., 20 Lab.)

(SW) 713 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Social Work 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 learning effective communication skills, identification of academic and community resources, effective intra and interpersonal relationships, identification of effective wellness and prevention programs, and effectively managing financial resources. The seminar also consists of a review of the cooperative work experience and its effects and advantages to the student. (1 Lec., 15 Lab.)

(SW) 714 Cooperative Work Experience (4)
Prerequisites: Completion of two courses in the Social Work 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 learning effective communication skills, identification of academic and community resources, effective intra and interpersonal relationships, identification of effective wellness and prevention programs, and effectively managing financial resources. The seminar also consists of a review of the cooperative work experience and its effects and advantages to the student. (1 Lec., 20 Lab.)

SOCIology

(SOC) 101 Introduction To Sociology (3)
This course is a study of the nature of society and the sources of group life, culture and social conflict. Topics include institutions, social change, processes, and problems. (This course is offered on campus and may be offered via television.) (3 Lec.)

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

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

(SOC) 203 Marriage And Family (3)
Prerequisites: Sociology 101 recommended. Courtship patterns and marriage are analyzed. Family forms, relationships, and functions are included. Sociocultural differences in family behavior are also included. (3 Lec.)

(SOC) 204 American Minorities (3)
Prerequisites: Sociology 101 or six hours of U.S. history recommended. Students may register for either History 204 or Sociology 204 but may receive credit for only one.
The principal minority groups in American society are the focus of this course. The sociological significance and historic contributions of the groups are presented. Emphasis is on current problems of intergroup relations, social movements, and related social changes. (3 Lec.)

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

(SOC) 209 Selected Topics (3)
Prerequisite: Sociology 101 or demonstrated competence approved by the instructor. An in-depth study of specific contemporary topics in sociology such as popular culture (including sports, religion and mass media), the military as a social institution, education, medicine, ethnographic film, apartheid, deviance or formal organizations. (3 Lec.)

(SOC) 210 Field Studies In American Minorities (3)
Prerequisite: Sociology 101 or Sociology 204. Experience is provided in various minority community centers. Work is under professional supervision in a task-oriented setting. (3 Lec.)

(SOC) 231 Urban Social Problems (3)
The sociology of social institutions is studied. Topics include urbanization, theories of formation, and the impact of urbanization on the individual. (3 Lec.)

SPANISH

(SPA) 101 Beginning Spanish (4)
The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee. (3 Lec., 2 Lab.)

(SPA) 102 Beginning Spanish (4)
Prerequisite: Spanish 101 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Spanish 101. Emphasis is on Idiomatic language and complicated syntax. Laboratory fee. (3 Lec., 2 Lab.)

(SPA) 201 Intermediate Spanish (3)
Prerequisite: Spanish 201 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) 100 Speech Laboratory (1)
This course focuses on preparing speeches, reading dialogue from literature, and debating propositions. Presentations are made throughout the community. This course may be repeated for credit. (3 Lab.)

(SC) 101 Introduction To Speech Communication (3)
Theory and practice of speech communication behavior in one-to-one, small group, and public communication situations are introduced. Students learn more about themselves, improve skills in communicating with others, and make formal oral presentations. This course requires college-level skills in reading and writing. (3 Lec.)

(SC) 105 Fundamentals Of Public Speaking (3)
Public speaking is introduced. Topics include the principles of reasoning, audience analysis, collection of materials, and outlining. Emphasis is on giving well prepared speeches. (3 Lec.)

(SC) 109 Voice And Articulation (3)
Students may register for either Speech Communication 109 or Theatre 109 but may receive credit for only one of the two. The mechanics of speech are studied. Emphasis is on improving voice and pronunciation. (3 Lec.)

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

(SC) 201 Forensic Workshop (1)
This course focuses on preparing speeches, readings, and debate propositions. Presentations are made in competition and before select audiences. This course may be repeated for credit. (2 Lab.)

(SC) 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) 101 Introduction To The Theatre (3)
The various aspects of theatre are surveyed. Topics include plays, playwrights, directing, acting, theatres, artist and technicians. (3 Lec.)

(THE) 102 Contemporary Theatre (3)
This course is a study of the modern theatre. The historic background and traditions of each style are included. Emphasis is on understanding the social, culture, and aesthetic significance of each style. A number of modern plays are read and selected video tapes are viewed. (3 Lec.)
THE 103 Stagecraft I (3)
The technical aspects of play production are studied. Topics include shop procedures, the planning and fabrication of scenic elements, and backstage operations. (2 Lec., 3 Lab.)

THE 104 Stagecraft II (3)
Prerequisites: Theatre 103 or demonstrated competence approved by the instructor. Emphasis is placed on the design process and individual projects. (2 Lec., 3 Lab.)

THE 105 Make-Up For The Stage (3)
The craft of make-up is explored. Both theory and practice are included. Laboratory fee. (3 Lec.)

THE 106 Acting I (3)
The theory of acting and various exercises are presented. Body control, voice, interpretation, characterization, and stage movement are included. Both individual and group activities are used. Specific roles are analyzed and studied. (2 Lec., 3 Lab.)

THE 107 Acting II (3)
Prerequisites: Theatre 106 or demonstrated competence approved by the instructor. This course is a continuation of Theatre 106. Emphasis is on characterization and ensemble acting. (2 Lec., 3 Lab.)

THE 108 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 109 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 110 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 111 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 112 Intermediate Dance (3)
Prerequisites: 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 119 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.)
TRANSPORTATION TECHNOLOGY

(TRT) 145 Principles Of Rates And Tariffs (3)
Special emphasis is placed on present-day transportation modes, carrier pricing systems documentation, and various regulatory policies. Both case and problem methods are utilized in the study of carrier pricing principles. (3 Lec.)

(TRT) 146 Transportation And Traffic Management (3)
This course is for students majoring in transportation technology. Emphasis is placed on current transportation methods. Topics include carrier services, carrier pricing systems, documentation, carrier liability, claims, import and export procedures, and governmental regulations. (3 Lec.)

(TRT) 215 Physical Distribution (3)
Prerequisite: Transportation Technology 146 or demonstrated competence approved by the instructor. The management and organization of physical distribution are studied. Emphasis is placed on decision-making in inventory control, warehousing, packaging, and material handling. Topics include distribution channels, cost planning, financial control, system design, and understanding the market environment. (3 Lec.)

(TRT) 243 Export/Import Practices (3)
Prerequisite: Transportation Technology 146 or demonstrated competence approved by the instructor. This course includes a study of ocean and air carriers, regulatory agencies, steamship conferences, international freight rates, packaging, marine insurance, U.S. Government export/import regulations, international trade terms, and letters of credit. (3 Lec.)

(TRT) 247 Economics Of Transportation (3)
Prerequisites: Transportation Technology 146, Economics 201 or demonstrated competence approved by the instructor. The economic significance of transportation is studied. Topics include the application of economic theory to transportation pricing, the cost behavior of the industry, factors influencing price levels, economic regulatory policies, and the cost of transportation in management decision-making. (3 Lec.)

(TRT) 260 Studies In Transportation Technology (1)
This course provides the student an opportunity to explore selected topics in the field of transportation. This course may be repeated with a different emphasis for a maximum of nine hours of credit. (1 Lec.)

(TRT) 703 Cooperative Work Experience (3)
Prerequisites: Completion of two courses in the Transportation and Logistics Management 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 the world of education, work, and retirement; meaning or mission of your life; clarifying your career goals; and human potential. (1 Lec., 15 Lab.)

(TRT) 713 Cooperative Work Experience (3)
Prerequisite: Transportation Technology 703 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 self inventory, work values, job benefits, and hints to keep a job. (1 Lec., 15 Lab.)

(TRT) 803 Cooperative Work Experience (3)
Prerequisite: Transportation Technology 713 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 relations, adjustment on the job, vertical and horizontal working relationships, and fundamentals of good working relationships. (1 Lec., 15 Lab.)

DCCCD TELECOURSES

The following courses are offered on campus and may be offered via television:

(ACC) 201 Principles of Accounting I
(ANT) 101 Cultural Anthropology
(BUS) 105 Introduction to Business
(CIS) 103 Introduction to Computer Information Systems
(ECO) 201 Principles of Economics I
(ECO) 202 Principles of Economics II
(ENG) 101 Composition I
(ENG) 102 Composition II
(GVT) 101 American Government
(GVT) 102 American Government
(HST) 101 History of the United States
(HST) 102 History of the United States
(HUM) 101 Introduction to the Humanities
(MGT) 136 Principles of Management
(PEH) 101 Health for Today
(PSY) 101 Introduction to Psychology
(PSY) 201 Developmental Psychology
(SOC) 101 Introduction to Sociology